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Original Article

The effectiveness of training based on Bandura's self-efficacy theory on hemodialysis patients' resilience during the COVID-19 outbreak: A quasi-experimental study

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Abstract

Background and aims: The COVID-19 outbreak has caused many psychological problems among different groups of society, particularly hemodialysis patients. There is little data on the benefits of resilience as a protective factor for adaptation to specific and threatening situations in such patients. Hence, this study aimed to examine the effects of training based on Bandura's self-efficacy theory on the resilience of hemodialysis patients in the southeast of Iran in 2020 during the COVID-19 outbreak.

Methods: This quasi-experimental study was conducted on 140 hemodialysis patients in southeast Iran. The participants were selected by convenient sampling and randomly assigned to control (n=70) and experimental (n=70) groups. Educational content was provided over ten sessions of face-to-face 20-30 minutes to the experimental group, and the control group received routine training. Data were collected via the Connor-Davidson Resilience Scale and analyzed by SPSS version 16 using descriptive and inferential statistics.

Results: The mean resilience scores in the experimental and control groups before the intervention were 51.94±11.11 and 53.79±16.04, and after the intervention, 53.27±10.39 and 73.86±13.16, respectively. There was a significant difference between the two groups after the intervention ($P<0.05$).

Conclusion: The findings denote the self-efficacy training program based on Bandura's theory improved resilience in the patients undergoing hemodialysis during the COVID-19 outbreak. Hence, nursing planners and policymakers are recommended to develop some measures for facilitating self-efficacy training programs for hemodialysis patients.

Keywords: COVID-19, Hemodialysis patients, Resilience, Self-efficacy

Introduction

COVID-19 was first identified in 2019, and governments were forced to take some measures, such as enforcing social distancing regulations to control the disease. These measures have minimized all interactions between individuals (1). A study found that COVID-19 worsens symptoms and complications of chronic diseases, including chronic renal failure (2). One of the most common treatments for this disease is hemodialysis, making patients suffer numerous problems (3). It is estimated that by 2030, the number of people worldwide who require dialysis and kidney transplants will increase to 5.5 million, significantly higher than the current number of 2.6 million. (4). Despite many efforts to prevent chronic renal failure, in Iran, the number of people with End-Stage Renal Disease is increasing, with a rate of 380 cases per million people in 2016 and an annual growth of 5%-6% (5).

It is often assumed that most chronic disease patients adapt well to their illness's psychological aspects. Still, adapting becomes more challenging if patients experience a defect in their physical health (6). Measures taken for people with chronic kidney failure seem insufficient due to high mortality and physical and mental disorders (7). Therefore, patients undergoing hemodialysis face significant limitations due to physical and psychosocial burdens, which include fluid and dietary restrictions, failure to adhere to the therapeutic regimen, reliance on treatment and health professionals, and fear of death (8). These patients need resilience to overcome psychological issues in their adaptation (9). Resilience is a process for better adaptation and survival in difficult circumstances. Self-efficacy is a crucial factor significantly impacting resilience, especially in hemodialysis patients. It helps them achieve healthier lifestyles, increasing happiness and overall satisfaction (10). Research has shown that dialysis patients suffering from poor mental health are less likely to follow their treatment plan and have a higher mortality risk. Therefore, hemodialysis patients must develop resilience to maintain good mental well-being (11).

The concept of self-efficacy originated from social cognitive theory and was pioneered by Bandura. It pertains to confidence in their ability to carry out the actions required to achieve certain goals. (12). Self-efficacy affects

how people deal with problems, make decisions, cope with stress and depression, and choose goals and achieve them (13). There is evidence that increased self-efficacy in hemodialysis patients has improved health's physical and psychological aspects (6,14).

Researchers believe resilience is a potential psychosocial ability that individuals can use to reduce negative emotions and strengthen coping with adversity, which acts as a protective factor (15). It causes individuals in difficult situations, despite risk factors, to use their existing capacities to achieve success and personal growth and gain a new perspective on challenges as an opportunity (16). The results of several studies have shown that patients' resilience is inadequate to face challenges and complications; therefore, it is recommended that it be strengthened through educational methods appropriate to their context (15,17,18). It seems that during the COVID-19 outbreak, Patients undergoing hemodialysis more than ever need to improve their resilience to cope with and adapt to the existing conditions. There is little data on the benefits of resilience as a protective factor for adaptation to specific and threatening situations and limited information on the association between self-efficacy and resilience in such patients. Hence, this study aimed to examine the effects of training based on Bandura's self-efficacy theory on hemodialysis patients' resilience in the southeast of Iran in 2020 during the COVID-19 outbreak.

Methods

This quasi-experimental study was conducted from March to June 2020 in hemodialysis centers of Kerman, southeast Iran. The participants in the study included 140 hemodialysis patients who were selected using convenience sampling and were randomly divided into experimental (n = 70) and control (n = 70) groups. The sample size was calculated based on a study by Koochaki et al (19) using the sample size formula ($\alpha = 0.05$, $\beta = 0.8$, $\sigma1 = 11.05$, $\sigma2 = 8.18$, $\mu1\text{-}\mu2 = 5$, $Z1\text{-}\alpha/2 = 1.96$). The inclusion criteria included the willingness to participate in the study, the ability to read, write and understand Persian, undergoing treatment for at least three months, being a permanent member of hemodialysis centers, and being at least 18 years old. The exclusion criteria included acute physical or mental illnesses that could affect the training process, unwillingness to continue cooperation in the study, and changes in the treatment method (undergoing transplant or other treatment methods) during the study.

The tool used in this study was a two-section questionnaire. The first section included demographic data such as age, sex, marital status, level of education, employment, duration of hemodialysis treatment, and the number of weekly hemodialysis sessions. The second section was the Connor-Davidson Resilience Scale (CD-RISC). The scale was translated into Persian, and its validity/reliability was confirmed (20). The reliability index was calculated as 0.89 using Cronbach's alpha coefficient, and the validity was estimated as 0.87. The scale consists of 25 items graded based on the 5-point Likert scale (zero: completely false; 5: completely true). It contains five subscales: personal competence and tenacity, trust in one's instincts and tolerance of negative affect, positive acceptance of change and secure relationships, control, and spiritual influences. The possible mean scores ranged from 0 to 100 (0-33; weak, 34-67; medium, > 67; high).

The researchers obtained permission from the ethics committee and coordinated with the relevant officials before attending the hemodialysis centers. First, the dialysis centers were randomly divided into two groups. Then, the experimental group was selected among patients from two centers, while the control group was chosen among patients from the other centers. At least, sampling was performed in the simple random sampling method with the assistance of a random numbers table. Finally, 140 patients were selected from the four centers and randomly divided into experimental and control groups. Then, written consent was obtained, and the questionnaires were completed. Afterward, the participants in the experimental group attended ten one-hour face-to-face training sessions. The educational content provided was based on the constructs of the self-efficacy model (Table 1).

It was approved by two nephrologists, a vascular surgeon, a senior clinical psychologist, a nutritionist, and two nursing professors. The intervention was provided through group and individual counseling, watching videos, listening to audio files, and sharing experiences. They were given free tickets to visit cultural and entertainment venues to further encourage the participants.

The participants in the control group received routine care and training according to the previous procedure. Finally, three months after the intervention, the questionnaires were completed by two groups. At the end of the study, to comply with ethical principles, at the end of the study, educational content and a multimedia compact disc were provided to the control group in addition to the experimental group.

Quantitative variables were described by mean and standard deviation, while qualitative variables were expressed in frequency and percentage. According to the results of the Kolmogorov-Smirnov test ($P < 0.05$), parametric tests were used for data analysis in the inferential part. The gathered data were analyzed in SPSS16, and the significance level was set at 0.05.

Results

This study involved 140 patients referred to Kerman's hemodialysis centers and was divided into two groups based on the "CONSORT" guidelines (Figure 1).

Data Analysis showed no statistically significant demographic difference between the two groups ($P > 0.05$). The control group and training group had a range of ages between 19 to 71 years and 19 to 76 years, respectively. Other demographic characteristics are

Table 1. The educational content based on the self-efficacy model constructs

Session	Content
1	Introduction, description of the objectives and training program procedure, kidney function, and renal failure.
2	Explanation of self-efficacy and resilience concept, emphasis on the following behaviors that lead to continued care, maintaining health, controlling the disease complications during the Covid-19 outbreak
3	Description of the hemodialysis process and required care, teaching how to comply with health protocols during the Covid-19 outbreak, and discussing factors affecting self-efficacy and their relationships with resilience.
4	Presentation instructions about diet, increase self-efficacy, create resilience, reduce stress, and improve psychological well-being during the Covid-19 outbreak.
5	Education the importance of proper use of drugs and their side effects, encouraging the patients to set goals and have hope for the future, and making a list of their strengths and weaknesses.
6	Explanation of daily routine activities, dealing with friends and stress management techniques during the Covid-19 epidemic, self-efficacy components including mastery, experiences, and social modeling.
7	Discussing other components of self-efficacy, including social persuasion and psychological responses, increasing resilience, and focusing on its importance in promoting health.
8	Instruction on creating and promoting resilience, fostering optimism, self-care, enhancing self-esteem, and encouraging the patients to share experiences.
9	Showing a short educational video on resilience promotion methods focusing on improving problem-solving skills.
10	Summarizing instructed points and highlighting significant topics, answering the patient's questions.

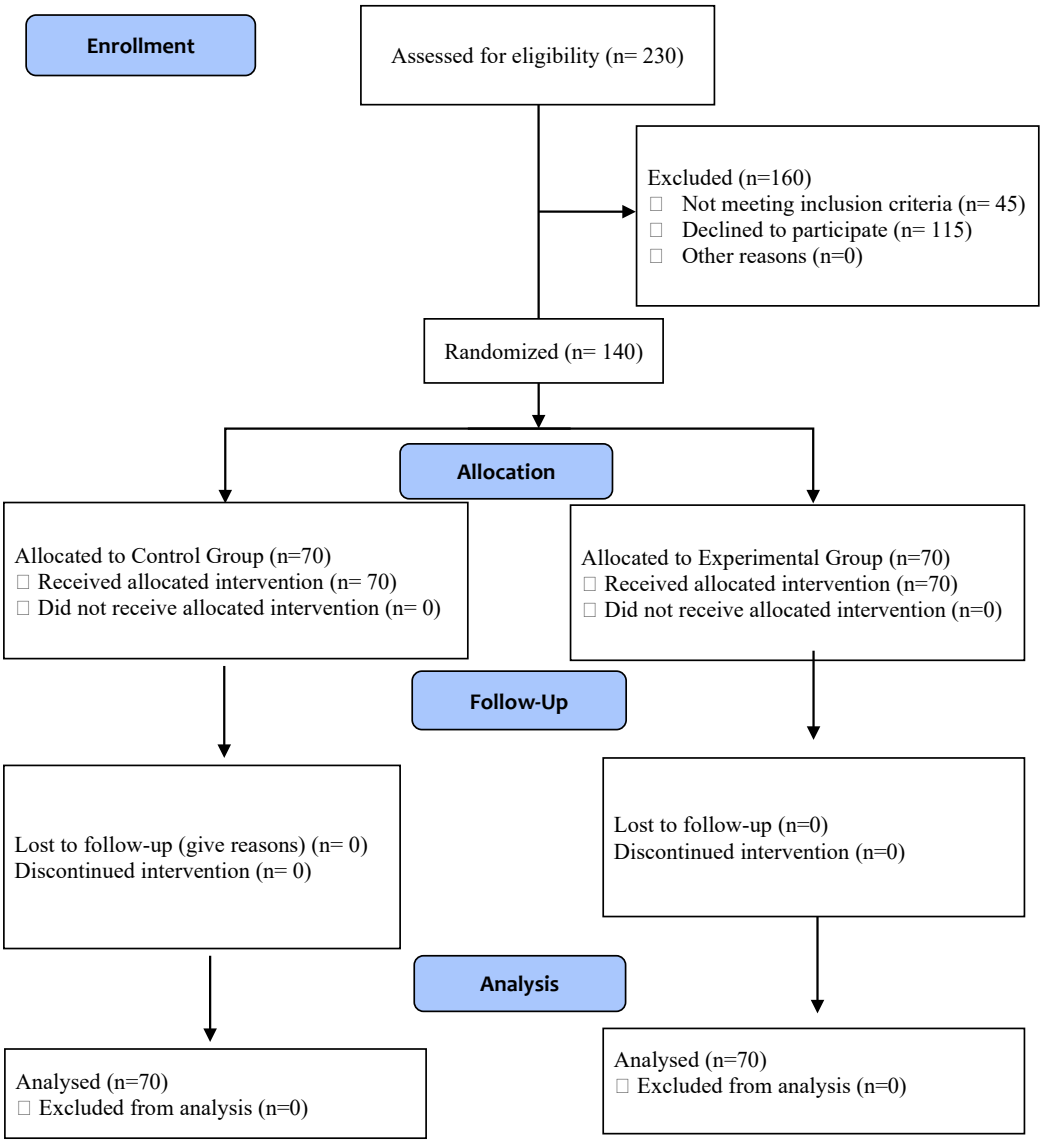

Figure 1. CONSORT Flow diagram of the project

presented in Table 2.

The analysis revealed that before the intervention, showed no significant differences between mean scores of resilience in the experimental and control groups ($P>0.05$). At the post-test, this difference was significant ($P<0.001$). Although the paired t-test showed a slight increase in the resilience score of the participants in the control group, it was not significant from before intervention to after it ($P>0.05$). According to this test, the mean score of participants' resilience in the experimental group was significantly higher than that of after intervention ($P<0.001$) (Table 3).

Discussion

The results of this study indicated the effectiveness of training based on Bandura's theory of self-efficacy on the resilience of patients undergoing haemodialysis during the COVID-19 outbreak. Self-efficacy training affects individuals' feelings, thoughts, and health-promoting behaviors in risky situations and their well-being (21). Research has shown that improving self-efficacy and engaging in preventive behaviors can significantly affect mental health. Therefore, people with high self-efficacy have better mental health during the COVID-19 pandemic (22). Furthermore, resilience is one of the main factors for managing malignant comorbidities in hemodialysis patients. Patients who report a higher level of resilience participate more effectively in their treatment since they are prepared to accept the natural course of their disease (17). Resilience enables patients to evaluate events positively and not be disturbed by the complications associated with the disease (23).

Table 2. Baseline characteristics of the participants

Characteristic	Control (n=70)	Experimental (n=70)	χ^2/t/u	*P*
	No. (%)	No. (%)		
Gender[a]				
Female	41(58.57)	44(62.85)	0.14	0.70
Male	29(41.42)	26(37.14)		
Marital status[a]				
Single	27(38.57)	19(27.14)	1.91	0.16
Married	43(61.42)	51(72.85)		
Education[a]				
High school and lower	38(54.28)	42(60.00)	1.4	0.23
Diploma	22(31.42)	20(28.57)		
Academic	10(14.28)	8(11.42)		
Occupation[a]				
Unemployed	31(44.28)	30(42.58)		
Working in the public sector	15(21.42)	8(11.42)	4.06	0.25
Working in the private sector	11(15.71)	17(24.28)		
Housewife	13(18.57)	15(21.42)		
Number of hemodialysis sessions[a]				
Two sessions	11(15.71)	3(4.28)	5.1	.6
Three sessions	58(82.85)	65(92.85)		
Four sessions	1(1.42)	2(2.85)		
	Mean±SD	Mean±SD		
Age (y)[b]	47.62±14.64	51.56±14.44	1.61	0.11
Duration of hemodialysis[c] (month)	43.94±42.23	46.21±42.12	0.27	0.78

[a] Chi-squared, [b] Independent t test, [c] Mann-Whitney U.

Table 3. Comparison of resilience scores before and after intervention in two groups

Variable	Time	Group		*t* [a]	*P* value
		Control (n=70)	Experimental (n=70)		
		Mean±SD	Mean±SD		
Resilience	Before- intervention	51.94±11.11	53.79±16.04	0.79	0.43
	After- intervention	53.27±10.39	73.86±13.16	10.26	<0.001
	t[b]	-1.05	-12.29		
	P	0.29	<0.001		

[a] Independent *t* test, [b] Paired *t* test.

The present study indicated that the resilience score was moderate before the intervention, which seemed inadequate to face the challenges of chronic kidney disease. Some studies have suggested that providing nursing care and education to these patients to improve resilience should be one of the essential treatment goals (15,17). However, other studies reported satisfactory resilience among patients undergoing hemodialysis (24,25). This discrepancy seems to be due to the communities' economic, social, and cultural conditions. Therefore, future studies are needed to explore other factors affecting the resilience of these patients.

The data in this study showed a significant difference in resilience scores between the two groups after the intervention, and the experimental group exhibited a significant improvement in resilience compared to the control group. Researchers believe that patients undergoing hemodialysis need higher levels of resilience since the disease has profound and often depriving effects on all aspects of their life (11). Hence, self-efficacy is decisive in increasing these patients' resilience, improving self-care behaviors, and helping them manage the disease more successfully (26). Besides, patients undergoing long-term hemodialysis treatment have lower efficiency and ability to perform activities and fatigue, leading to social isolation, frustration, and low resilience (19). A study also showed a significant difference between dietary adherence and self-efficacy in hemodialysis patients. Hence, patients with higher self-efficacy scores have better health-promoting behaviors, including dietary adherence (14).

According to the findings, the average resilience score of the participants in the experimental group increased significantly after the educational intervention compared to their initial score. Additionally, the control group's resilience score showed a minor increase at the end of the study, but it was not significant. Recent studies support our data, demonstrating the effectiveness of self-efficacy-based educational intervention in improving health-promoting behaviors among chronic patients (27). Some studies have suggested that self-efficacy training based on Bandura's theory improves health-promoting behaviors, including resilience in various diseases such as cardiovascular disease, diabetes, and cancer (28-30). Therefore, applying Bandura's theory of self-efficacy in designing and implementing educational interventions by nurses as the health team's principal members can substantially improve patients' health. Also, a study reported that self-efficacy training provides a situation in which the patient can cope effectively with stressful conditions and problems due to increased awareness, change of attitude, and acquisition of self-care skills (14).

One of the limitations of the present study was the relationship between the control and experimental groups. Hence, the hemodialysis centers were randomly divided into two groups. Patients from two centers were selected as the experimental group, while patients from the other centers as the control group. It is suggested to use a larger sample size in future studies to improve the validity of the result.

Conclusion

The results of the present study showed that self-efficacy training based on Bandura's theory improved the endurance of hemodialysis patients. Therefore, considering the essential role of resilience in enhancing the health of these patients and providing care along with meeting their educational needs as one of the principles of patient rights, it is recommended that training programs for nurses should incorporate self-efficacy training methods and nursing students' courses should cover this topic.

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Authors' Contribution

Conceptualization: Atena Ghorbani Hanouj, Maryam Khandan, Yunes Jahani.
Data curation: Atena Ghorbani Hanouj, Maryam Khandan.
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Investigation: Maryam Khandan.
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Software: Atena Ghorbani Hanouj, Yunes Jahani.
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Visualization: Atena Ghorbani Hanouj, Maryam Khandan, Yunes Jahani.
Writing – original draft: Maryam Khandan.
Writing – review & editing: Atena Ghorbani Hanouj, Maryam Khandan, Yunes Jahani.

Competing Interests

The authors declare no conflict of interest.

Ethical Approval

This research project was approved by the Ethics and Research Committee of Islamic Azad University, Kerman Branch, with the code IR.IAU.KERMAN.REC.1398.005. The participants were informed about voluntary participation in this study, confidentiality and anonymity of their information, and freedom to withdraw from the study at any time. Written consent forms were also signed by the participants.

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References

1. Brooks SK, Webster RK, Smith LE, Woodland L, Wessely S, Greenberg N, et al. The psychological impact of quarantine and how to reduce it: rapid review of the evidence. Lancet. 2020;395(10227):912-20. doi: 10.1016/s0140-6736(20)30460-8.
2. Kar SK, Yasir Arafat SM, Kabir R, Sharma P, Saxena SK. Coping with mental health challenges during COVID-19. In: Saxena SK, ed. Coronavirus Disease 2019 (COVID-19). Singapore: Springer; 2020. p. 199-213. doi: 10.1007/978-981-15-4814-7_16.

3. Sadeghian Z, Shahgholian N, Dashti-Dehkordi A. Hemodialysis patients and nurses in relation with caring behaviors. J Urmia Nurs Midwifery Fac. 2017;15(9):659-66. [Persian].
4. Filipska A, Bohdan B, Wieczorek PP, Hudz N. Chronic kidney disease and dialysis therapy: incidence and prevalence in the world. Pharmacia. 2021;68(2):463-70. doi: 10.3897/pharmacia.68.e65501.
5. Nafar M, Aghighi M, Dalili N, Alipour Abedi B. Perspective of 20 years hemodialysis registry in Iran, on the road to progress. Iran J Kidney Dis. 2020;14(2):95-101.
6. Royani Z, Rayyani M, Vatanparast M, Mahdavifar M, Goleij J. The relationship between self-care and self - efficacy with empowerment in patients undergoing hemodialysis. Military Caring Sciences. 2015;1(2):116-22. doi: 10.18869/acadpub.mcs.1.2.116. [Persian].
7. Wen J, Fang Y, Su Z, Cai J, Chen Z. Mental health and its influencing factors of maintenance hemodialysis patients: a semi-structured interview study. BMC Psychol. 2023;11(1):84. doi: 10.1186/s40359-023-01109-2.
8. Wang X, Shi Q, Mo Y, Liu J, Yuan Y. Palliative care needs and symptom burden in younger and older patients with end-stage renal disease undergoing maintenance hemodialysis: a cross-sectional study. Int J Nurs Sci. 2022;9(4):422-9. doi: 10.1016/j.ijnss.2022.09.015.
9. Novita D, Rokayah C, Muliani R, Sumbara S. The relationship of spirituality and resilience in patients that received Hemodialysis. Indonesian Journal of Global Health Research. 2022;4(4):685-90.
10. Feldman R. What is resilience: an affiliative neuroscience approach. World Psychiatry. 2020;19(2):132-50. doi: 10.1002/wps.20729.
11. Kukihara H, Yamawaki N, Ando M, Nishio M, Kimura H, Tamura Y. The mediating effect of resilience between family functioning and mental well-being in hemodialysis patients in Japan: a cross-sectional design. Health Qual Life Outcomes. 2020;18(1):233. doi: 10.1186/s12955-020-01486-x.
12. Bandura A. Self-efficacy: toward a unifying theory of behavioral change. Psychol Rev. 1977;84(2):191-215. doi: 10.1037//0033-295x.84.2.191.
13. Kariminejad K, Mansouri L, Movahedi M, Hosseini H. The effectiveness of self-efficacy training on self-esteem and achievement motivation in women with disabilities of welfare organization of Khoramabad city. J Soc Work. 2018;6(4):43-50. [Persian].
14. Kazemi S, Didarlo A, Khalkhali H, Feizi A. Studying the relationship between self-efficacy and dietary adherence, in patients under hemodialysis. Nurs Midwifery J. 2018;15(11):835-42. [Persian].
15. Chon MY, Yeun EJ, Jung KH, Jo YI, Lee KR. Perceptions of resilience in patients undergoing peritoneal dialysis: a Q-methodology study. Nurs Health Sci. 2020;22(1):108-17. doi: 10.1111/nhs.12655.
16. Rajabiyan Dehzireh M, Dortaj F, Dortaj F, Allahi Z. Role of spiritual health in the resiliency of Kashan university students. Rooyesh. 2019;8(1):97-108. [Persian].
17. Freire de Medeiros CM, Arantes EP, de Paulo Tajra RD, Santiago HR, Carvalho AF, Libório AB. Resilience, religiosity and treatment adherence in hemodialysis patients: a prospective study. Psychol Health Med. 2017;22(5):570-7. doi: 10.1080/13548506.2016.1191658.
18. Liu YM, Chang HJ, Wang RH, Yang LK, Lu KC, Hou YC. Role of resilience and social support in alleviating depression in patients receiving maintenance hemodialysis. Ther Clin Risk Manag. 2018;14:441-51. doi: 10.2147/tcrm.s152273.
19. Koochaki G, Hoseini M, Vasli P, Faghihzadeh E. The effect of education of health promotion behaviors on resilience in hemodialysis patients. The First National Confrance on Care and Treatment; Aliabad Islamic Azad University; 2011. https://civilica.com/doc/878754.
20. Keyhani M, Taghvaei D, Rajabi A, Amirpour B. Internal consistency and confirmatory factor analysis of the Connor-Davidson Resilience Scale (CD-RISC) among nursing female. Iran J Med Educ. 2015;14(10):857-65. [Persian].
21. Wong JCS, Yang JZ. Seeing is believing: examining self-efficacy and trait hope as moderators of youths' positive risk-taking intention. J Risk Res. 2021;24(7):819-32. doi: 10.1080/13669877.2020.1750463.
22. Yıldırım M, Güler A. COVID-19 severity, self-efficacy, knowledge, preventive behaviors, and mental health in Turkey. Death Stud. 2022;46(4):979-86. doi: 10.1080/07481187.2020.1793434.
23. Greup SR, Kaal SEJ, Jansen R, Manten-Horst E, Thong MSY, van der Graaf WTA, et al. Post-traumatic growth and resilience in adolescent and young adult cancer patients: an overview. J Adolesc Young Adult Oncol. 2018;7(1):1-14. doi: 10.1089/jayao.2017.0040.
24. Imran A, Zakar R, Shahzad R, Hussain B, Ahmed R. Resilience: a coping strategy for physical and psychological challenges faced by chronic kidney disease patients. Pak J Med Health Sci. 2023;17(6):21-4. doi: 10.53350/pjmhs202317621.
25. Şanli ME, Dinç M, Öner U, Buluş M, Çiçek İ, Doğan İ. The role of spirituality in anxiety and psychological resilience of hemodialysis patients in Turkey. J Relig Health. 2023. doi: 10.1007/s10943-023-01855-y.
26. Gomes CCI, Lanzotti BR, Orlandi SF. Resilience in patients with chronic kidney disease in hemodialysis. Int J Nurs Health Sci. 2017;11(5):227-31. doi: 10.5281/zenodo.1130415.
27. Guo L, Li L, Lu Y, Li T, Chen L, Jiang L, et al. Effects of empowerment education on the self-management and self-efficacy of liver transplant patients: a randomized controlled trial. BMC Nurs. 2023;22(1):146. doi: 10.1186/s12912-023-01298-6.
28. Ghanei Gheshlagh R, Ebadi A, Dalvandi A, Rezaei M, Nourozi Tabrizi K. A systematic study of resilience in patients with chronic physical diseases. Nurs Midwifery Stud. 2017;6(2):e36401. doi: 10.5812/nmsjournal.36401.
29. Tehranineshat B, Mohammadi F, Mehdizade Tazangi R, Sohrabpour M, Parviniannasab AM, Bijani M. A study of the relationship among burned patients' resilience and self-efficacy and their quality of life. Patient Prefer Adherence. 2020;14:1361-9. doi: 10.2147/ppa.s262571.
30. Werdani YD, Silab PA. Self-efficacy affects cancer patients in solving problems, seeking support and avoiding problems as coping mechanisms. Nurse Media J Nurs. 2020;10(2):146-57. doi: 10.14710/nmjn.v10i2.26803.

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