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The Relationship between Self-Esteem and Coping Styles in Patients Undergoing Hemodialysis

Leila Rezaei¹ and Shayesteh Salehi^{2*}

¹Graduate student, Faculty of nursing and Midwifery, Islamic Azad University, Isfahan (khorasgan) Branch, Isfahan, Iran.

²Associate Professor, Faculty of nursing and Midwifery, Islamic Azad University, Isfahan (khorasgan) Branch, Isfahan, Iran.

Corresponding Email: *sh.salehi@khuisf.ac.ir

ABSTRACT

This paper is a report of a study of The Relationship between Self-Esteem and Coping Styles in patients undergoing hemodialysis in Iran. Hemodialysis patients face with multiple physical and psychological stressful factors; they use coping styles in order to cope with the challenges. A descriptive-correlation study was conducted based on the data collected from patients undergoing hemodialysis by census method in the city of Kerman using the Endler and Parker coping style, Self-esteem and demographic information questionnaires. The mean age of patients was 56.21 ± 1.45 years and 58.5% were male. The statistically positive relationship between self-esteem and problem-oriented coping style ($p=0.05$) and inverse relationship between self-esteem and emotion-oriented style ($p<0.001$). The patients with higher and lower self-esteem used problem-oriented and emotion-oriented styles, respectively. According to the results, it is necessary for nurses to enhance their role in promoting self-esteem and help patients undergoing hemodialysis while using problem-oriented style.

Keywords: Self-esteem, coping styles, hemodialysis

INTRODUCTION

Chronic renal failure or irreversible kidney failure is the reduced function of kidney tissues, so that the residual mass cannot maintain the body's internal environment [1]. Chronic kidney disease is one of the health problems in today's world which is considered a threatening situation for the health, social and economic condition of the infected person, and his/her family and community [2].

The prevalence of chronic kidney failure is 242 cases in a million of people in the world, and about 8% is added to this rate annually [3]. At the beginning of 2012, the number of these patients in Iran was around 40,000 [4].

Dialysis is a stressful process and results in numerous psychological and social problems that can lead to physical and mental disorders in the chronic renal failure patients [5]. When the patient begins dialysis treatment, his life will be completely changed, as he must attend regular dialysis sessions, uses prescribed drugs and adjust anything that eats or drinks. The frequency and duration of dialysis are stressful factors in patients undergoing hemodialysis that affect the extent of their mental-social problems [6].

Such patients need emotional support to cope with their situation. People, who have high psychological and social support, are better able to cope with stressful life events [7]. These patients use a variety of coping strategies to cope with disease-related stress and medical procedures. Type of coping strategies they use depends on their personal experience, support system and the available resources [8].

Various researchers have shown that the level of health, functional status and self-esteem, in ESRD patients, especially those undergoing hemodialysis is lower than expected [9].

According to various developments in the field of nursing of patients with chronic diseases, now nursing is not limited only to hospital patients and care of patients in acute phase, it also includes care at discharge and education during admission and discharge. Nurses, as key members of the health team, play a very important role especially in the management of patients under treatment. In this regard, as well as nurses and other health team members, patients should also have active participation in improving quantitative and qualitative level of life, it is clear that it will be realized if there is sufficient knowledge in the field of treatment and care [10].

Gurkan *et al.* study showed that anxiety and depression were significantly higher in patients undergoing hemodialysis compared to patients with kidney transplant, and hemodialysis patients used less problem-oriented style compared with transplant patients [11]. Bagheriansararoudi *et al.* showed that hemodialysis patients are less eager to use direct exposure coping styles; in contrast, they apply evasive and soothing styles in coping with stresses [12]. The results of Shinde and Patil Mane in India showed that 97% of hemodialysis patients had severe stress [13].

There are several reports that show these patients face with many challenges in coping with the stress of chronic disease [12]. So these patients use a variety of coping strategies to cope with disease-related stress and medical procedures. Type of coping strategies they use depends on their personal experience, support system and the available resources [8]. Thus, identification of coping styles and their relationship with self-esteem is necessary to help nurses with self-care and improve the self-esteem of these patients. Therefore, this study aimed to determine the relationship between self-esteem and coping styles in patients referring to hemodialysis centers in the city of Kerman in 2015.

MATERIALS AND METHODS

Aims this study was designed to determine The Relationship between Self-Esteem and Coping Styles in patients undergoing hemodialysis in Iran, and the relationship of the coping styles and Self-Esteem to some demographic variables, such as, age, gender and educational level.

Design

This is a descriptive-correlation study of hemodialysis patients in Kerman, Iran.

Sample and Data collection

The study population was patients undergoing chronic hemodialysis who were selected by census method based on inclusion and exclusion criteria from four dialysis centers of Javadolaemeh, Samen Al-Hojaj, hospitals of Shafa and Afzalipoor. First, we visited the relevant centers and prepared patients' list, then subjects were identified on this basis and in accordance with inclusion criteria (minimum age of 18 years, at least 4 months of treatment with hemodialysis, ability to complete the questionnaire or participate in the interview) and exclusion criteria (request to withdraw, disability to continue answering questions, earning scores more than 4 out of 8 questions of self-esteem questionnaire lie detector). After explanations and sufficient trainings, the questionnaires were completed by 185 patients.

Instruments

Data collection tools consisted of three parts, the first was a demographic questionnaire in which the participants' specifications such as gender, age, marital status, occupation, education, duration of hemodialysis, the underlying cause of kidney failure and the daily activities were examined. The second part was the Cooper smith self-esteem questionnaire. This questionnaire has 58 items, 8 of them lie detector and 50 of them related to self-esteem. Grading method is in the form of zero and one. This means that some items, "yes" scores is 1 and "no" score is 0 and the score of other items is in reverse order. If the respondents get 4 out of 8 items of the lie detector, the validity of the test is low and will be removed. Using Cronbach's alpha coefficient, Hosseini, Dejkam and Mirlashari reported the

validity coefficient of the scale, and its reliability, 0.71 and 0.92, respectively [14]. The third part was the questionnaire of Endler& Parker coping styles, which has 48 items whose responses are measured on a Likert scale and has three subscales of problem-oriented style, emotion-oriented style and avoidance style and each subscales includes 16 questions. The questions are answered on a 5-point scale from never (1) to always (5). The score of each of styles is 16 to 80. This means that each of the behaviors that earns higher scores, it is considered as the coping method [15]. ZamaneeShatouri in his study in 2013, reported Cronbach's alpha reliability of the questionnaire equal to 0.87 [16].

Data analysis

In this study, SPSS version 19 and the non- parametric tests such as Chi-square and Mann-Whitney test and Spearman correlation coefficient were used for statistical analysis.

Ethical considerations

In order to complete the survey questionnaire, written informed consent was obtained from patients, and they were assured that all information obtained during the study will be confidential and results will be presented generally. In addition, in order to conduct this study, Ethical Code No. 1394.4.66 was obtained Medical from the ethics committee of Isfahan University of Medical Sciences.

RESULTS

In total, 185 patients participated in the study. According to lie detector items, 23.24% of patients (n = 43) were excluded. Finally, 142 questionnaires were used in analyzing process. The mean age of patients was 56.21 ± 1.45 years, 58.5% were male, most of the them (46.5%) above the age of 60, majority of them were married (77.5%), retired (34.5%) with primary school education (34.5%) and were treated with hemodialysis more than 3 years (39.4%). The majority of them (86.6%) lived in the city. Most of them stated the diabetes as underlying cause of kidney failure (31%) and had low daily activities (41.5%).

The highest mean score (47.52 ± 1.25) of coping styles were related to problem-oriented style. The mean scores of self-esteem and coping styles are presented in Table 1.

Table1. Mean total score of self-esteem and coping styles in patients undergoing hemodialysis

Variable	Mean	Standard deviation
Self-esteem	36.08	5.69
Coping styles		
Problem-oriented	47.52	1.25
Emotion-oriented	36.25	1.19
Avoidance-oriented	35.38	1.08

There was significant relationship between self-esteem and gender, age and occupation, between problem-oriented coping style and education level and daily activities, between emotion-oriented coping style and gender, age and occupation, between avoidance-oriented style and age, marital status, education level, the underlying cause of kidney failure and daily activity ($p < 0.05$). In the relationship between self-esteem and coping style, self-esteem had the greatest correlation with the emotion-oriented coping style ($p < 0.001$) so that people with low self-esteem used more emotion-oriented coping style. In addition, self-esteem had a significant positive relationship with problem-oriented coping style ($p = 0.05$) such that people with higher self-esteem used more problem-oriented style (Table 2).

Table 2. The relationship between self-esteem and coping styles in patients undergoing hemodialysis

Variable	Self-esteem	
	Spearman correlation coefficient	P value
Coping styles		
Problem-oriented	0.16	0.05
Emotion-oriented	-0.57	$P < 0.001$
Avoidance-oriented	-0.10	0.25

DISCUSSION

In this study, there was a significant relationship between gender, age, occupation and self-esteem. Mean score of self-esteem in men above 60 and retired was higher. The results of our study were different from Chou and self-esteem had no significant relationship with gender, age and occupation [17]. Different cultures, beliefs and geographical area may be the reasons of this discrepancy.

The present study showed that problem-oriented coping style was significantly associated with level of education and daily activities. The mean score of people with higher education and activity level was more in problem-oriented style. The results of Gurkan et al. (2015), as well as Sultan et al. (2007) confirmed the significant association between problem-oriented style and level of education. Higher education may lead to a better understanding of the stressful situation and take constructive measures in the face of difficulties [11, 18]. Kurella Tamura et al. in their study found that lower education is associated with a higher likelihood of cognitive impairment [19].

In this study, emotion-oriented coping style had significant relationship with gender, age and occupation, coping style mean score was higher in women of lower age group (22-40 years) and employed and retired people. Yeh and Chou found that women used more coping style compared to men [19]. The results of Gurkan et al. showed an inverse significant relationship between age and emotion-oriented coping strategy. Soltan et al. (2007) showed a direct correlation between education level and emotion-oriented style that were different from our study [11, 18].

In the present study, the avoidance-oriented style had a significant relationship with age, marital status, education level, underlying cause of kidney failure and the daily activities. The score mean of avoidance-oriented style was higher in single people with higher education, with the underlying cause of high blood pressure and average daily activity level. Gurkan et al.(2015) study results also showed that age was inversely correlated with avoidance-oriented style, but it was different from our study in terms of significance of marital status and education level [11]. Yeh and Chou(2007) showed a significant inverse relationship between age and avoidance-oriented style [20].

In this study, the highest and lowest mean scores in the coping styles were in problem-oriented and avoidance-oriented styles, respectively. Also in the study of Gurkan et al. (2015), the problem-oriented and avoidance-oriented styles had the highest and lowest scores [11]. Lack of knowledge about the health status in younger patients may result in denial or negligence of the disease [21].

In this study, there was a significant relationship between self-esteem and coping styles; self-esteem had the highest inverse correlation with emotion-oriented styles, so that people with low self-esteem used more emotion-oriented styles. Moreover, there was a positive significant relationship between self-esteem and problem-oriented style, so that people with higher self-esteem used more problem-oriented styles. The results of Sahebalzamani, Fesharaki and AbdollahiMonfared (2010) were consistent with our study, and there was a significant relationship between self-esteem and lifestyle ($p=0.001$) [22]. Also, in the study of O'Brien (1993), there was a significant positive relationship between self-esteem and problem-oriented coping style($p=0.03$) [23]. It can be said that individuals who have the sense of self-worth have a positive attitude towards their own abilities, as a result, they try to take constructive actions in coping with stressful situations to maintain or change the source of stress [24].

Limitations

According to the Cooper smith Self-Esteem Inventory (CSEI), some of questionnaires were excluded after being completed due to the high score of the lie detector. As a result, the number of samples was reduced; moreover, the psychological state of the subjects was uncontrollable which can affect how to respond.

CONCLUSION

The findings showed that people with higher self-esteem use problem-oriented style and individuals with low self-esteem apply emotion-oriented style. Assessing psycho-social needs, psycho-social support and proper, interventions, such as training social skills and ways to strengthen self-worth, nurses can help hemodialysis patients to use problem-oriented coping styles. More scientific research is recommended in order to identify factors that increase the self-esteem of patients undergoing hemodialysis and also the impact of nursing interventions based on consulting, training, coping strategies and social skills on self-esteem in patients undergoing hemodialysis.

Key points for policy, practice and/or research

Self-esteem is one of the essential factors in the growth and prosperity of the human; high self-esteem prevents problems, physical and psychological disorders.

Coping style differs in accordance with the terms and the amount of knowledge about them, and hemodialysis patients may be different from healthy people due to their special conditions and limitations.

Since the self-esteem includes self-worth, it affects the choice of the coping style.

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Declaration of conflicting interest

The authors declare that there are no conflicts of interest.

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