

Peipei Chen<sup>1</sup>  
Dandan Lin<sup>1,\*</sup>

## Solution-Focused Group Counseling on Mental States in Hemodialysis Patients with Anxiety

<sup>1</sup>Blood Purification Center, Wenzhou TCM Hospital of Zhejiang Chinese Medical University, 325000 Wenzhou, Zhejiang, China

### Abstract

**Background:** Hemodialysis patients usually suffer from anxiety due to physical and social factors, which belongs to a kind of psychological disorder, easily contributing to the decrease of patients' adherence to the treatment, and seriously affecting the patients' health status and quality of life. Solution-focused group counseling (SFGC) is a kind of psychotherapy proven to improve emotional problems in many fields. Still, the application of this therapy is rare in medical situations. This retrospective study aims to analyze the application of SFGC and probe into the effects on mental states in hemodialysis patients with anxiety.

**Methods:** From January 2022 to February 2023, 212 patients with hemodialysis and anxiety admitted to our hospital were selected, and 9 patients who did not meet the inclusion criteria were excluded. Finally, 203 patients were included in this retrospective study. According to different clinical management methods, 102 patients receiving routine management were classified as the control group (CG), and 101 patients receiving SFGC on the basis of routine management were included in the observation group (OG). The scores of the self-perceived burden scale (SPBS), medical coping modes questionnaire (MCMQ), and self-rating anxiety scale (SAS) of the two groups were collected. The data collected were calculated and processed by software SPSS 26.0, and the effects of different managements on the mental states of patients with hemodialysis and anxiety were compared.

**Results:** After management, the scores of SPBS in both groups were lower than those before management, and the score in OG was significantly lower than the CG ( $p$

$< 0.001$ ). After management, the confrontation scores increased, the avoidance and resignation scores decreased in the MCMQ of the two groups, and the scores in the OG changed significantly ( $p < 0.001$ ). The SAS scores of the two groups after management were significantly lower than those before management, and the OG score was significantly lower than the CG ( $p < 0.001$ ).

**Conclusion:** SFGC has a positive effect on the mental states of patients with hemodialysis and anxiety, which is worthy of further clinical study.

### Keywords

solution-focused group counseling; hemodialysis; anxiety; mental states

### Introduction

End-stage renal disease (ESRD) is the fifth stage of chronic kidney disease, which will bring a heavy burden to public health [1]. Hemodialysis is one of the main treatment methods for ESRD. Patients who receive hemodialysis treatment for a long time will have physical and psychological changes, and patients in the early stage may be limited by rest and diet changes. This progressive disease also results in the loss of working days, leading to financial strain [2]. Furthermore, various stimuli from medical alarms, as well as frequent transfer treatment and social limitations of patients during the treatment, also trigger mental illnesses such as anxiety and fear [3]. Mental illness like anxiety is common in patients with ESRD and hemodialysis [4], which further affects treatment compliance and increases hospitalization time and mortality, showing a certain effect on the quality of life of hemodialysis patients [5].

Solution-focused group counseling (SFGC), a kind of psychotherapy, pays more attention to stimulating potential

\*Corresponding author details: Dandan Lin, Blood Purification Center, Wenzhou TCM Hospital of Zhejiang Chinese Medical University, 325000 Wenzhou, Zhejiang, China. Email: 18312919036@163.com

**Table 1. Inclusion and exclusion criteria.**

Inclusion criteria	Exclusion criteria
Patients who were diagnosed with anxiety by psychiatrists	Patients with language and hearing dysfunctions and no method to communicate with others
Age of patients $\geq 18$ years old	Patients with secondary mental diseases and self-injurious intention
Patients with normal communication ability and a conscious state	Patients with incomplete clinical data
Patients with chronic kidney diseases in stage 5	Patients with complications in the heart, brain, and lung
-	Patients with irregular hemodialysis treatment
-	Patients with predicted survival time $< 1$ year and the need for renal transplantation

for solving problems, emphasizing constant empowerment in an atmosphere of mutual support in a team, and continually moving towards goals to achieve self-healing compared with routine management [6]. The study on this therapy in medical situations is scarce. In terms of anxiety treatment, SFGC allows members to freely express their feelings and ideas, and gain strength from companionate support and advice through providing a safe and supportive environment. Tabatabaei and other scholars [7] have found that SFGC can reduce the anxiety states of patients with multiple sclerosis. However, it is still worth exploring whether it can improve the mental states of hemodialysis patients with anxiety. This study explores SFGC in hemodialysis patients with anxiety, aiming to provide more references for establishing and enhancing psychological management measures for such patients.

## Materials and Methods

### Participants

The participants were 212 hemodialysis patients with anxiety admitted to Wenzhou TCM Hospital of Zhejiang Chinese Medical University from January 2022 to February 2023. Finally, 203 cases were included after excluding 9 cases that did not meet the inclusion criteria. The inclusion and exclusion criteria are shown in Table 1. This study conformed to the Declaration of Helsinki [8].

### Study Procedures

Based on different management methods, 203 participants were divided into the control group (CG; routine management) and the observation group (OG; routine management plus SFGC). The research process is shown in Fig. 1.

### Management Methods

#### CG

The CG received routine management, with specific content detailed as follows:

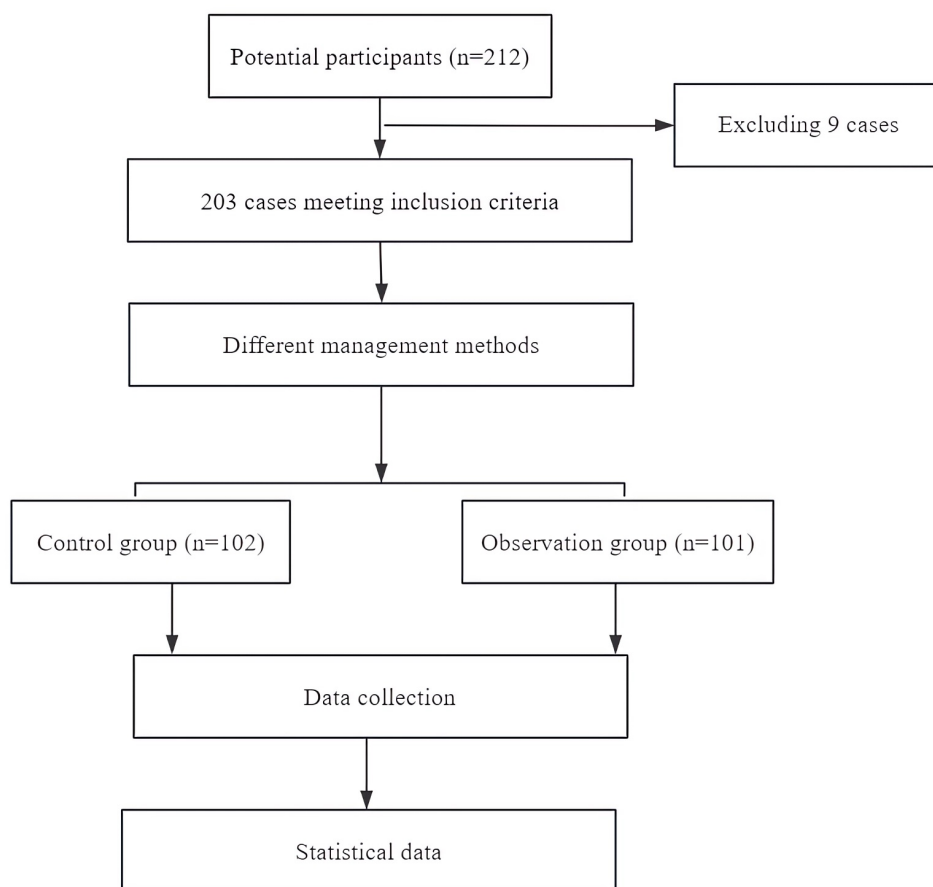
(1) The diet was recommended to be rich in high-quality protein, essential amino acids, and low-phosphorus foods, and patients were advised to have more meals a day but less food at each.

(2) The health knowledge manual was issued to introduce disease types, treatment methods of hemodialysis, and treatment significance in combination with oral education. It was necessary to patiently answer patients' doubts, comfort them, and encourage and guide patients with psychological problems.

(3) The effective contact information of patients and their families was collected to perform telephone follow-up and regular outpatient reviews after discharge. Patients were encouraged to contact medical staff or call the department telephone for consultation when encountering problems.

#### OG

The OG was treated with routine management (a management method similar to section CG) plus SFGC (management content is shown in Table 2) [9]. First, a core team of SFGC was established, consisting of 1 chief physician, 1 head nurse, 1 psychological consultant, and 5 nurses. Then, the patients were given SFGC for 8 weeks, 60 minutes/time, once a week.



**Fig. 1. Research progress.**

### *Observation Indexes*

#### Baseline Data

The baseline data included gender, age, marital status, place of residence, educational level and body mass index (BMI), the course of ESRD, the duration of dialysis, and dialysis frequency were collected.

#### Self-perceived Burden Scale (SPBS)

SPBS [10] evaluated the patients on the first day of admission and after 8-week management, including physical, emotional, and economic burdens, with scores ranging from 1 to 5 points and a total score of 10–50 points. The higher score indicated heavier self-perceived burden, i.e., <20 = no burden, 20–29 points = mild burden, 30–39 points = moderate burden, and >40 points = severe burden.

### Disease Coping Styles

Medical coping modes questionnaire (MCMQ) [11, 12] assessed the patients on the first day of admission and after 8 weeks of management. It consists of three dimensions: confrontation, avoidance, and resignation. The higher the score, the higher the possibility of patients adopting this coping style.

#### Negative Emotion Evaluation

The self-rating anxiety scale (SAS) [13] was used to evaluate the patients on the first day of admission and after 8-week management. The scale comprised 20 items, scoring 1–4 points and a total score of 20–80 points (<50 for normal, 50–60 points for mild anxiety, 61–70 points for moderate anxiety, and  $\geq 71$  points for severe anxiety).

**Table 2. Solution-focused group counseling.**

Time	Theme	Content
Week 1	Grouping	The management team was established. The team members encouraged patients to introduce themselves and interact with each other and guided patients to use positive words to describe their advantages in coping with hemodialysis and anxiety. Thus, they created a positive and relaxed communication atmosphere in the team and established an emotional atmosphere with mutual respect and positivity after preliminary empowerment.
Week 2	Focal issues	The relevant questions were set to guide patients in participating in the discussion, such as reviewing their life effects and physical changes and expressing their inner needs after illness and during hemodialysis. The core members listened to the patients' discussion content, gave appropriate affirmation, asked questions, and guided the patients to express their inner feelings sequentially. The assignment was to ask patients to record and share positive events in daily life.
Week 3	Goal setting	It was necessary to guide patients in sharing the assignment completion last week. The core members reconstructed the definition of emotions based on typical events shared by patients and helped patients clarify the cause and effect of problems. For example, patients with anxiety may be too eager to achieve a goal. At this time, core members should guide patients to imagine "achieving this goal, what I need to do in treatment or life", to eliminate negative thoughts. Regarding arranging assignments, the completed situations of various goals were recorded, and feelings were shared.
Week 4	Self-regulation	The pre-setting and additional questions were adopted to ask patients about examples of adjusting their feelings and help them search for self-regulating experiences in previous experiences. Snowball inspired patients to analyze and summarize the above expertise, thus applying these experiences to other situations. For the assignment, it was hoped to encourage patients to imagine the changes made and record and share their feelings.
Week 5	Problem-solving	The patients were guided to think about the direction that needed to be worked on and to describe the goal in positive language. The patients shared their experience of solving problems and thoughts about the admirable or appreciated aspects of themselves or others, thereby learning from the experience and continuing to move forward. The assignment was to record and share the changes during hemodialysis in the next activity.
Week 6	Positive feedback	It was essential to encourage members to share their changes, the problems encountered during the shift, the experience of solving problems, and the situation and feelings after the change with a joyful tone, expression, or action. The core team members needed to affirm the staged success of the patients and guide patients in summarizing the experiences they had learned by themselves or others and applying them to other aspects. The patients shared content like "The transformation of hemodialysis I know" to re-energize the group spirit and strength.
Week 7	Disease coping training	A score of 0–10 points evaluated the attitudes of disease coping, assisted in the situations of current evaluation, compared the scores before and after the transformation, summarized the progress made by patients in body image and other aspects, and evaluated more possibilities for patients in the future so that patients could continue to progress and improve after the end of the activity.
Week 8	Summary and evaluation	Successful experiences and touching moments were reviewed so that patients could feel the strength and cooperation of the groups. The performance and changes of patients in this activity were summarized using transposition thinking, suggestion, and encouragement. It was vital to encourage patients to correctly face the current symptoms, transfer the results of activities to real life, and enhance self-strength to better cope with diseases and treatments.

### Statistical Methods

The statistical software SPSS (version: 26.0; manufacturer: IBM Corporation; origin: Armonk, NY, USA) was used to calculate and process the research data. The enumeration data covering gender, dialysis frequency, marital status, place of residence, and educational level were expressed as [n(%)], tested by chi-square test. The mea-

surement data, including age, BMI, the course of ESRD, the duration of dialysis, SPBS score, MCMQ score, and SAS score were tested by the Shapiro-Wilk method, and the data meeting skewed distribution were indicated by  $M(P_{25}, P_{75})$ , tested by non-parametric test. Fig. 1 was drawn using WPS Office (version: 2021; manufacturer: Jinshan Software Co., Ltd.; origin: Beijing, China).

**Table 3. Comparative result of baseline characteristics [M (P<sub>25</sub>, P<sub>75</sub>), n(%)].**

Projects		CG (n = 102)	OG (n = 101)	X <sup>2</sup> /Z	p
Gender	Male	64 (62.75)	59 (58.42)	0.398	0.528
	Female	38 (37.25)	42 (41.58)		
Age (years)		58.00 (48.00, 68.25)	58.00 (50.00, 68.50)	-0.136	0.892
BMI (kg/m <sup>2</sup> )		19.78 (18.86, 21.49)	20.47 (19.15, 21.93)	-1.535	0.125
Course of ESRD (months)		82.50 (47.75, 129.50)	94.00 (43.50, 135.50)	-0.664	0.506
Duration of dialysis (months)		64.00 (33.75, 101.50)	60.00 (35.50, 87.00)	-1.123	0.261
Dialysis frequency (times/week)	2	63 (61.76)	60 (59.41)	0.118	0.731
	3	39 (38.24)	41 (40.59)		
Marital status	Unmarried	8 (7.84)	8 (7.95)	0.419	0.936
	Married	67 (65.69)	70 (69.31)		
	Divorced	11 (10.78)	10 (9.90)		
	Widowed	16 (15.69)	13 (12.87)		
Place of residence	Town	52 (50.98)	55 (54.46)	0.246	0.620
	Country	50 (49.02)	46 (45.54)		
Educational level	Illiteracy	10 (9.80)	9 (8.91)	0.213	0.995
	Junior high school and below	12 (11.76)	11 (10.89)		
	Senior high school	44 (43.14)	47 (46.53)		
	College (Junior college)	28 (27.45)	27 (26.73)		
	Postgraduate and above	8 (7.84)	8 (7.92)		

BMI, body mass index; ESRD, end-stage renal disease; CG, control group; OG, observation group.

## Results

### Baseline Characteristics

There was no significant difference in baseline characteristics in both groups ( $p > 0.05$ ), as shown in Table 3.

### SPBS Scores

No significant difference existed in SPBS scores between the two groups before management ( $p > 0.05$ ). After management, the SPBS scores in both groups were lower than those before management ( $p < 0.05$ ), and the score in OG was significantly lower than the CG ( $p < 0.001$ ), as detailed in Table 4.

### MCMQ Scores

No significant difference was found in MCMQ scores between the two groups before management ( $p > 0.05$ ). After management, the confrontation scores increased, and the avoidance and resignation scores decreased in the MCMQ of the two groups ( $p < 0.05$ ). The scores in the OG were changed significantly ( $p < 0.001$ ), as shown in Table 5.

### SAS Scores

There was no significant difference in SAS scores in both groups before management ( $p > 0.05$ ). The SAS scores of the two groups after management were significantly lower than those before management ( $p < 0.05$ ), and the score in the OG was significantly lower in comparison with the CG ( $p < 0.001$ ), as detailed in Table 6.

## Discussion

Anxiety is one of the more frequent problems concerning mental health during hemodialysis treatment. Patients experience significant changes and limited professional careers, and their social and family roles change due to the strengthening of patient roles, which negatively impacts social, economic and family status [14]. In the routine clinical management, less attention is paid to hemodialysis complicated with anxiety, and insufficient evaluation and intervention of patients' psychological status may lead to the persistence of anxiety symptoms in patients, affecting their quality of life and prognosis. Therefore, the purpose of this study is to explore the application of SFGC in hemodialysis patients with anxiety, in order to provide more comprehensive and effective nursing services for patients. The results of this study showed that SFGC reduces the self-

**Table 4. Comparative result of SPBS scores [M (P<sub>25</sub>, P<sub>75</sub>), points].**

Groups	Cases	Physical burden		Emotional burden		Economic burden		Total score	
		Before management	After management	Before management	After management	Before management	After management	Before management	After management
CG	102	11.00 (9.00, 12.00)	7.00 (6.00, 8.00)*	17.00 (16.00, 18.00)	10.00 (9.00, 12.00)*	7.00 (6.00, 8.00)	8.00 (7.00, 9.00)*	33.00 (31.00, 37.00)	25.00 (23.00, 28.00)*
OG	101	11.00 (9.00, 12.00)	4.00 (3.00, 5.50)*	17.00 (16.00, 18.00)	7.00 (6.00, 8.00)*	7.00 (6.00, 8.00)	5.00 (4.00, 6.00)*	35.00 (32.00, 37.00)	20.00 (19.00, 21.00)*
Z	-	-0.148	-10.338	-0.041	-10.422	-0.753	-11.421	-1.868	-10.847
p	-	0.882	<0.001	0.967	<0.001	0.451	<0.001	0.062	<0.001

SPBS, self-perceived burden scale; CG, control group; OG, observation group. Compared with the score before management in the same group, \* $p < 0.05$ .

**Table 5. Comparative result of MCMQ scores [M (P<sub>25</sub>, P<sub>75</sub>), points].**

Groups	Cases	Confrontation		Avoidance		Resignation	
		Before management	After management	Before management	After management	Before management	After management
CG	102	16.00 (15.00, 17.00)	19.00 (17.00, 20.00)*	20.00 (17.75, 22.00)	16.00 (14.00, 18.00)*	16.00 (15.00, 17.00)	10.00 (9.00, 12.00)*
OG	101	16.00 (15.00, 17.00)	23.00 (21.00, 25.00)*	19.00 (17.00, 22.00)	14.00 (12.00, 15.00)*	16.00 (15.00, 17.00)	7.00 (6.00, 8.00)*
Z	-	-0.857	-11.028	-0.739	-6.462	-0.011	-10.756
p	-	0.391	<0.001	0.442	<0.001	0.991	<0.001

MCMQ, medical coping modes questionnaire; CG, control group; OG, observation group. Compared with the score before management in the same group, \* $p < 0.05$ .

**Table 6. Comparative result of SAS scores [M (P<sub>25</sub>, P<sub>75</sub>), points].**

Groups	Cases	Before management	After management
CG	102	59.00 (56.00, 62.00)	54.00 (53.00, 55.00)*
OG	101	60.00 (57.00, 63.50)	50.00 (49.00, 51.00)*
Z	-	-1.583	-12.434
p	-	0.113	<0.001

SAS, self-rating anxiety scale; CG, control group; OG, observation group. Compared with the score before management in the same group, \* $p < 0.05$ .

perceived burden of hemodialysis patients with anxiety, improves their medical coping styles, and adjusts their concurrent negative emotions. The specific analyses are as follows.

#### Reduction of Self-perceived Burden

Mirmahmoodi *et al.* [15] have conducted mindfulness-based group counseling in cancer patients with anxiety, and the perceived stress score in the management group decreased significantly after management, which was similar to the results of this study.

The results of this study showed that the SPBS score of the OG was significantly lower than the CG, indicating that the self-perceived burden caused by anxiety was significantly reduced after receiving SFGC. SFGC underlines that patients actively apply their resources and tap their potential in an atmosphere of mutual encouragement to obtain change. After SFGC, patients with hemodialysis and anxiety can better understand this disease. By expressing their confusion and feelings during dialysis to the team members, patients better understand the hidden symptoms and psychological changes, and face the reality and future optimistically. Meanwhile, patients were guided to gradually transform ideas from “no method to beat the disease” to “sufficient capacity to beat it”, thus encouraging patients to live actively and reducing their self-perceived burden.

#### Improvement of the Disease Coping Styles

Medical coping styles include upbeat coping styles (confrontation) and negative coping styles (avoidance and resignation). SFGC positively affects the coping styles of patients with chronic diseases. Wei Xiaowei *et al.* [16] have found that the confrontation score of the management group receiving SFGC was significantly higher than that of

the control group. In contrast, the avoidance and resignation scores were substantially lower than those in the control group, indicating that SFGC improves patients' disease coping styles.

This study showed that the confrontation score of the OG was significantly higher, and the avoidance and resignation scores were considerably lower than the CG. The reason is that some hemodialysis patients will have a series of stress responses to treatment, such as anxiety. SFGC deepens patients' understanding of this disease, guides patients to review positive and full-face events, and focuses on feasible changes, clearing up negative emotions and improving treatment confidence through sharing positive cases of good rehabilitation. The experience is applied to other contexts to form an active self-concept gradually, adjust how to deal with this disease and respond to hemodialysis positively and effectively.

#### *Amelioration of the Negative Emotions*

A study has reported that most hemodialysis patients will be complicated by anxiety and other psychological diseases [17]. Chen SY *et al.* [18] have suggested that SFGC enables patients to find their problems gradually, pay attention to their advantages, enhance personal self-esteem, and rebuild positive perception, consequently alleviating psychological pain. Creswell C *et al.* [19] applied solution-centered therapy to children with anxiety, and in the treatment group, clinical global impression improvement was notably improved in 69% of children, showing that the anxiety symptoms of children in the treatment group have been significantly improved, which is similar to the results of this study. In this study, the OG displayed a considerably lower SAS score than the CG in the same period, which is related to providing comprehensive guidance for patients in SFGC and stimulating patients' confidence in overcoming this disease. When the team members respond to and affirm the patients' problem-solving ability, the patients' negative emotions can gradually dissipate.

#### **Conclusion**

The adhibition of SFGC in patients with hemodialysis and anxiety reduces the perceived burden, helps patients actively face this disease, and relieves stress, which has specific clinical application value. Future clinical works should further explore a more perfect SFGC to provide new ideas for improving the mental health of hemodialysis patients.

#### **Availability of Data and Materials**

The original contributions presented in the study are included in the article. Further inquiries can be directed to the corresponding author.

#### **Author Contributions**

PC: Conception, Design, Materials, Data Collection, Analysis, Literature Review, Writing. DL: Supervision, Materials, Data Collection, Analysis, Writing, Critical Review. Both authors contributed to editorial changes in the manuscript. Both authors read and approved the final manuscript. Both authors have participated sufficiently in the work and agreed to be accountable for all aspects of the work.

#### **Ethics Approval and Consent to Participate**

This study was approved by the ethics committee of Wenzhou TCM Hospital of Zhejiang Chinese Medical University (approval no.: WZY2023-LW-038-01). As this article is a retrospective study, no direct patient intervention was required, but we strictly followed the relevant hospital regulations when collecting and analyzing the data. Therefore, the ethical approval of this paper mainly focused on patient privacy and data protection. We strictly adhered to the relevant ethical regulations to ensure the security and privacy of patient data. The patient's informed consent was waived based on the above premise.

#### **Acknowledgment**

Not applicable.

#### **Funding**

This research was funded by 2022 Wenzhou City Basic Scientific Research Project (Y20220222).

#### **Conflict of Interest**

The authors declare no conflict of interest.

#### **References**

- [1] Moreno Velásquez I, Tribaldos Causadias M, Valdés R, Gómez B, Motta J, Cuero C, *et al.* End-stage renal disease-financial costs and

- years of life lost in Panama: a cost-analysis study. *BMJ Open*. 2019; 9: e027229.
- [2] Goyal E, Chaudhury S, Saldanha D. Psychiatric comorbidity in patients undergoing hemodialysis. *Industrial Psychiatry Journal*. 2018; 27: 206–212.
- [3] Eroglu H, Gok Metin Z. Benson Relaxation Technique Combined With Music Therapy for Fatigue, Anxiety, and Depression in Hemodialysis Patients: A Randomized Controlled Trial. *Holistic Nursing Practice*. 2022; 36: 139–148.
- [4] Schouten RW, Haverkamp GL, Loosman WL, Chandie Shaw PK, van Ittersum FJ, Smets YFC, *et al.* Anxiety Symptoms, Mortality, and Hospitalization in Patients Receiving Maintenance Dialysis: A Cohort Study. *American Journal of Kidney Diseases: the Official Journal of the National Kidney Foundation*. 2019; 74: 158–166.
- [5] Nagy E, Tharwat S, Elsayed AM, Shabaka SAEG, Nassar MK. Anxiety and depression in maintenance hemodialysis patients: prevalence and their effects on health-related quality of life. *International Urology and Nephrology*. 2023; 55: 2905–2914.
- [6] Li XD, Di RQ, Ye L. The application of nursing intervention based on a focus solution oriented group counseling model in young nasopharyngeal carcinoma patients. *Chinese Journal of Modern Nursing*. 2023; 29: 3033–3038. (In Chinese)
- [7] Tabatabaei RH, Bolghan-Abadi M. Effectiveness of solution-focused group therapy in generalized anxiety disorder in patients with multiple sclerosis. *Zahedan Journal of Research in Medical Sciences*. 2020; 22.
- [8] World Medical Association. World Medical Association Declaration of Helsinki: ethical principles for medical research involving human subjects. *JAMA*. 2013; 310: 2191–2194.
- [9] Yildirim H, Aylaz R. The effects of group counseling based on the solution-focused approach on anxiety and healthy lifestyle behaviors in individuals with eating disorders. *Perspectives in Psychiatric Care*. 2022; 58: 180–188.
- [10] Cousineau N, McDowell I, Hotz S, Hébert P. Measuring chronic patients' feelings of being a burden to their caregivers: development and preliminary validation of a scale. *Medical Care*. 2003; 41: 110–118.
- [11] Feifel H, Strack S, Nagy VT. Coping strategies and associated features of medically ill patients. *Psychosomatic Medicine*. 1987; 49: 616–625.
- [12] Shen XH, Jiang QJ. A test report on 701 cases of the Chinese version of the Medical Coping Style Questionnaire. *Chinese Journal of Behavioral Medicine*. 2000; 9: 18–20. (In Chinese)
- [13] Zung WW. A rating instrument for anxiety disorders. *Psychosomatics*. 1971; 12: 371–379.
- [14] Rikos N, Kassotaki A, Frantzeskaki C, Fragiadaki M, Mpalaskas A, Vasilopoulos G, *et al.* Investigation of Perception of Quality of Life and Psychological Burden of Patients Undergoing Hemodialysis-Quality of Life of Hemodialysis Patients. *Nursing Reports (Pavia, Italy)*. 2023; 13: 1331–1341.
- [15] Mirmahmoodi M, Mangalian P, Ahmadi A, Dehghan M. The Effect of Mindfulness-Based Stress Reduction Group Counseling on Psychological and Inflammatory Responses of the Women With Breast Cancer. *Integrative Cancer Therapies*. 2020; 19: 1534735420946819.
- [16] Wei XW, Li Q, Yuan Q. The Intervention Effect of Focused Solution Oriented Group Counseling on Negative Emotions and Medical Coping Styles in Hemodialysis Patients. *Chinese Journal of Clinical Psychology*. 2022; 30: 207–211, 240. (In Chinese)
- [17] Amirkhani M, Shokrpour N, Bazrafcan L, Modreki A, Sheidai S. The effect of resilience training on stress, anxiety, depression, and quality of life of hemodialysis patients: A randomized controlled clinical trial. *Iranian Journal of Psychiatry and Behavioral Sciences*. 2021; 15.
- [18] Chen SY, Bian C, Cheng Y, Zhao WW, Yan SR, Zhang YH. A randomized controlled trial of a nurse-led psychological pain solution-focused intervention for depressed inpatients: study protocol. *BMC Nursing*. 2023; 22: 111.
- [19] Creswell C, Violato M, Fairbanks H, White E, Parkinson M, Abitabile G, *et al.* Clinical outcomes and cost-effectiveness of brief guided parent-delivered cognitive behavioural therapy and solution-focused brief therapy for treatment of childhood anxiety disorders: a randomised controlled trial. *The Lancet. Psychiatry*. 2017; 4: 529–539.