Spiritual Coping Strategies for Patients with Chronic Renal Failure

إستراتيجيات التكيف الروحانى للمرضى المصابين بالفشل الكلوي المزمن

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المستخلص:

أهداف الدراسة: تهدف هذه الدراسة إلى (١) إيجاد الإرتباط بين عمر المرضى، مدة الإصابة بالمرض وقابلية التكيف الروحاني، (٢) إيجاد الفروقات في قابلية التكيف الروحاني بين مجموعات الجنس، مستوى التعليم، الدخل الشهري، السكن، والقناعة بجودة خدمات الرعاية الصحية.

ا**لمنهجية:** تصميم وصفي إرتباطي استعمل في هـذه الدراسـة. شملـت عينــة الدراســة الدراســة الملائمــة (١٥٨) مريضــاً مصابــاً بالعجــز الكلـوى المزمـن.

تكونت أداة الدراسة من جزئين؛ يتناول الجزء الأول المعلومات الديمو غرافية، ويتناول الجزء الثاني التكيف الروحاني بإستعمال مقياس إستراتيجيات التكيف الروحاني.

النتائج: بينت نتائج الدراسة أنّ ما يقارب نصف العينة يستعملون إستراتيجيات التكيف الروحاني بمستوى كبير ومتوسط. فضلاً عن ذلك، هنالك فروقات إحصائية معنوية في التكيف الروحاني بين مجموعات الدخل الشهري.

الإستنتاجات: خلصت الدراسة إلى أنّ العمر كان عاملاً مؤثراً في إستعمال إستراتيجيات التكيف الروحاني وأن المرضى من ذوي الدخل الشهري المتدني يستعملون إستراتيجيات التكيف الروحاني أكثر من غيرهم من المرضى.

لكلمات المفتاحية: التكيف الروحاني، الفشل الكلوى المزمن

Abstract:

Objectives: This study aims to (1) find out the association between patients' age, years of getting the disease, and their spiritual coping ability, and (2) investigate the differences in illness perception and spiritual coping ability between gender groups, level of education groups, monthly income groups, residence groups and satisfaction with health services groups.

Methodology

A descriptive correlational design is used in this study. The study sample includes a convenience sample of (158) patients with chronic kidney failure.

The study instrument consists of two parts; the first one focuses on participants' sociodemographic characteristics, and the second part deals with participants' spiritual coping by using Spiritual Coping Strategies Scale.

Results: The study results reveal that around a half of participants use spiritual coping at both greater and moderate extents. Furthermore, there is a statistically significant difference in spiritual coping among monthly income groups.

Recommendations: There is a need to reinforce and emphasize the importance the spiritual coping in alleviation patients' suffering resulted from CKD, and there is need to incorporate materials related to the role of spiritual coping in the management of chronic illnesses including CKD into the curricula across varied levels of education.

Keywords: Spiritual Coping, Chronic Kidney Failure

Introduction:

Renal failure results when the kidneys remove the body's metabolic perform their regulatory wastes or functions. The substances normally eliminated in the urine accumulate in the body fluids as a result of impaired renal excretion, affecting endocrine and metabolic functions as well as fluid, electrolyte, and acid-base disturbances. Renal failure is a systemic disease and is a final common pathway of many different kidney and urinary tract diseases. Each of the number deaths from year, irreversible renal failure increases (1).

When a patient has sustained enough kidney damage to require replacement therapy on a permanent basis, the patient has moved into the fifth or final stage of Chronic kidney disease (CKD), also referred to as chronic renal failure (CRF) or ESRD. CKD is an umbrella term that describes kidney damage or a decrease in the glomerular filtration rate (GFR) for 3 or more months (2). CKD is associated with decreased quality of life, increased health care expenditures, and premature death. Untreated CKD can result in endstage renal disease (ESRD) and necessitate renal replacement therapy (dialysis or kidney transplantation).

Coping with stress

Lazarus and Folkman (1984) defined coping as

'constantly changing cognitive and behavioral efforts to manage external and/or internal demands that are appraised as taxing or exceeding the resources of the person' (3).

This mirrors the definition of stress as the individual's belief that his/her available biological, psychological and social resources are not sufficient to meet the demands of the situation.) This definition clearly reflects the transactional model which explicitly acknowledges the ongoing interactions between a person and his/her environment ⁽⁴⁾.

Stressful experiences are construed as person environment transactions created initially by an individual's appraisal of the stressor. Subsequently, such experiences are influenced by ongoing appraisals of available coping resources, effectiveness of coping behaviors and so forth ⁽⁵⁾.

Spirituality

Spirituality is difficult to describe. It cannot be seen, and it undoubtedly means something different to all people. Perhaps this is partly the reason it has been somewhat ignored in the nursing literature. The inclusion of nursing responsibility for spiritual care is cited by the International Council of Nurses in their Code of Ethics and by the American Holistic Nurses

Association in their Standards for Holistic Nursing Practice.

In addition, contemporary research has produced evidence that spirituality and religion can make a positive difference in health and illness. Smucker states: Spirituality is the recognition or experience of a dimension of life that is invisible, and both within us and yet beyond our material world, providing a sense of connectedness and interrelatedness with the universe ⁽⁶⁾.

Religion and Health

Religion is one way in which an individual's spirituality may be expressed. There are more than 6,500 religions in the world (7). Some individuals seek out various religions in an attempt to find answers to fundamental questions that they have about life, and indeed, about their very existence. Others, although they may regard themselves as spiritual, choose not to affiliate with an organized religious group. In either situation, however, it is inevitable that questions related to life and the human condition arise during the progression of spiritual maturation. Brodd suggests that all religious traditions manifest seven dimensions: experiential, mythic, doctrinal, ethical, ritual, social, and material. He explains that these seven dimensions are intertwined and complementary and, depending on the particular religion, certain dimensions are emphasized more than others ⁽⁸⁾.

Some religious bodies including mosques and churches actively promote healthy lifestyles and discourage behavior that would be harmful to health or interfere with treatment of disease. But some researchers believe that the strong social support network found in mosques or churches may be the most important force in boosting the health and well-being of their members. More so than merely an affiliation, however, it is regular church attendance and participation that appear to be the key factors. Best to our knowledge, this is the first study that shed the light on the mediating role of spirituality among patients with CRF in Iraq.

Objective of the study:

This study aims to (1) determine those patient's spiritual coping ability, (2) find out the association between patient's age, years of getting the disease, and their spiritual coping ability, and (3) investigate the differences in spiritual coping ability between gender groups, level of education groups, monthly income groups, residence groups and satisfaction with health services groups.

Methodology:

Design

A descriptive correlational design was used in this study.

Population

The study population included patients with chronic kidney failure. The target

population for this study was drawn from Baghdad City Hospitals and met the inclusion criteria mentioned below.

Sampling

applied The study the convenience sampling method. This type of sampling is inexpensive and feasible, and usually requires less time in comparison with other (9) types of samples Convenience sampling facilitates conducting studies on topics that could not be investigated via the of probability application sampling (Grove, Burns, & Gray, 2013). Furthermore, it allows researchers to obtain information in unexplored fields. In the convenience sampling approach, participants were included in the study since they happened to be in the right place at the right time ⁽⁹⁾.

Based on seven predictors (age, gender, level of education, monthly income, residency, duration of illness, satisfaction with the health care services), an anticipated effect size of 0.15, a desired statistical power level of 0.95, and a probability level of 0.05, the minimum required sample size would be 154. The researcher distributed (180) copies of the study questionnaire to the accessible patients. The returned questionnaires were 164; six of them were incomplete. they were excluded from the data analyses. The final sample size was 158. Thus, the response rate was 91.1%.

Instrumentation

The study instrument consists of two parts; the first one focuses on participants' sociodemographic characteristics, and the second part deals with participants' spiritual coping.

Spiritual Coping Strategies Scale

The SCS (10) is a self-administered scale that was used to measure spirituality (religious and non-religious coping strategies). This scale is 4-point Likert scale that is composed of 20 items (nine items for religious coping which asks about participant's attitude with regard to religion and belief in God and 11 items for non-religious coping that assess humanistic coping strategies related to self, others and nature. These items were measured on a 4point Likert scale. Responses on this scale range from 0 (Never used) to 3 (Often used). Total scores range from 0 to 60, with a higher score indicating greater use of spiritual coping (10). A cutoff point for the scale has not been defined. The validity and reliability of the scale have been established in previous studies (10-11). The SCS has shown an excellent internal consistency reliability; Cronbach's alphas 0.84 for the English version, 0.79 for the back-translation, and 0.82 for the bilingual version (10-11). As well, the SCS shown good content validity.

Setting

The accessible population included patients with renal failure that the researcher could access in facilities where patients meet including three hospitals of Baghdad medical city. Participants were those who met the previously mentioned inclusion criteria and were willing to participate in the study. Data collection took place at those locations.

Data Collection Plan

Data were collected by using a self-reported questionnaire for the period from January 29th, 2018 to February 28th, 2018. Data included the nominal level of measurement for some variables including gender and residency, interval level for the age, ordinal level for the variables of level of education, monthly income, satisfaction

with health services, spiritual coping, and illness perception.

Data Analyses/Statistics

Data were analyzed using the statistical package for social science (SPSS) for windows Version 24 (Chicago, IL). statistical Descriptive measures of frequency, percent, mean, and standard deviation were used to demonstrate the participant's sociodemographic characteristics. Furthermore, the inferential statistical measures of Bivariate correlation and linear regression were used to measure the association between study variables. Moreover, the non-parametric tests of Kruskal-Wallis tests and Mann-Whitney U were used to investigate the test differences in the mean scores of the spiritual coping distributed among the dependent variables groups.

Study Results

Table (1): Participants' Sociodemographic Characteristics (N = 158)

Variables	Frequency	Percent
Age Mean: 48.29 ± 14.9		
15-27	17	10.8
28-40	35	22.2
41-53	41	25.9
54-66	48	30.4
67-80	17	10.8
Gender		
Male	87	55.1
Female	71	44.9
Level of education		
Illiterate	27	17.1
Reads and writes	8	5.1
Elementary school graduate	40	25.3
Middle school graduate	38	24.1
High school graduate	16	10.1
Associate degree	10	6.3
Bachelor's degree	17	10.8
Master's degree	2	1.3
Monthly Income (Iraqi Dinar)		
< 300.000	78	49.4
301.000-600.000	42	26.6
601.000-900.000	22	13.9
901.000-1.200.000	11	7.0
1.201.000-1.500.000	2	1.3
≥ 1.501.000	3	1.9
Residence		
Urban	122	77.2
Suburban	12	7.6
Rural	24	15.2

The age mean is 48.29 ± 14.9 ; less than a third are of the (54-66) years-old age (n = 48; 30.4%), followed by those who are of the (41-53) years-old age (n = 41; 25.9%), those who are of the ((28-40) years-old age (n = 35; 22.2%), and about tenth for each of the (15-27) and (67-80) years-old (n = 17; 10.8%). Concerning gender, more than a half are males (n = 87; 55.1%) and less than a half are females (n = 71; 44.9%).

Regarding the level of education, around a quarter are Elementary school graduates (n = 40; 25.3%), followed by those who are Middle school graduates (n = 38; 24.1%), those who are unable to read and write (n = 27; 17.1%), those who hold a Bachelor's degree (n = 17; 10.8%), those who hold an associate degree (n = 10; 6.3%), those who read and write (n = 8; 5.1%), and those who hold a Master degree (n = 2; 1.3%).

With respect to monthly income, around half reported that their monthly income is less than 300.000 ID (n=78; 49.4%), followed by those who reported that their monthly income ranges between 301.000-600.000 ID (n=42; 26.6%), those whose monthly income ranges between 601.000-900.000 ID (n=22; 13.9%), those whose monthly income ranges between 901.000-1.200.000 ID (n=11; 7.0%), those whose monthly income is 1.501.000 ID or more (n=3; 1.9%), and those whose monthly income ranges between 1.201.000-1.500.000 ID (n=2; 1.3%). Ultimately, most of participants live in urban areas (n=122; 77.2%), followed by those who live in rural areas (n=24; 15.2%), and those who live in suburban areas (n=12; 7.6%).

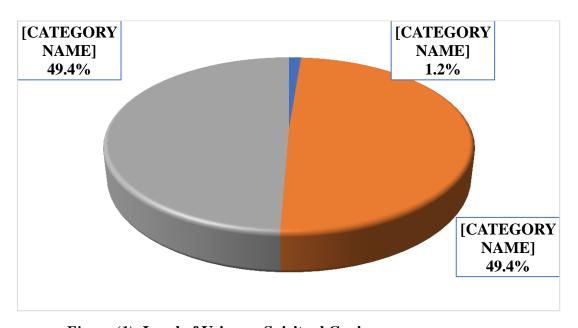


Figure (1): Level of Using or Spiritual Coping

Around a half of participants use spiritual coping at both greater and moderate extents (n = 78; 49.4%), and a small proportion who use spiritual coping at a lesser extent (n = 2; 1.2%).

Table (2): Correlations among Participants' Age, Duration of Getting the

And Each of Spiritual Coping and Illness Perception

	1.	2.	3.
1. Age	-		
2. Duration of getting the disease	101**	-	
3. Spiritual Coping	.067**	086**	-

^{**.} Correlation is significant at the 0.01 level (2-tailed).

There is a positive statistically significant correlation between participants' age and their spiritual coping (r = .067 at p-value < .05). Furthermore, there is an inverse statistically significant correlation between duration of getting the disease and participants' spiritual coping (r = .086 at p-value < .05).

Table (3): Difference in Spiritual Coping Between Gender Groups

Ranks			Mann-	Asymp.		
	Gender	N	Mean Rank	Sum of Ranks	Whitney U	Sig.
Spiritual	Male	87	83.09	7229.00	2776.000	.274
Coping	Female	71	75.10	5332.00		
	Total	158				

Males use spiritual coping greater than females. However, there is no statistically significant difference in using spiritual coping between gender groups (Mann-Whitney U = 7229.004, p-value = .274).

Table (4): Difference in spiritual Coping Among Level of Education Groups

	Chi-square	df	Asymp. Sig.			
	Level of education	N	Mean Rank	9.936	7	.192
	Unable to read and write	27	63.43			
	Reads and writes	8	67.06			
	Elementary school graduate	40	75.23			
Spiritual	Middle school graduate	38	81.50			
Coping	High school graduate	16	87.44			
	Associate degree	10	104.60			
	Bachelor's degree	17	95.24			
	Master's degree	2	71.00			
	Total	158				

Participants who hold an associate degree use greater spiritual coping, followed by those who hold a bachelor's degree, those who are High school graduates, those who are Middle school graduates, those who are Elementary school graduates, those who hold a master's degree, those who read and write, and those who are unable to read and write. However, there is no statistically significant difference in using spiritual coping among level of education groups (Chi-square = 9.936, df = 7, p-value = .192).

Table (5): Difference in Spiritual Coping among Monthly Income Groups

	Chi-square	df	Asymp. Sig			
	Monthly Income (Iraqi Dinar)	N	Mean Rank	Cm-square	G1	risymp. sig
	< 300.000	78	68.51			
Coping	301.000-600.000	42	92.17	9.118 3	3	.028
	601.000–900.000	22	71.55			
	901.000-1.200.000	11	90.23			
	Total	153				

Participants who reported that their monthly income ranges between (301.000-600.000 ID) use greater spiritual coping, followed by those who reported that their monthly income ranges between (901.000-1.200.000 ID), those who reported that their monthly income ranges between (601.000-900.000 ID), and those who reported that their monthly income is less than (300.000 ID) respectively. Participants who reported that their monthly income ranges between (1.201.000-1.500.000 ID) and higher were excluded from this analysis because of their limited number. There is a statistically significant difference in spiritual coping among monthly income groups Chi-square = 9.118, df = 3, p-value = .028).

Table (6): Difference in Spiritual Coping among Satisfaction with Health Services Groups

	Chi-square	df	Asymp. Sig			
	Satisfaction with health services	N	Mean Rank	Cin square	u1	713ymp. 51g
	Dissatisfied	17	91.53	3.830	2	.147
Spiritual	Satisfied	97	73.54			
Coping	Very Satisfied	43	86.37			
	Total	157				

Participants who reported that they are dissatisfied with health services provided in the hospitals they are treated in use greater spiritual coping, followed by those who reported that they are very satisfied with such services, and those who reported that they satisfied with such services respectively. The participant who reported that they are very dissatisfied with such services was excluded from this analysis. However, there is no statistically significant difference in using spiritual coping among satisfaction with health services groups (Chisquare = 3.830, df = 2, p-value = .147).

Discussion:

Regarding the age, less than a third are of the (54-66) years-old age, followed by those who are of the (41-53) years-old age, those who are of the (28-40) years-old age, and about tenth for each of the (15-27) and (67-80) years-old. This finding is consistent with that of Yodchai and others

in their exploratory, qualitative study on 12 people receiving HD ⁽¹²⁾ and Valcanti and others in their quantitative, descriptive and cross-sectional study on 123 CKD patients under hemodialysis treatment ⁽¹³⁾.

Concerning gender, more than a half are males and less than a half are females. This finding is consistent with

that of Kim and Evangelista in their study on 151 patients of CKD. Females in their sample study was less than Males ⁽¹⁴⁾.

Regarding the level of education, around a quarter are Elementary school graduates, followed by those who are Middle school graduates, those who are unable to read and write, those who hold a bachelor's degree, those who hold an associate degree, those who read and write, and those who hold a master's degree. This finding is consistent with that of Chaves and others in their descriptive and observational study on 120 adult patients with chronic renal diseases (15) Gerogianni and others (16) in their study on 100 patients undergoing hemodialysis found that unfinished primary education prevailed. Few participants finished secondary or higher education, which confirms subjects' low education level.

With respect to monthly income, around half reported that their monthly income is less than 300.000 ID, followed by those who reported that their monthly income ranges between 301.000-600.000 ID, those whose monthly income ranges between 601.000-900.000 ID, those whose monthly income ranges between 901.000-1.200.000 ID, those whose monthly income is 1.501.000 ID or more, and those whose monthly income ranges between 1.201.000-1.500.000 ID. Most patients have low monthly income. This finding is

consistent with that of Yann and others in their cross-sectional study on 300 patients of CKD. They found that most of patient in their sample with low monthly income ⁽¹⁷⁾.

Ultimately, most of participants live in urban areas, followed by those who live in rural areas, and those who live in suburban areas. This finding is consistent with that of Tonkin-Crine and others in their qualitative study on 19 patients with CKD ⁽¹⁸⁾.

Concerning using spiritual coping, around a half of participant's use spiritual coping at both greater and moderate extents. This could be explained as that the clear majority of study participants are Muslims who have strong connectedness with Allah, prophets, and Imams. This finding is consistent with that of Ramirez and others (19) in their cross-sectional study on (170) patients with ESRD and Valcanti and others (13) in their cross-sectional study on (123) HD patients found that the majority of patients on dialysis depend on religion to cope with their disease. Moreover, Rambod and others (20) in their cross-sectional study found that religious and spiritual beliefs are stronger in the HD population. Furthermore, Lucchetti and others (21) in their cross-sectional study on a sample of (205) patients on hemodialysis found that there was a great importance of religion for the recovery of patients. This reflects the faith patients have in God, enable them to defeat their difficulties and cope with their disease while also aiding in recovery and treatment.

Participants age was found to be influential in using of spiritual coping and their overall illness perception. Further cross-tabulation analysis revealed that a half participant of the (41-53) years-old hold a master's degree. It is expected that individuals with higher levels of education can read more about different topics including coping and illness perception.

Participants who reported that their monthly income ranges between (301.000-600.000 ID) use greater spiritual coping, followed by those who reported that their monthly income ranges between (901.000-1.200.000 ID). There is a statistically significant difference in spiritual coping among monthly income groups. Except for participants who reported that their monthly income ranges between (301.000-600.000 ID), the study findings demonstrated that the higher the monthly income, the greater the use of spiritual coping. Further cross-tabulation analysis revealed that most of participants whose monthly income is higher than other have higher levels of education.

There was a positive statistically significant correlation between participants' age and each of spiritual coping and their illness perception. This indicates that as people advance in age,

they can come through different life experiences and acquire knowledge in various aspects of life. These experience and knowledge can help them how to deal with different hardships they can face throughout their life.

Furthermore, there is an inverse statistically significant correlation between duration of getting the disease and participants' spiritual coping. This indicates that the shorter the duration of illness, the less amount of discomfort, illness-related problems, and consequences.

On the other hand, there was a positive statistically significant correlation between duration of getting the disease and participants' illness perception respectively. This could be explained as that patients whose illness is long can get as much as possible information about their illness from the repeated visit to health care providers.

Lastly, there was an inverse statistically significant correlation between participants' spiritual coping and their illness perception. This could be explained as that people who have strong connectedness with Allah, prophets, and religious people give less attention to their illness and its consequences.

Recommendations:

1. There is a need to reinforce and emphasize the importance the

- spiritual coping in alleviation patients' suffering resulted from CKD.
- There is need to incorporate materials related to the role of spiritual coping into the curricula across varied levels of education.

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