

## Religious Coping and Life Satisfaction Among Elderly Patients Undergoing Hemodialysis



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### ABSTRACT

**Background:** Elderly patients undergoing hemodialysis often experience psychological distress, necessitating effective coping strategies. **Aim:** Assessment of Religious Coping and Life Satisfaction among Elderly Patients Undergoing Hemodialysis. A descriptive study design was implemented: The study was conducted at the dialysis unit of Mansoura University Hospital, which is situated on the first floor within medical department 3. **Subjects:** A purposive sample of 166 elderly patients attend at dialysis unit in Mansoura University Hospital. Four tools were employed to harvest the necessary data: Scheduling Interviews sheet on Elderly Patients, The Mini Mental State Examination Scale, Brief-Religious Coping Scale, and the Satisfaction with Life Scale. **Results:** Positive religious coping was prevalent in 85.5% of elderly patient undergoing hemodialysis at the same time 54.5% of them were satisfied with their life. As well as, there was a positive correlation between positive religious coping, and satisfaction with life ( $R= 0.177$ ,  $P= 0.022$ ). **Conclusion:** Finding indicates that, elderly patients undergoing hemodialysis exhibit positive religious coping, which positively impact on their life satisfaction. **Recommendations:** Encourage elderly patients to engage in prayer and meditation to help them cope with stress and anxiety. Encourage elderly patients to participate in religious community activities to foster social support and connection. Help patients find meaning and purpose in life through reflective practices, such as journaling or storytelling. Involve family members in care planning and support to enhance patient satisfaction.

**Key words:** Elderly Patients, Hemodialysis, Life Satisfaction, Religious Coping

### Introduction

Chronic kidney disease is characterized by insidious loss of kidney functions, filtering out waste products or excessive fluid, or both, over a period. Indeed, CKD has become a public health concern worldwide, where its prevalence among the aging population is very high due to physiological changes induced by age and the increasing incidence of chronic diseases such as hypertension and diabetes. In effect, healthy aging is related to reduced kidney function and therefore puts older adults at risk for developing CKD. (Kalantar-Zadeh.,etal(2021).

In the elderly, CKD is usually a challenging clinical condition to present. This is because the condition might be asymptomatic in its early stages and therefore would require very late diagnosis and interventions. It usually co-occurs with other chronic conditions like cardiovascular diseases, complicating the management of the condition. Other than the obvious physical effects, chronic kidney disease is associated with a significantly increased decline in cognitive and functional limitation and general quality of life in the elderly population. (Glasscock., 2017).

Due of the high prevalence of chronic renal disease among the elderly, this has been increasing recently, particularly among this demographic. One of the most popular treatment options for people with end-stage renal illness, in which the kidneys are unable to function normally and need waste elimination, fluid control, and electrolyte stability, is hemodialysis. Hemodialysis presents several challenges in the elderly because to their numerous co-morbid conditions and social demands, but it may also lengthen their life expectancy, lessen some of their symptoms, and ultimately enhance their quality of life. (Chan., etal (2024).

Comorbid conditions such as cardiovascular disease, diabetes, and frailty are also more common in elderly hemodialysis patients and render the treatment less tolerable. Furthermore, in the elderly, impairment in vascular elasticity and resilience, as part of the physiological process of aging, makes dialysis procedures more technically challenging. (Dharmarajan,(2021). Beyond the medical issues, hemodialysis in elderly patients brings about ethical and quality-of-life concerns since it involves long hours of treatment, frequent hospital visits, and sometimes lifestyle adjustment, which might

be very challenging to the elderly and his caregivers. (Subba. (2024).

Hemodialysis is considered a burdensome therapy that, in most instances, involves severe physical, emotional, and social stress; thus, effective coping styles are necessary in maintaining the quality of life. (Lazarus et al., 2016).

Religious coping possesses a central and axial place in the framework of everyone's personality. It contains within itself the principles of human activity at an affective, social, and cognitive level; it is responsible for bringing about short-term and long-term developmental results. A behavior that consists of an attribute which is essential for an individual's daily life. The repertoire of coping strategies also encompasses practices about the spiritual-religious realm, as for example the religious positive coping. (Pargament, & Park (2019)

Those who reported high levels of positive religious coping also reported high ratings in mental health and life satisfaction. On the contrary, negative religious coping is associated with lower happiness, life satisfaction, and some aspects of quality of life, which include impaired physical and social functioning and impaired mental health. (Yilmaz, Sabanciogullari, & Berk, S. (2021). (Rababa, Hayajneh, & Bani-Iss,(2021).

Coping with chronic diseases may make many differences in individuals' lives, especially about life satisfaction, which represents an individual's general assessment of quality of life and contentment. In particular, in the case of elderly patients on hemodialysis treatment, life satisfaction is seriously challenged by rigors from treatment, physical limitations, and the psychological impact of chronic illness. Religious coping, however, has been found to relate to higher life satisfaction since it provides a meaningful avenue for the reduction of stress and an enhancement of purpose and connection. (Dobrakowski,(2021) It is a crucial personal power that contributes to the promotion of well-being, vitality enhancement, the avoidance of psychopathology, and the rise in susceptibility to disease. (Tomlinson, Sandage, Jankowski, & Captari, (2021).

The healthcare professional, caring for their patients in a holistic and patient-centered manner, has to be aware of the relation between religious coping strategies and life satisfaction in elderly haemodialysis patients. Support of the spiritual needs of patients and encouragement toward religious or spiritual practices can help improve

overall well-being and contribute to better health. (Dobrakowski,(2021) .

As they are the ones who deal more frequently with HD patients compared to other clinical personnel, nurses are better positioned to monitor whatever health issues might beset dialysis patients and ensure that optimum care for them is delivered. (Evans,. etal 2020). Gerontological nurses are also supposed to offer mental support for the patients who undergo haemodialysis to accept the situation as it is. The nurse helps the patient get familiar with his fears and concerns for the disease by soothing anxiety, enhancing adaptability, facilitating decision-making and educating the patient. ( Lavoie - Tremblay,. etal(2022) .

Additionally, the nurse's knowledge of providing high-quality care can impact these patients' care and increase patient satisfaction. (Labrague & de Los Santos., (2021).

#### **Aim of the Study**

1. Assess religious coping and life satisfaction among elderly patients undergoing hemodialysis.
2. Determine the relationship between religious coping and life satisfaction among elderly patients undergoing hemodialysis.

#### **Research Questions**

3. What is the type of religious coping among elderly patients undergoing hemodialysis?
4. What is the level of life satisfaction among elderly patients undergoing hemodialysis?
5. What is the relationship between religious coping and life satisfaction among hemodialysis elderly patients?

#### **Method**

##### **Research Design**

The descriptive study design was employed to conduct this investigation, as it was the most appropriate design for achieving the study's objective.

##### **Study Setting**

This study was conducted at dialysis unit of Mansoura University Hospital that is located in the first floor inside medical department 3. The dialysis unit work every day in three shifts and the patients divided into two groups the first group came to the unit on Saturday ,Monday and Wednesday .While, the second group came to the unit on Sunday , Tuesday and Thursday . shifts in hemodialysis unit divided into 3 shifts . the first shift started at 5 am then the second shift at 11am and the last shift at 3 pm. Dialysis unit contains 29 beds connected to

dialysis machines. This unit also offers other services like **Peritoneal dialysis service**, **such as kidney (interventional Procedures catheters and kidney biopsies)** and **Plasma Separation Device**. The unit provides regular hemodialysis sessions for both inpatients and outpatients and also at the nephrology patients at the departments of Mansoura University Hospitals and medical centers. Emergency hemodialysis sessions for critical and emergency cases referred from the emergency hospital or from the main hospital departments and medical centers.

#### Subjects

A purposive sampling of 166 elderly patients undergoing hemodialysis and were selected according to the following criteria.

#### Inclusion criteria

1. Aged 60 years and above.
2. Free from cognitive impairment.
3. Able to communicate and willing participate in the research..
4. Accessible when the data is being collected.

#### Exclusion criteria

Patients undergoing peritoneal dialysis.

#### Sample size calculation:

Based on data from literature (Dobrakowski et al., 2016), taking into account an 80% power of study and a 5% level of significance, the following formula was used to determine the sample size: Where  $Z_{1-\alpha/2}$  is the standard normal variate, which is 1.96 at a 5% type 1 error, SD is the standard deviation of the variable, and d is the absolute error or precision, the formula for the sample size is  $[(Z_{1-\alpha/2})^2 \cdot SD^2] / d^2$ . By dividing 1.96 by  $2 \cdot (12.48) / 2$ , we get the sample size. At the conclusion, the value is 165.7. An appropriate sample for the investigation would consist of 166 haemodialysis patients in their twilight years, as indicated by the aforementioned formula.

#### Tools of data collection:

Four tools were used to collect data pertinent to the study:

#### Tool I: Mini – Mental State Examination (MMSE)

This tool was developed by (Folstein, 1999). It was translated into Arabic language by Elokli, (2008), validated and tested for its reliability ( $r = 0.93$ ) by (Abd El Moniem, 2012). The development's intended target was the cognitive function of the elderly. There are eleven items that make up the Mini-Mental State Exam (MMSE),

and they assess things like attention, memory, naming calculations, repetition, registration, language, praxis, and design copying skill. This was put in place to ensure that no elderly person with moderate to severe cognitive impairments could participate. The MMSE scale scores range from 30 to 40 and are categorised as follows:

- Score of 24-30 indicates normal cognitive function.
- Score of 18-23 indicates mild cognitive impairment.
- Score of 0-17 indicates severe cognitive impairment.

#### Tool II: Structured Interview Sheet

It was developed by the researcher after review of relevant literature and divided into two parts:

**Part 1** The demographic information of the older patients, including their age, gender, marital status, education level, occupation prior to retirement, income, and living situation.

**Part II** Details about the medical history of the elderly were recorded, including the following: the reasons for renal failure, the beginning of the disease, the beginning of haemodialysis, the frequency of haemodialysis sessions, the presence of any comorbidities, and the adherence to medication regimens.

#### Tool III: Brief-Religious Coping Scale (RCOPE)

This tool was developed by Pargament, et al. (1998). The purpose of its implementation was to assess religious coping. It is a 14-item survey that looks at how often people use certain religious coping strategies. It consists of two smaller scales: (1) a constructive religious approach to dealing with difficulties, which includes things like reaching out to spiritual community, growing closer to God, seeking forgiveness through religion, and having a compassionate religious perspective on illness.; and (2) On a 4-point Likert scale, we find negative religious coping, which includes things like seeing God as a punisher, interpersonal religious discontent, demonic judgements, spiritual discontent, and doubting God's power. Second, we added up the negative items to get two subscale scores; third, we added up the positive items to get one subscale score. Subscale scores were not computed for individuals with more than one missing item per subscale. On the positive spirituality and religion (S/R) scale, a higher score When people score lower on the coping subscale, it may be because they have a more negative view of God and rely on their religious or spiritual beliefs

to help them cope.

**Tool IV: The Satisfaction with Life Scale (SWLS)**

This tool was developed by Diener, Emmons, Larsen & Griffin (1985). It was translated into Arabic language by El-Gilany & Refaat Alam (2018), validated and tested for its reliability ( $r = 0.87$ ) by (Cheung & Lucas (2014). One brief tool for gauging people's overall subjective assessments of life satisfaction is the five-item Satisfaction with Life Scale (SWLS). The questions were posed using a seven-item Likert-type scale, where 1 indicates strong disagreement and 7 indicates strong agreement. The survey usually takes about one minute of the subjects' time to finish. To get an overall score, the SWLS items were added together. The maximum possible score was 35 points, meaning that a score of 35 would indicate high levels of satisfaction with life. Here are some benchmarks: 31–35 respondents reported being extremely satisfied, 26–30 respondents were satisfied, 21–25 respondents were slightly satisfied, 20 respondents were neutral, 15–19 respondents were slightly dissatisfied, 10–14 respondents were dissatisfied, and 5–9 respondents were extremely dissatisfied.

**Data Collection Process**

**I: Preparatory phase** –A few things were part of it.

At the administrative level, we sought the director's approval to collect data by obtaining an official letter from the dean of the nursing faculty and sending it to Mansoura University Hospital. The researcher also introduced herself to the dialysis unit's medical and nursing staff, met with them to get their consent to collect data, and briefed them on the study's goals and scheduling..

A literature review was suggested based on scientific publications, online searches, and textbooks. The literature review would examine national and international literatures on the different parts of evaluating religious coping and life satisfaction among haemodialysis patients who are elderly. The study tools were developed using this review as a guide.

Developing the study tools of data collection :-

The Arabic version of the study tool I (Mini Mental State Examination (MMSE) and tool IV (The Satisfaction with Life Scale (SWLS) had been used in the study.

Tool II (Health-Related and Demographic Information After reviewing the relevant literature,

the researcher created a structured interview schedule.

Tool III (The Brief-Religious Coping Scale (RCOPE) was validated by an expert in the field of education from the Faculty of English after the original text was translated into Arabic by the researcher. In this study, researchers double-checked the translation using a backup method.

- Content validity: Five gerontological nursing experts served as a jury that reviewed and revised the study tools after testing them for content validity and feasibility. As a result, we used the final form for data collection after making the required modifications.
- Face validity: The trial was carried out by first testing 10% (17) Excluding the elderly from the study allowed researchers to assess the time needed to complete the questionnaire sheet and determine the developed tools' clarity, feasibility, relevance, comprehensiveness, and applicability. The necessary adjustments were subsequently made.
- The time needed to fill the interview schedule was 15 to 20 min.
- The reliability: Tool III(Brief-Religious Coping Scale (RCOPE)and tool IV (The Satisfaction with Life Scale (SWLS) had been assured by means of Cronbach's Alpha ( $r = 0.83$  and  $r = 0.87$  respectively).

**II:Operational phase;** This phase extended over a period of 3 months started from the first January ,2023 till the end of march ,2023.

This phase consisted of the following steps:

- The researcher started data collection when the necessary approval was obtained.
- Assessment of amental state of the patient done first used tool I (Mini Mental State Examination (MMSE) then assess demographic state used tool II then assess religious coping and life satisfaction of life used tool III and tool IV.
- The researcher made five weekly visits to the haemodialysis unit in accordance with their schedule. Three shifts are worked daily on the unit, with patients split into two groups. The first group visited the unit on Saturday, Monday, and Wednesday. On Sunday, Tuesday, and Thursday, the second group visited the unit.
- According to the haemodialysis unit's shift schedule. Starting at 5 in the morning, the first shift continued until 3 in the afternoon. From 10 am to 2 pm, on average, the researcher was

able to interview 10 patients daily for the purpose of conducting pre- and post-hemodialysis interviews.

### Ethical Considerations

Researchers at Mansoura University's Faculty of Nursing were able to secure ethical clearance from their respective research ethics committees. Each participant was asked to sign a written informed consent form after receiving detailed information about the study's purpose, methods, potential advantages and disadvantages, and financial compensation. All information gathered will be kept private and utilised exclusively for research purposes, protecting the privacy of the people who take part in the study. The researchers assured all elderly participants that their participation in the study is entirely voluntary and that they are free to withdraw at any time without penalty.

### Statistical Analysis

Data was coded, tabulated, and analysed using SPSS version 21, the statistical package for the social sciences. Tests for frequency, percentage, mean, and standard deviation will be used, along with other descriptive statistics. Both descriptive and inferential statistics were employed.

### Results

**Table 1** shows the breakdown of the elderly patients who were evaluated using the Positive Religious Coping (PRC) Subscale while they were on haemodialysis. Among these patients, 85.5% expressed a desire to "seek a stronger connection with God," while 84.3% confirmed the same. Additionally, a sizable portion of the population (62.0%) and a significant portion of the population (78.3%) "tried to put my plans into action together with God" and "sought help from God in letting go of my anger," respectively. Some of the most common comments were "sought forgiveness for my sins" (72.9%), "focused on religion to stop worrying about my problems" (69.3%), and "tried to see how god might be trying to strengthen me in this situation" (72.9%). In terms of overall score, there was satisfactory religious coping, with an average of  $19.17 \pm 2.1$ . Results from the Negative Religious Coping (NRC) Subscale, which was given to a group of elderly people undergoing haemodialysis, showed that 90% did not think God had left them, while 85% thought God was punishing them for not being committed enough. Zero people answered the questions "questioned God's love for me" (90.4% of the sample) or "wondered what I did for God to punish me" (82.5%). In a similar vein, "wondered whether my

church had abandoned me," "decided the devil made this happen," and "questioned the power of God" were deemed extremely implausible by 79.5%, 87.3%, and 92.8% of members, respectively. As a whole, the religious coping score was  $0.96 \pm 1.45$  points lower than the average.

**Figure 1** shows satisfaction with life level of studied elderly patients undergoing hemodialysis. It was detected that 42.2% of studied elderly patients undergoing hemodialysis were extremely satisfied, 41.6% of them were satisfied, while 10.8% of them slightly satisfied and only 5.4% of them were neutral toward satisfaction of life.

**Table 2** reveals a correlation between the religious coping strategies employed by the elderly patients undergoing haemodialysis and certain demographic variables. A statistically significant relationship ( $p < 0.05$ ) was found between positive religious coping and factors such as sex, educational level, and monthly income.

Furthermore, negative religious coping was significantly related to gender, degree of education, and employment prior to retirement.

**Table 3** shows relationship between medical history of the studied elderly patients undergoing hemodialysis and their religious coping. It was demonstrated that there was a significant relation ( $p < 0.05$ ) between suffering from other diseases and positive religious coping.

In addition, there was statistically significant relation ( $p < 0.05$ ) between duration of hemodialysis, suffering from any side effects during dialysis, suffering from other diseases, and medication intake with negative religious coping.

**Table 4** shows relation between participation in different activities of the studied elderly patients undergoing hemodialysis and their religious coping. It was demonstrated that there was a significant relation ( $p < 0.05$ ) between praying, reading the Quran, and attending & listening religious lessons, as well as having information about religious coping, and attending seminars on religious coping with positive and negative religious coping.

**Table 5** provides insight into the correlation between life satisfaction and demographic variables of the studied haemodialysis patients aged 65 and up. Educational level, current employment, and living arrangement were found to have a statistically significant relationship ( $p < 0.05$ ) with life satisfaction.

**Table 6** examines the correlation between the medical history, life satisfaction, and duration of haemodialysis as well as the presence or absence of other diseases, medication intake, and side effects experienced by the elderly patients undergoing dialysis. The results show a significant relationship ( $p < 0.05$ ) between these variables and life satisfaction.

**Table 7** shows relation between participation in different activities of the studied elderly patients undergoing hemodialysis and their satisfaction with life. It was demonstrated that there was a significant relation ( $p < 0.05$ ) such as praying, reading the Quran, attending religious lessons with satisfaction with life. As well as there was a

significant relation ( $p < 0.05$ ) between having information about religious coping and attending seminars on religious coping with satisfaction with life.

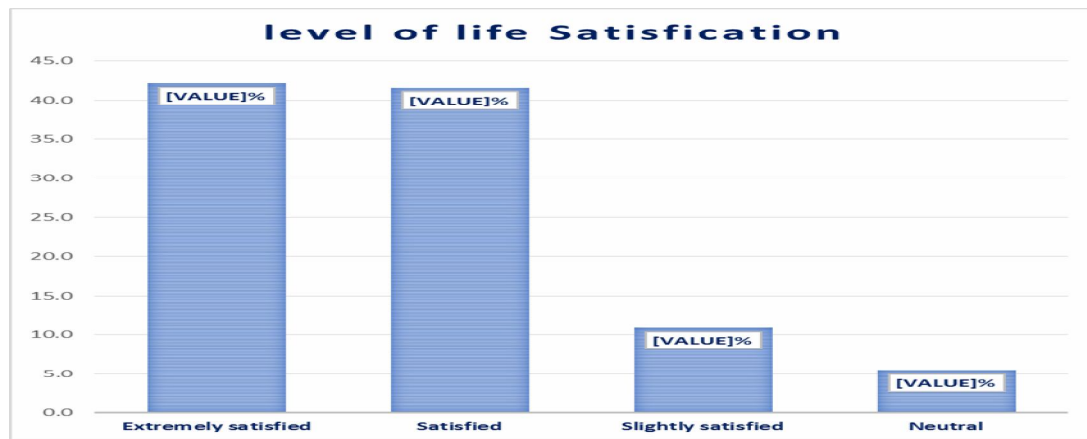
**Figure (2)** found a link between the religious coping strategies used by the elderly patients and their overall life satisfaction. It was demonstrated that there was positive correlation between positive religious coping, and satisfaction with life ( $R = 0.177$ ,  $P = 0.022^*$ ).

**Figure (3)** shows the correlation between negative religious coping behaviors and satisfaction with life of the studied elderly patients ( $R = -0.273$ ,  $P = 0.000^*$ ).

**Table 1:** Distribution of Studied Elderly Patients Undergoing Hemodialysis Using brief Religious Coping Scale.

Scale:

Items	Not at all		Some what		Quite a bit		A great deal		Mean ± SD
	0		1		2		3		
	n	%	n	%	n	%	n	%	
1. Looked for a stronger connection with God.	0	0	2	1.2	22	13.3	142	85.5	2.84±0.4
2. Sought God's love and care.	0	0	2	1.2	2	14.5	140	84.3	2.83±0.41
3. Sought help from God in letting go of my anger.	0	0	2	1.2	34	20.5	130	78.3	2.77±0.45
4. Tried to put my plans into action together with God.	2	1.2	2	1.2	59	35.5	103	62.0	2.58±0.58
5. Tried to see how God might be trying to strengthen me in this situation.	0	0	2	1.2	43	25.9	121	72.9	2.72±0.48
6. Asked forgiveness for my sins.	0	0	4	2.4	47	28.3	115	69.3	2.67±0.52
7. Focused on religion to stop worrying about my problems.	0	0	0	0	41	24.7	125	75.3	2.75±0.43
<b>Total score of positive religious coping</b>	<b>19.17±2.1</b>								
<b>Negative religious coping</b>									
1. Wondered whether God had abandoned me.	156	94.0	0	0	8	4.8	2	1.2	0.08±0.39
2. Felt punished by God for my lack of devotion.	142	85.5	20	12.0	2	1.2	2	1.2	0.18±0.50
3. Wondered what I did for God to punish me.	137	82.5	27	16.3	2	1.2	0	0	0.19±0.42
4. Questioned God's love for me.	150	90.4	16	9.6	0	0	0	0	0.1±0.30
5. Wondered whether my church had abandoned me.	132	79.5	32	19.3	2	1.2	0	0	0.22±0.44
6. Decided the devil made this happen.	145	87.3	21	12.7	0	0	0	0	0.13±0.33
7. Questioned the power of God.	154	92.8	12	7.2	0	0	0	0	0.07±0.26
<b>Total score of negative religious coping</b>	<b>0.96±1.45</b>								



**Figure (1):** Level of life satisfaction with of studied elderly patients undergoing hemodialysis.

**Table 2:** Relation Between Demographic Characteristics of the Studied Elderly Patients Undergoing Hemodialysis and Their Religiouscoping

Demographic Characteristics	N= 166	Positive religious coping		Negative religious coping	
		Mean ± SD		Mean ± SD	
Age (years)					
60 to less than 65 years	71	19.2±2.06		0.93±1.52	
65 to less than 70 years	69	19.17±2.34		0.99±1.5	
70 years and more	26	19.08±1.52		1.00±1.13	
Test of significance		F=0.031	P=0.969	F=0.035	P=0.966
Sex					
Male	80	19.53±1.64		0.72±1.35	
Female	86	18.84±2.41		1.18±1.50	
Test of significance		T=2.132	p=0.035*	T=-2.065	P=0.041*
Marital status					
Single	6	19.33±2.58		0.00±0.00	
Married	81	19.15±2.19		1.14±1.56	
Widow	72	19.00±2.00		0.92±1.39	
Divorced	7	21.00±0.00		0.29±0.76	
Test of significance		F=1.821	P=0.145	F=1.980	P=0.119
Educational level					
Illiterate	25	19.16±2.36		1.76±1.69	
Read and write	40	19.23±1.7		1.00±1.38	
Primary education	10	18.6±2.91		2.10±2.38	
Secondary education	59	18.46±2.21		0.88±1.30	
University education	32	20.59±0.87		0.09±0.30	
Test of significance		F=6.282	P=<0.0001**	F=7.307	P=<0.0001**
Occupation before retirement					
Worked	120	19.17±2.1		1.12±1.59	
Not worked	46	19.17±2.12		0.57±0.91	
Test of significance		T=-0.020	P=0.984	T=2.216	P=0.028*

<b>Current work</b>				
No	164	19.16±2.11	0.98±1.46	
Yes	2	20.00±0.00	0.00±0.00	
<i>Test of significance</i>		<i>T=-0.562</i>	<i>P=0.575</i>	<i>T=-0.944</i> <i>P=0.346</i>
<b>Monthly income</b>				
Enough	30	19.93±1.51	0.73±1.14	
Not enough	136	19.00±2.18	1.01±1.51	
<i>Test of significance</i>		<i>T=2.230</i>	<i>P=0.027*</i>	<i>T=-0.961</i> <i>P=0.338</i>
<b>Living arrangements</b>				
With family	84	19.24±2.19	1.07±1.56	
Alone	25	18.68±2.19	1.04±1.49	
With son	45	19.36±1.94	0.8±1.34	
With relatives	12	19.00±1.91	0.67±0.98	
<i>Test of significance</i>		<i>F=0.622</i>	<i>P=0.601</i>	<i>F=0.531</i> <i>P=0.662</i>

**Table 3:** Relationship Between Medical History of the Studied Elderly Patients Undergoing Hemodialysis and their Religious Coping

Medical history	N=166	Positive religious coping	Negative religious coping
		Mean ± SD	Mean ± SD
Duration of hemodialysis			
Less than 3 years	78	19.23±1.98	0.69±1.07
From 3 to less than 5 years	44	19.14±2.14	1.55±1.84
From 5 to less than 10 years	28	19.36±2.68	0.36±0.73
From 10 years and more	16	18.63±1.36	1.75±1.98
Test of significance		F= 0.455      P=0.714	F=7.183      P=<0.0001**
Suffering from any side effect during dialysis			
No	26	19.62±1.72	0.54±0.95
Yes	140	19.09±2.16	1.04±1.52
Test of significance		T=1.183      P=0.239	T=-2.371      P=0.019*
Suffering from other diseases			
No	101	19.45±2.01	0.66±1.19
Yes	65	18.74±2.17	1.43±1.7
Test of significance		T=2.141      P=0.034*	T=-3.431      P=0.001**
Medication intake			
No	53	19.34±1.89	0.45±0.82
Yes	113	19.09±2.19	1.2±1.62
Test of significance		T=0.717      P=0.474	T= -3.191

- Higher scores on the PRC represent a greater connectedness with God
- Higher scores on the NRC suggest a struggles relationship with God.



**Table 4:** Relationship Between Participation in Different Activities of the Studied Elderly Patients Undergoing Hemodialysis and their Religiouscoping

Item			N=166	Positive religious coping		Negative religious coping	
				Mean ± SD		Mean ± SD	
Participation in social activity							
No			35	19.23±1.85		0.8±1.08	
Yes			131	19.15±2.17		1.01±1.54	
Test of significance				T=0.189	P=0.850	T=-0.751	P=0.454
Participation in sports activities							
No			73	19.08±1.85		1.1±1.61	
Yes			93	19.24±2.28		0.86±1.32	
Test of significance				T=-0.469	P=0.640	T=1.038	P=0.301
Religious activities							
The praying	No	2	15.5±2.12		4±1.41		
	Yes	164	19.21±2.07		0.93±1.42		
Test of significance			T=-2.527 P=0.012*			T=3.049 P=0.003**	
Reading the Quran orBible	No	88	18.12±2.22		1.61±1.66		
	Yes	78	20.38±1.04		0.22±0.58		
Test of significance			T=-8.148 P=<0.0001**			T=-6.960	
Attending religiouslessons	No	156	19.06±2.12		1.03±1.48		
	Yes	10	20.9±0.32		0.00±0.00		
Test of significance			T=-2.743 P=0.007**			T=2.190	P=0.03*
Listening to religiouslessons	No	59	17.93±2.12		1.41±1.48		
	Yes	107	19.85±0.32		0.72±4.00		
Test of significance			T=-6.251 P=0.000**			T=2.988	
Do you have information about religious coping							
No			44	17.95±2.28		1.32±1.55	
Yes			122	19.61±1.85		0.84±1.4	
Test of significance			T=-4.759 P=<0.0001**			T=-1.903	P=0.05*
Have you attended any seminars on religious coping							
No			134	18.93±2.16		1.1±1.55	
Yes			32	20.16±1.48		0.38±0.66	
Test of significance			T=-3.034		P=0.003*	T=2.598	P=0.01*

— Higher scores on the PRC represent a greater connectedness with God

— Higher scores on the NRC suggest a struggles relationship with God.

**Table 5:** Relation Between Demographic Characteristics of the Studied Elderly Patients Undergoing Hemodialysis and their Satisfaction with Life.

Demographic Characteristics	N=166	Satisfaction with life	Test of significance
		Mean ± SD	
Age (years)			
60 to less than 65 years	71	30.17±3.88	F=1.552 P=0.215
65 to less than 70 years	69	29.04±4.01	
70 years and more	26	29.08±4.53	
Sex			
Male	80	29.41±3.85	F=-0.474 P=0.636
Female	86	29.63±4.25	
Marital status			
Single	6	33.00±1.55	F=1.900 P=0.132
Married	81	29.43±3.35	
Widow	72	29.22±4.66	
Divorced	7	30.86±5.21	
Educational level			
Illiterate	25	28.40±2.55	F=3.441 P=0.010**
Read and write	40	28.37±4.67	
Primary education	10	29.44±4.28	
Secondary education	59	30.40±3.08	
University education	32	31.44±3.15	
Occupation before retirement			
Worked	120	29.67±3.8	F=0.700 P=0.485
Not worked	46	29.17±4.69	
Current work			
No	164	29.46±4.03	F=-1.936 P=0.05*
Yes	2	35.00±0.00	
Monthly income			
Enough	30	29.93±4.6	F=0.601 P=0.549
Not enough	136	29.44±3.94	
Living arrangements			
With family	84	30.18±3.06	F=3.521 P=0.016*
Alone	25	28.04±4.78	
With son	45	29.80±4.62	
With relatives	12	27.08±5.04	

High score indicate high levels of satisfaction with life.

**Table 6:** Relation Between Medical History of the Studied Elderly Patients Undergoing Hemodialysis and their Satisfaction Withlife.

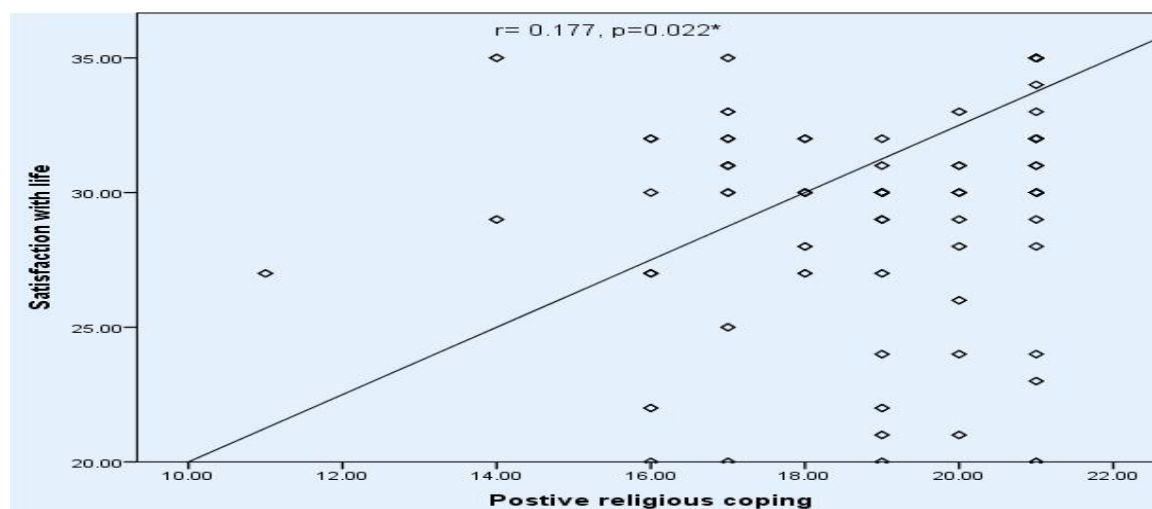
Medical history	N=166	Satisfaction with life	Test of significance
Duration of hemodialysis			
Less than 3 years	78	30.08±4.07	F=3.730 P=0.013*
From 3 to less than 5 years	44	30.00±4.23	
From 5 to less than 10 years	28	29.36±2.63	
From 10 years and more	16	28.50±4.60	
Suffering from any side effect during dialysis			
No	26	31.23±1.97	T=2.361 P=0.019*
Yes	140	29.21±4.26	
Suffering from other diseases			
No	101	30.33±3.75	T=3.246 P=0.001**
Yes	65	28.29±4.22	
Medication intake			
No	53	30.50±3.95	T=2.155 P=0.033*
Yes	113	29.07±4.03	

High score indicate high levels of satisfaction with life.

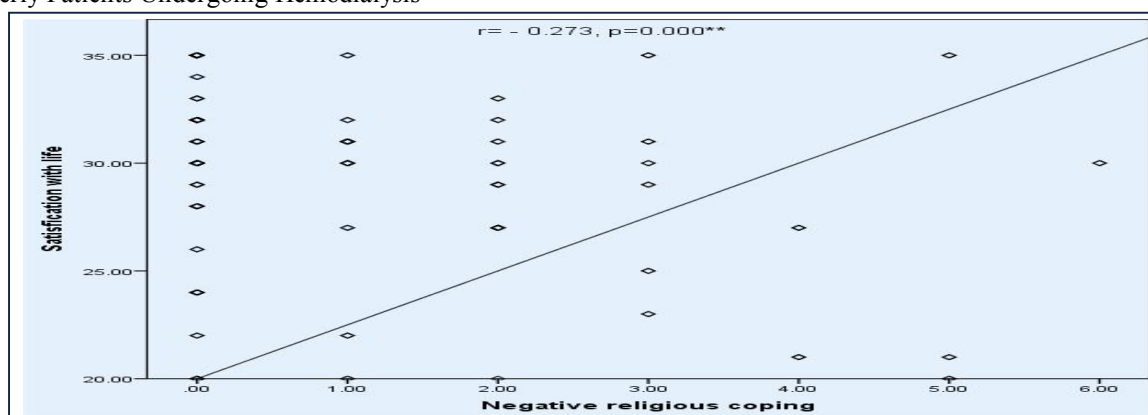
**Table 7:**Relation Between Participation in Different Activities of the Studied Elderly Patients Undergoing Hemodialysis and Satisfaction with Life

Item		N=166	Satisfaction with life Mean ± SD	Test of significance
Participation in social activity				
No		35	30.17±3.67	T=1.054 P=0.293
Yes		131	29.36±4.15	
Participation in sports activities				
No		73	29.32±4.34	T=-0.604P=0.546
Yes		93	29.7±3.83	
Religious activities <sup>#</sup>				
The praying	No	2	23.5±4.95	T=-2.139 P=0.034*
	Yes	164	29.6±4	
Reading the Quran or Bible	No	88	28.36±4.21	T=3.632 P=<0.0001**
	Yes	78	30.57±3.63	
Attending religious lessons	No	156	29.24±4	T=-3.735 P=<0.0001**
	Yes	10	34±1.33	
Listening to religious lessons	No	59	29.66±3.71	T=0.308 P=0.758
	Yes	107	29.46±4.25	
Do you have information about religious coping				
No		44	29±4.24	T=2.866 P=0.005**
Yes		122	31±3.07	
Have you attended any seminars on religious coping				
No		134	28.84±4.04	T=-4.809 P=<0.0001***
Yes		32	32.44±2.55	

High score indicate high levels of satisfaction with life.



**Figure 2:** The Correlation Between Positive Religious Coping Behaviors and Satisfaction with Life of the Studied Elderly Patients Undergoing Hemodialysis



**Figure 3:** The correlation between negative religious coping behaviors and satisfaction with life of the studied elderly patients undergoing hemodialysis.

## Discussion

The life-limiting nature of end-stage renal failure forces patients to endure a multitude of emotional and physical challenges. Psychological anguish and physically painful symptoms often work together to reduce the quality of life (QoL) of people with end-stage renal disease (ESRD). More than just the patient and doctor, managing a chronic illness is an intricate process that often necessitates the involvement of a multidisciplinary team of experts, such as nurses, physiotherapists, occupational therapists, medical social workers, patient support groups, and others. One of the potential stress factors among dialysis patients is the inability of dialysis to completely compensate for the metabolic activities of individuals (Lazarus, 2019).

### *Religious coping of studied elderly patients undergoing hemodialysis .*

The total mean of score positive religious coping (PRC's) was  $19.17 \pm 2.1$  this highlights that most elderly patients lean heavily on positive religious coping, which likely plays a critical role in their psychological well-being and resilience. The elderly patients undergoing hemodialysis were adopted positive religious coping strategies to handle their illness, with low incidence of negative religious coping. The PRC's focus on divine connection, forgiveness, and reliance on God's love shows that their faith provides significant psychological comfort and a sense of purpose.

This study result decides with a study done in Iran by Okhli, (2022) who evaluated the correlation between haemodialysis patients' religious beliefs and their professed faith.

On the other hand, a study conducted in Jordan by **Musa et al., (2023)**, the current study's findings that haemodialysis patients in Jordan had moderate levels of religious and spiritual wellbeing but low levels of existential wellbeing are not supported.

***Satisfaction with life (SWL) of studied elderly patients undergoing hemodialysis :***

An encouraging sign of the health and happiness of the elderly haemodialysis patients surveyed in this study was their high level of life satisfaction. This may be explained by the regular schedule of hemodialysis provides structure and routine, which can foster a sense of purpose.

Knowing they have a treatment that keeps them alive and active can enhance satisfaction with life, as it allows them to participate in routines and daily activities they value. And Many elderly patients use religious or spiritual beliefs to help them cope with chronic illness. This can bring peace, acceptance, and an optimistic outlook despite health struggles. Religious or spiritual practices may also provide a supportive community that positively impacts life satisfaction. This present study result agrees with a study done in Saudi Arabia by **Asiri, et al., (2023)**, who found the same results .

***Relationship between demographic characteristics of the studied elderly patients undergoing hemodialysis and their religious coping.***

The current study showed that there was a significant relation between demographic characteristics such as sex, educational level, and monthly income with positive religious coping as  $p\text{-value} > 0.05$ . This may be explained as the majority of studied elderly patients were females and females may have stronger social support networks, including religious communities which can promote positive religious coping. Education can influence an individual's cognitive appraisal of stressors and coping strategies in addition higher monthly income often provides individuals with greater access to religious and spiritual resources, such as books, retreats, or counseling services that can promote positive religious coping. This present study result agrees with a study done in United States by **Ramirez, et al ., (2012)**, who found that there was significant relation between demographic characteristics such as ( sex ,age ,educational level and currently work) and positive religious coping.

***Relationship between medical history of the studied elderly patients undergoing hemodialysis and their religious coping.***

The current study demonstrated a statistically significant correlation ( $p > 0.05$ ) between religious coping strategies and medical history variables (e.g., the presence or absence of other diseases). This is explained as the elderly patients undergoing hemodialysis who suffer from other diseases may experience a greater burden of illness and stress that lead the patient to rely more heavily on their social support networks, including religious communities, for emotional and spiritual support. In the study done in Portugal by **Prazeres, etal. (2021)**. Who found significant relation between medical history and positive religious coping that was support the current study .

***Relationship between participation in different activities of the studied elderly patients undergoing hemodialysis and religious coping.***

Prayer, Quran reading, religious class attendance and listening, knowledge of religious coping strategies, and seminar attendance were all significantly related to positive and negative religious coping ( $p > 0.05$ ) in the current study. It may be justified by religious activities are deeply intertwined with cultural and religious beliefs. Engaging in practices such as prayer, reading religious texts, and attending religious lessons reflects individuals' commitment to their faith and adherence to religious teachings. For elderly patients undergoing hemodialysis, religious beliefs serve as a guiding framework for understanding illness and coping with its challenges.

In the line with the current results a study done in Iran by **Askari, (2018)** who confirm the same results

***Relationship between demographic characteristics of the studied elderly patients undergoing hemodialysis and their satisfaction with life.***

The current study demonstrated a statistically significant correlation ( $p > 0.05$ ) between life satisfaction and demographic variables including education level, employment status, and housing situation. The idea that more education usually means more access to things like healthcare, knowledge, and social support networks provides some justification for the practice. Jobs and social standing tend to improve in tandem with one's degree of education. Higher levels of education are associated with better life satisfaction because they may lead to more financial stability, better access to healthcare, and more chances to

participate in meaningful social activities. The findings are consistent with those of a study conducted in Turkey by **Taskin Yilmaz, (2021)**, We discovered that patients' levels of life satisfaction were significantly impacted by their age, economic status, the extent to which they met their daily demands, and the use of positive religious coping strategies.

***Relationship between medical history of the studied elderly patients undergoing hemodialysis and satisfaction with life.***

According to the results of this study, a p-value greater than 0.05 indicates a statistically significant association between medical history variables and life satisfaction, including haemodialysis duration, dialysis side effect experiences, other diseases, and medication intake. This results may be justified by over time, elderly patients undergoing hemodialysis may adapt to the hemodialysis treatment regimen, including its physical and emotional effects. As patients become more accustomed to the routine and develop coping strategies to manage the challenges associated with hemodialysis, which increase their satisfaction with life may improve. In study done in Turkey by **Taskin Yilmaz, (2021)**, who found the patients' general health levels, was the factor that significantly affected their levels of satisfaction with life.

***Relationship between participation in different activities of the studied elderly patients undergoing hemodialysis and satisfaction with life.***

The current study demonstrated a statistically significant relationship ( $p\text{-value} > 0.05$ ) between religious activities (e.g., praying, reading the Quran, attending religious lessons) and life satisfaction. One possible explanation for these findings is that people with chronic illnesses who are also undergoing haemodialysis find that participating in religious activities helps them cope. Furthermore, as the p-value was greater than 0.05, there was a statistically significant correlation between knowledge of religious coping strategies and participation in seminars on such strategies and life satisfaction.

Consistent with the present findings, a Turkish study by **Taskin Yilmaz, (2021)**, who found that patients' faith-based coping mechanisms and their capacity to meet their basic needs had a significant impact on their levels of life satisfaction.

***The correlation between religious coping behaviors and satisfaction with life of the studied elderly patients undergoing hemodialysis.***

We found that religious coping strategies were positively correlated with life satisfaction ( $R=0.177$ ,  $P=0.022^*$ ) and negatively correlated with life satisfaction ( $R=-0.273$ ,  $P=0.000^*$ ). A supporting evidence for these findings is the fact that religious coping strategies have been linked to decreased anxiety, depression, and distress. There is some evidence that religious coping strategies may help elderly haemodialysis patients feel more emotionally stable and less negative, which in turn may increase their life satisfaction. Religious beliefs and practices can provide comfort, solace, and a sense of peace amid the uncertainties and difficulties of chronic illness and medical treatment.

Similarly in study done in Turkey by **Taskin Yilmaz, (2021)** who found a positive correlation between the positive religious coping levels and satisfaction with life of the patients. In contrary to current study, a study conducted in United States of America by **Saffari, (2019)**, reported the same finding.

**Conclusion**

The majority of elderly patients undergoing hemodialysis were adopted positive religious coping strategies to handle their illness. Also, the majority of them were satisfied with their life.

Furthermore, the aged patients' religious coping was positively correlated with their sex, educational level, and monthly income, which was significantly different from zero. Elders' happiness with life was also significantly correlated with their degree of education, current employment status, and living situation. Also, life satisfaction was positively correlated with positive religious coping. Conversely, life satisfaction was inversely related to religious coping.

**Recommendations**

**Based on the finding of this study, the following recommendations are suggested:**

1. Encourage patients to participate in religious community activities to foster social support and connection.
2. Help patients find meaning and purpose in life through reflective practices, such as journaling or storytelling.
3. Support patients in engaging in self-care activities, like yoga or meditation, to improve physical and emotional wellbeing.

4. Involve family members in care planning and support to enhance patient satisfaction.

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