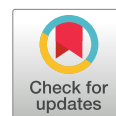





## Religious Coping and Empowerment in Patients with Heart Failure



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### Abstract

**Objective:** Heart failure (HF) is a complex and difficult disease to manage. The patients' use of coping methods and their level of strength may affect the control of the disease. This study investigated the relationship between HF patients' level of empowerment and their religious coping.

**Methods:** The data of the study were obtained with the Heart Failure Empowerment Scale (HFES) and the Religion Coping Scale (RCS).

**Results:** The mean duration of the diagnosis was 5.77±5.78 years. The patients had mean scores of 9.35±2.41 for negative religious coping and 24.02±4.04 for positive religious coping. The mean HFES total score was 92.07±9.96. It was determined that smoking, symptom severity, and disease duration affected religious coping levels. Patient empowerment was found to be influenced by the following factors: smoking, regular physician control, gender, education, employment status, disease awareness, and perception of health status.


**Conclusion:** A weak and negative correlation was observed between religious coping and patient empowerment in individuals with HF, suggesting that higher reliance on religious coping may be associated with lower levels of empowerment.

### Keywords

Heart Failure • Empowerment • Religious Coping • Holistic Nursing



“ Citation: Turen S., Akca Dogan D., Dedeoglu Demir B. & Yıldizer F. Religious coping and empowerment in patients with heart failure. CURARE–Journal of Nursing 2025; (9): 20-26. DOI: 10.26650/CURARE.2025.1706148

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## INTRODUCTION

Cardiovascular diseases are among the chronic diseases that are increasing in prevalence worldwide. Heart failure (HF), one of these conditions, is notable for having a high morbidity and fatality rate. In the United States of America, 6.2 million persons suffer from HF, with an incidence of 2.1% beyond the age of 65 (1-2). According to the Heart Failure Prevalence and Predictors in Turkey (HAPPY) study, the prevalence of HF in Türkiye was found to be 2.9% (3). Depending on the underlying aetiology, patients with HF may experience a wide range of chronic physical and emotional symptoms. These symptoms often impair patients' daily physical and social functioning, limiting their independence and negatively impacting their psychosocial well-being (4, 5). Symptom control is one of the main goals of treatment. However, despite the use of modern treatments, the disease can progress, and the symptoms get worse over time, significantly affecting the health-related quality of life of individuals (2,6).

The concept of patient empowerment has been especially emphasised in the effective management of chronic diseases. Empowerment is critical for successfully managing the symptoms of individuals with HF and increasing their health-related quality of life (7). With empowerment, it is ensured that individuals are willing to participate in care, adapt to diseases, and cope with the problems they encounter (8). For this purpose, the evaluation of the level of strength in motivating the patients constitutes a critical step (7,9).

In addition to the impact of work, social, and family relationships on the chronic disease process, the weariness of the treatment process has a significant impact on individuals' lives (10). Individuals suffering from serious illness may turn to religion and spirituality to help them cope with a various stressors (11). Religious coping is the use of religious principles or practices to reduce stress and deal with issues in daily life. (12). Individuals may adopt positive or negative religious coping methods, and this may affect health differently. Efforts to cope with the disease are important factors that affect the course of the disease and the success of treatment. While these efforts can enable people to stand strong in the processes, they can worsen the adaptation and treatment process if they are weak (10). According to Brewer et al. (2022), intermediate or optimal cardiovascular health was linked to higher levels of religiosity (13). Upon reviewing the literature, it was found that no studies had examined the relationship between religious coping and patient empowerment. The goal of this study was to evaluate the religious coping and empowerment levels of individuals with HF and to determine the relationship between them.

## METHODS

### Study population and procedure

This study was designed as descriptive and, cross-sectional. The study was conducted in the cardiology clinics of a training and research hospital in Istanbul between August 2022 and January 2023. The surveys were conducted face-to-face with individuals and took an average of 10-15 minutes. The minimum sample size in the population was determined by power analysis with the programme G\*Power (v3.9.7). In the calculation performed to obtain a 0.05 significance level ( $\alpha$ ) and an 80% statistical test power ( $1-\beta$ ), the effect size was calculated as 0.30, and a minimum sample size of 97 was found according to the standard deviation value. The study sample included patients aged 18 years who had been diagnosed with heart failure (HF) and consented to participate. Patients with communication difficulties, those awaiting heart transplantation, or those with a ventricular assist device were excluded from the study.

### Measures

#### Data collection form

The researchers prepared the data collection form in light of a literature review (7-8,10,15). This form consisted of 18 questions regarding socio demographic (age, gender, education level, marital status, working status, etc.) and clinic characteristics (New York Heart Association-NYHA class, duration of illness, comorbidities, regular use of medication, regular physician follow-up, etc.).

#### Heart Failure Empowerment Scale (HFES)

The Heart Failure Empowerment Scale (HFES) is a scale developed to evaluate the level of strength of HF patients by Karaman et al. (2017) by adapting the Diabetes Empowerment Scale to individuals with HF (7). The five-point Likert-type scale, consisting of 28 questions, has three sub-dimensions (self-awareness-managing the psychological aspects of the illness, the ability to reach the goal, and the ability to set goals). A "low level of empowerment" is indicated by a score between 28 and 65, a "medium level of empowerment" by a score between 66 and 103, and a "high level of empowerment" by a score between 104 and 140 (between 28 and 140 points). The total Cronbach's alpha value of the scale was 0.93, and it was found to be 0.84 in this study.

#### Religious Coping Scale (RCS)

The Religious Coping Scale (RCS) is a tool designed to evaluate how individuals use religious beliefs and practices to manage stressful or challenging life events. Initially developed

by Abu-Raiya, Pargament, Mahoney, and Stein in 2008 and later translated and validated for Turkish populations by Eksi and colleagues in 2016, the scale consists of 10 items. These items are categorised into two subdimensions: positive religious coping and negative religious coping. A higher score on the positive subscale suggests a stronger engagement in constructive, faith-based coping mechanisms, while a higher score on the negative subscale indicates a tendency towards less adaptive or distress-related religious responses. The Cronbach's alpha value of the scale was 0.91 for the positive religious coping sub-dimension and 0.86 for the negative religious coping sub-dimension. In this study, the Cronbach's alpha value was found to be 0.86 for the positive religious coping sub-dimension and 0.87 for the negative religious coping sub-dimension.

### Ethical aspects of the study

The study conforms with the ethical principles outlined in the Declaration of Helsinki. Appropriate permissions were obtained from the institution where the study was conducted. The University Institutional Review Board (IRB date and number: 05.08.2022/2022.13) approved the study. Patients who fulfilled the study requirements gave their written and verbal (informed consent) consent.

### Statistical analysis

Continuous variables were expressed as means  $\pm$  SD, and categorical variables were expressed as percentages. The patients' HFES and RCS scores were compared across the socio-demographic and clinical characteristics of the patients using Student's t-test and one-way analysis of variance (ANOVA). Post hoc analyses were performed where appropriate using the Bonferroni correction. The correlation between variables was analysed using Pearson correlation analysis. For all tests, two-sided *P* values  $<0.05$  were considered significant. Statistical analysis was performed using the Statistical Package for the Social Sciences (SPSS) version 20.0 for Windows (SPSS Inc., Chicago, Illinois, USA).

## RESULTS

The mean age of the patients included in the study was  $69.09\pm 10.96$  years and the mean duration of the illness was  $5.77\pm 5.78$  years. Nearly all of the patients were male (53.5%), married (98.8%), non-smokers (86.6%), with NYHA class IV (50.0%), with comorbidities (90.7%), and rated their health status as "moderate" (62.8%) (Table 1).

The patients' mean religious coping scores were  $9.35\pm 2.41$  for negative religious coping and  $24.02\pm 4.04$  for positive religious coping. While the HFES total score average was

$92.07\pm 9.96$ , the HFES sub-dimension "target determines the ability" had the highest mean ( $32.35\pm 4.67$ ) (Table 2).

Table 1. Patients' socio-demographic and clinical characteristics (N = 172)

Age (year)	Mean $\pm$ SD (Min-Max)	69.09 $\pm$ 10.96 (31-91)	
Duration of illness	Mean $\pm$ SD (Min-Max)	5.77 $\pm$ 5.78 (1-38)	
		n	%
Age (year)	< 65 years	53	30.8
	$\geq$ 65 years	119	69.2
Gender	Female	80	46.5
	Male	92	53.5
Education level	< High school	155	90.1
	$\geq$ High school	17	9.9
Marital status	Married	170	98.8
	Single	2	1.2
Working status	Working	24	14.0
	Not working	148	86.0
Economic status	Income more than expenses	120	69.8
	Income partially covers expenses	46	26.7
	Income less than expenses	6	3.5
Smoke	Yes	23	13.4
	No	149	86.6
Alcohol	Yes	2	1.2
	No	170	98.8
Home status	Living alone	9	5.2
	Living with a family member	163	94.8
NYHA Class	II	9	5.2
	III	77	44.8
	IV	86	50.0
Duration of the illness	$\leq$ 5 years	106	61.6
	> 5 years	66	38.4
Presence of comorbidities	Yes	156	90.7
	No	16	9.3
Type of comorbidity*	Hypertension	116	67.4
	Diabetes Mellitus	82	47.7
	Chronic obstructive pulmonary disease	37	21.5
	Chronic renal failure	36	20.9
	Hyperlipidaemia	32	18.6
Regular use of medication	Yes	148	86.0
	No	24	14.0
Regular physician follow-up	Yes	128	73.8
	No	45	26.2
Knowledge about the disease	Yes	19	11.0
	Some	103	59.9

Age (year)	Mean±SD (Min-Max)	69.09±10.96 (31-91)	
Duration of illness	Mean±SD (Min-Max)	5.77±5.78 (1-38)	
Overall health assessment	No	50	29.1
	Good	2	1.2
	Moderate	108	62.8
Emergency visit within the last year	Poor	62	36.0
	Yes	157	91.3
	No	15	8.7
Hospitalisation within last year	Yes	169	98.3
	No	3	1.7

NYHA: New York Heart Association., \*More than one option selected

**Table 2.** Religious Coping Scale and Heart Failure Empowerment Scale scores of patients

Scale	Mean±SD (Min-Max)	Score range
Religious Coping Scale		
Positive Religious Coping	24.02±4.04 (7-28)	46935
Negative Religious Coping	9.35±2.41 (3-12)	45994
Heart Failure Empowerment Scale (Total)	92.07±9.96 (59-113)	28-140
Self-awareness-manage the psychological aspects of the disease	30.21±4.23 (19-41)	16681
Target reach capability	29.51±2.78 (18-35)	16681
Target determines the ability	32.35±4.67 (20-41)	18537

It was found that smoking, symptom severity, and duration of the illness affected religious coping levels. It was found that the patients' gender, education level, employment status, smoking, regular physician control, knowledge of the disease, and perception of their health status were the factors affecting their empowerment levels ( $p < 0.05$ ).

There was a statistically significant difference between those who had knowledge about the disease and those who did not when the empowerment level of the patients was assessed ( $p < 0.001$ ). There was also a statistically significant difference between those who reported their health status as "good" and those who reported it as "poor" ( $p < 0.001$ ) (Table 3).

When the relationship between religious coping and empowerment levels of HF patients was examined, a very weak negative correlation ( $r = -0.175$ ,  $p = 0.02$ ) and a weak negative correlation ( $r = -0.218$ ,  $p = 0.004$ ) were found between empowerment level and positive coping and negative coping, respectively (Table 4).

## DISCUSSION

Heart failure is a tough ailment to manage due to patients' poor quality of life and frequent hospitalisations. In addition, the progressive nature of the disease makes it difficult for

individuals to accept the stages of the disease and to control symptoms. This process wears out individuals physically, socially, and psychologically (4-5). The literature shows that religious methods for coping are frequently employed by heart patients (16-18). In this study, the evaluation of religious coping and empowerment levels of HF patients and the relationship between them were discussed.

A factor affecting adherence to illness and treatment in individuals with chronic disease is religious coping (10). Positive or negative religious coping methods can affect health differently, and on the contrary, difficulties in the management of the disease can cause positive or negative religious attitudes (10-18). In their study of individuals with chronic diseases, Coşgun and Tokur (2022) discovered that religion provided both direct and indirect positive effects in the fight against the disease. Positive coping refers to a secure relationship with God, to gaining strength from him, and to believing that there is meaning in life. Negative coping is associated with anger at God, weak relationships with God, and feelings of punishment (10). Mangolian Shahrabaki et al. (2017) stated that a spiritual strategy helps patients cope with HF (6). In their systematic review, Park et al. (2017) found that religion and spirituality were inversely proportional to disease development and had a positive effect on recovery (19). When the religious coping level of the patients was examined in our study, it was shown that both positive and negative religious coping mean scores were high. The quality of life of HF patients is closely affected by the changes in their symptom status from time to time. As a result of the aggravation of the symptoms, there may be questions about the troubles experienced, and it can trigger the feelings of helplessness and loneliness they feel in the face of situations that they cannot afford. On the other hand, positive feelings can be reinforced by asking for help for themselves, without asking God whom they see as the most powerful being, in times of physical, mental, social, and economic difficulties (10,20). These results were associated with the patients' frequent experiences of ambivalent and volatile emotions.

The NYHA classification is the most widely used system for determining the severity of symptoms patients with HF. While NYHA class I refers to asymptomatic patients, symptoms and prognosis worsen as the class increases. NYHA class IV is the most advanced stage of HF (5). In the study, it was determined that the increase in the symptom severity of the patients significantly increased their level of negative religious coping ( $p = 0.04$ ). Negative religious coping increases the depressive tendency by affecting the process of gaining meaning and control together with the increase in anxiety and stress (20). Psychological disorders such as depression can



**Table 3.** Factors affecting patients' religious coping and empowerment

	RCS- Positive			RCS- Negative			Total Score of HFES		
	Mean $\pm$ SD	t, F	p	Mean $\pm$ SD	t, F	p	Mean $\pm$ SD	t, F	p
<b>Age (year) &lt; 65 years</b>	23.07 $\pm$ 4.68			9.00 $\pm$ 2.54			94.13 $\pm$ 10.08		
$\geq$ 65 years	24.44 $\pm$ 3.66	-2.061*	0.06	9.50 $\pm$ 2.35	-1.267*	0.20	91.16 $\pm$ 9.81	1.819*	0.07
<b>Gender Female</b>	24.17 $\pm$ 4.20			9.37 $\pm$ 2.59			89.34 $\pm$ 10.58		
Male	23.88 $\pm$ 3.91	0.476*	0.63	9.33 $\pm$ 2.26	0.132*	0.89	94.46 $\pm$ 8.77	-3.468*	<b>0.001</b>
<b>Education level &lt; High school</b>	23.99 $\pm$ 4.11			9.26 $\pm$ 2.42			91.40 $\pm$ 9.79		
$\geq$ High school	24.23 $\pm$ 3.42	-0.234*	0.81	10.12 $\pm$ 2.26	-1.387*	0.16	98.23 $\pm$ 9.63	-2.736*	<b>0.007</b>
<b>Marital status Married</b>	24.02 $\pm$ 4.06			9.35 $\pm$ 2.43			92.05 $\pm$ 10.02		
Single	24.00 $\pm$ 2.83	0.006*	0.99	9.50 $\pm$ 0.71	-0.089*	0.92	94.50 $\pm$ 0.71	-0.345*	0.73
<b>Working status Working</b>	22.96 $\pm$ 3.84			9.17 $\pm$ 2.41			96.42 $\pm$ 10.68		
Not working	24.19 $\pm$ 4.06	-1.389*	0.16	9.38 $\pm$ 2.42	-0.397*	0.69	91.37 $\pm$ 9.70	2.331*	<b>0.02</b>
<b>Economic status</b>									
Income more than expenses	24.22 $\pm$ 3.79			9.57 $\pm$ 2.41			92.47 $\pm$ 9.93		
Income partially covers expenses	23.83 $\pm$ 4.44			8.93 $\pm$ 2.32			91.24 $\pm$ 10.15		
Income less than expenses	21.33 $\pm$ 5.35	1.545 <sup>y</sup>	0.21	8.00 $\pm$ 2.83	2.168 <sup>y</sup>	0.11	90.50 $\pm$ 10.33	0.331 <sup>y</sup>	0.71
<b>Smoke Yes</b>	21.69 $\pm$ 4.52			8.13 $\pm$ 2.68			96.65 $\pm$ 10.53		
No	24.37 $\pm$ 3.85	-3.033*	<b>0.003</b>	9.54 $\pm$ 2.32	-2.645*	<b>0.009</b>	91.37 $\pm$ 9.71	2.400*	<b>0.01</b>
<b>Alcohol Yes</b>	20.00 $\pm$ 9.90			10.00 $\pm$ 2.83			82.50 $\pm$ 4.95		
No	24.06 $\pm$ 3.97	-0.580*	0.66	9.34 $\pm$ 2.42	0.383*	0.70	92.19 $\pm$ 9.96	-1.371*	0.17
<b>Home status Living alone</b>	22.44 $\pm$ 6.84			9.67 $\pm$ 3.20			86.44 $\pm$ 10.96		
Living with a family member	24.10 $\pm$ 3.81	0.722*	0.49	9.33 $\pm$ 2.37	-0.405*	0.68	92.39 $\pm$ 9.85	1.753*	0.08
<b>NYHA Class II</b>	24.89 $\pm$ 3.72			8.86 $\pm$ 2.61			85.55 $\pm$ 6.63		
III	24.44 $\pm$ 3.58			9.22 $\pm$ 2.11			92.71 $\pm$ 10.60		
IV	23.44 $\pm$ 4.50	1.475 <sup>y</sup>	0.23	9.80 $\pm$ 2.18	3.206 <sup>y</sup>	<b>0.04</b>	92.19 $\pm$ 9.49	2.119 <sup>y</sup>	0.12
<b>Duration of illness <math>\leq</math> 5 years</b>	23.61 $\pm$ 4.36			8.95 $\pm$ 2.46			92.11 $\pm$ 10.03		
> 5 years	24.67 $\pm$ 3.39	-1.771*	0.07	9.98 $\pm$ 2.21	-2.779*	<b>0.006</b>	92.01 $\pm$ 9.93	0.063*	0.95
<b>Presence of comorbidities Yes</b>	23.96 $\pm$ 4.02			9.33 $\pm$ 2.46			91.76 $\pm$ 9.69		
No	24.56 $\pm$ 4.27	-0.566*	0.57	9.50 $\pm$ 1.93	-0.319*	0.75	95.19 $\pm$ 12.24	-1.315*	0.19
<b>Regular use of medication Yes</b>	24.07 $\pm$ 3.84			9.26 $\pm$ 2.42			92.53 $\pm$ 9.95		
No	23.71 $\pm$ 5.19	0.403*	0.68	9.87 $\pm$ 2.38	-1.152*	0.25	89.29 $\pm$ 9.76	1.481*	0.14
<b>Regular physician follow-up Yes</b>	23.96 $\pm$ 3.93			9.17 $\pm$ 2.51			94.12 $\pm$ 9.20		
No	24.18 $\pm$ 4.36	-0.309*	0.75	9.84 $\pm$ 2.07	-1.610*	0.10	86.31 $\pm$ 9.87	4.800*	<b>&lt;0.001</b>
<b>Knowledge about the disease Yes</b>	24.79 $\pm$ 2.93			9.84 $\pm$ 2.48			100.84 $\pm$ 7.06		
Some	23.78 $\pm$ 4.01			9.27 $\pm$ 2.31			92.58 $\pm$ 9.76		
No	24.22 $\pm$ 4.46	0.590 <sup>y</sup>	0.55	9.32 $\pm$ 2.62	0.449 <sup>y</sup>	0.63	87.70 $\pm$ 8.93	14.21 <sup>y</sup>	<b>&lt;0.001</b>
<b>Overall health assessment Good</b>	27.50 $\pm$ 0.71			11.00 $\pm$ 0.00			101.00 $\pm$ 12.73		
Moderate	23.59 $\pm$ 4.37			9.17 $\pm$ 2.63			94.99 $\pm$ 9.41		
Poor	24.64 $\pm$ 3.32	2.117 <sup>y</sup>	0.12	9.61 $\pm$ 2.00	1.148 <sup>y</sup>	0.32	86.71 $\pm$ 8.56	17.14 <sup>y</sup>	<b>&lt;0.001</b>
<b>Emergency visit within the last year</b>									
Yes	23.87 $\pm$ 4.12			9.30 $\pm$ 2.43			92.37 $\pm$ 10.02		
No	25.53 $\pm$ 2.75	-1.528*	0.12	9.87 $\pm$ 2.29	-0.869*	0.38	89.00 $\pm$ 9.04	1.254*	0.21
<b>Hospitalisation within the last year</b>									
Yes	24.07 $\pm$ 3.98			9.38 $\pm$ 2.39			92.20 $\pm$ 9.92		
No	21.00 $\pm$ 7.21	1.308*	0.19	7.33 $\pm$ 3.51	1.463*	0.14	85.00 $\pm$ 12.12	1.243*	0.21

Significant difference at p<0,05; value in bold: significant; ANOVA<sup>y</sup>, Students t test\* HFES: Heart Failure Empowerment Scale, NYHA: New York Heart Association, RCS: Religious Coping Scale.



**Table 4.** Relationship between patients' religion coping and empowerment

RCS	HFES		Target reach capability	Target determines the ability	Total
		Self-awareness-manage the psychological aspects of the disease			
Positive	r	-0.121	-0.136	-1.184	-0.175
	p	0.11	0.07	<b>0.01</b>	<b>0.02</b>
Negative	r	-0.164	-0.169	-0.216	-0.218
	p	<b>0.03</b>	<b>0.02</b>	<b>0.004</b>	<b>0.004</b>

r: correlation coefficient; using Pearson's correlation analyses, HFES: Heart Failure Empowerment Scale, RCS: Religious Coping Scale

be seen frequently in patients in the advanced stages of HF (5). In this study, it was also observed that the duration of the illness increased significantly in parallel with the negative religious coping level ( $p = 0.006$ ). It was found that the negative attitudes of the patients increased as the clinical picture worsened with the worsening of the prognosis. Indeed, Zulgarnain et al. (2022) found, in their study of individuals with chronic diseases (diabetes, cancer, and coronary heart diseases), a negative relationship between depression and positive religious coping (21). With the worsening the symptoms, the difficulty in managing of the disease made us think that the patients may tend to depression.

Empowerment plays a vital role in the development of behaviours such as health protection, self-care, and self-control in individuals (8,22). It increases compliance with the disease process, especially in individuals with chronic diseases such as HF, and enables them to cope with the problems they encounter by creating motivation (7,23). According to Daniati et al. (2020), the patients' empowerment levels were interpreted as low in the study (24). Kohler et al. (2018) found that patients levels of empowerment were found to be high (25). In this study, the level of empowerment of the patients was determined to be moderate ( $92.07 \pm 9.96$ ).

When the relationship between patients' empowerment and religious coping levels is explored, it is shown that an increase in both negative and positive religious coping levels reduces empowerment. In severe diseases, the meanings attributed to the disease, the responses and coping efforts of individuals may vary according to individual and situational characteristics. The type and stage of the disease, the general condition of the patient, social and economic status, and internal and external motivation sources play a decisive role in the effects of the disease on the person and his life (10).

## Limitation

The fact that the study was conducted with volunteer HF patients who were admitted to a single hospital during a specific period creates a limitation in terms of the

generalizability of the results. In addition, information on religious coping and empowerment is based on self-reports.

## CONCLUSION

In this study, the religious coping level of HF patients was found to be high, and the level of empowerment was found to be moderate. There was a weak and negative relationship between religious coping and empowerment levels. It is essential to consider the psychosocial aspects of healthcare professionals when evaluating patients from a holistic perspective. In this respect, the use of religious coping methods will be beneficial in the symptom management of HF patients. It is recommended that interventions that boost religious coping and empowerment, as well as physician follow-up of patients, be included in the symptom management of HF patients.



<b>Ethics Committee Approval</b>	The study was approved by the Istanbul Arel University Institutional Review Board (IRB date and number: 05.08.2022/2022.13).
<b>Informed Consent</b>	Written consent was obtained from the participants.
<b>Peer Review</b>	Externally peer-reviewed.
<b>Author Contributions</b>	Conception/Design of Study- S.T., D.A.D., B.D.D., F.Y.; Data Acquisition- F.Y.; Data Analysis/Interpretation- S.T.; Drafting Manuscript- S.T., D.A.D., B.D.D., F.Y.; Critical Revision of Manuscript- S.T., D.A.D., B.D.D., F.Y.; Final Approval and Accountability- S.T., D.A.D., B.D.D., F.Y.
<b>Conflict of Interest</b>	Authors declared no conflict of interest.
<b>Financial Disclosure</b>	Authors declared no financial support.

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**REFERENCES**

- 1 Benjamin EJ, Virani SS, Callaway CW, Chamberlain AM, Chang AR, Cheng S, et al.; American Heart Association Council on Epidemiology and Prevention Statistics Committee and Stroke Statistics Subcommittee. Heart Disease and Stroke Statistics-2018 Update: A Report From the American Heart Association. *Circulation*. 2018;137(12):e67-e492. doi:10.1161/CIR.0000000000000558
- 2 Heidenreich PA, Bozkurt B, Aguilar D, Allen LA, Byun JJ, Colvin MM, et al. 2022 AHA/ACC/HFSA Guideline for the Management of Heart Failure: Executive Summary: A Report of the American College of Cardiology/American Heart Association Joint Committee on Clinical Practice Guidelines. *Circulation*. 2022;145(18):e876-e894. doi:10.1161/CIR.0000000000001062
- 3 Değertekin M, Erol C, Ergene O, Tokgözoğlu L, Aksoy M, Erol MK, et al. Heart failure prevalence and predictors in Turkey: HAPPY study. *Türk Kardiyol Dern Ars*. 2012;40(4):298-308. doi:10.5543/tkda.2012.65031
- 4 Türen S, Eng N. A comparison of Gordon’s functional health patterns model and standard nursing care in symptomatic heart failure patients: A randomized controlled trial. *Appl Nurs Res*. 2020;53:151247. doi:10.1016/j.apnr.2020.151247
- 5 McDonagh TA, Metra M, Adamo M, Gardner RS, Baumach A, Böhm M, et al.; ESC Scientific Document Group. 2021 ESC Guidelines for the diagnosis and treatment of acute and chronic heart failure. *Eur Heart J*. 2021;42(36):3599-3726. doi:10.1093/eurheartj/ehab368
- 6 Mangolian Shahrabaki P PhD, Nouhi E PhD, Kazemi M PhD, Ahmadi F PhD. Spirituality: A Panacea for Patients Coping with Heart Failure. *Int J Community Based Nurs Midwifery*. 2017;5(1):38-48.
- 7 Karaman E, Fadiloğlu Ç, Şahin YG, Yıldırım Y, Şenuzun Aykar F. The validity and reliability of heart failure empowerment the scale. *Türkiye Klinikleri Journal of Nursing Sciences*. 2017;9(1):30-40. doi: 10.5336/nurses.2016-51773
- 8 Karaman E, Fadiloğlu Ç, Yıldırım Y, Zoghi M, Yıldırım Y, Şenuzun Aykar F. The effects of an exercise empowerment programme for older patients with heart failure: A randomized controlled trial. *International Journal of Caring Sciences*. 2020;13(3):1835-1846.
- 9 Funnell MM. Patient empowerment. *Critical Care Nursing Quarterly*. 2004;27(2):201-204. doi: 10.1097/00002727-200404000-00012
- 10 Coşgun R, Tokur B. Religious coping in severely ill patients. *Journal of Analytic Divinity*. 2022;6(2):122-144. doi:10.46595/jad.1127744
- 11 Sousa FFRD, Freitas SMFM, Farias AGS, Cunha MCSO, Araújo MFM, Veras VS. Religious/spiritual coping by people with cancer undergoing chemotherapy: Integrative literature review. *SMAD Revista Electronica Salud Mental, Alcohol y Drogas*. 2017;13(1):45-51. doi:10.11606/issn.1806-6976.v13i1p45-51
- 12 Larbi M, Larley JKS, Osafo J. Depression and religious coping mechanisms among cancer patients in Ghana. *An International Journal of Nursing and Midwifery*. 2017;1: 49-58.
- 13 Brewer LC, Bowie J, Slusser JP, Scott CG, Cooper LA, Hayes SN, et al. Religiosity/Spirituality and Cardiovascular Health: The American Heart Association Life's Simple 7 in African Americans of the Jackson Heart Study. *J Am Heart Assoc*. 2022;11(17):e024974. doi: 10.1161/JAHA.121.024974
- 14 Abu Raiya H, Pargament KI, Mahoney A, Stein C. A psychological measure of Islamic religiousness (PMIR): Development and evidence for reliability and validity. *International Journal for the Psychology of Religion*. 2008;18:291-315. doi: 10.1080/10508610802229270
- 15 Eksi H, Sayin M. The adaptation of Religious Coping Scale into Turkish language: A study of bilingual equivalence, validity and reliability. *AGP Humanities and Social Sciences Conference*. 2016. BAU International Berlin University, Berlin, Germany.
- 16 Eways KR. The relationship between positive and negative religious coping, depressive symptoms, and adherence to health behaviors in cardiac rehabilitation patients: The role of perceived control, college of charleston. (Master Thesis, College of Charleston, Charleston). 2016. Retrieved from <https://hdl.handle.net/10355/59194>.
- 17 Trevino KM, McConnell TR. Religiosity and religious coping in patients with cardiovascular disease: change over time and associations with illness adjustment. *Journal of Religion and Health*. 2014;53(6):1907-1917. doi:10.1007/s10943-014-9897-0
- 18 Abu HO, Ulbricht C, Ding E, Allison JJ, Salmoirago-Blotcher E, Goldberg RJ, et al. Association of religiosity and spirituality with quality of life in patients with cardiovascular disease: a systematic review. *Qual Life Res*. 2018;27(11):2777-2797. doi: 10.1007/s11136-018-1906-4
- 19 Park CL, Masters KS, Salsman JM, Wachholtz A, Clements AD, Salmoirago-Blotcher E, et al. Advancing our understanding of religion and spirituality in the context of behavioral medicine. *J Behav Med*. 2017;40(1):39-51. doi: 10.1007/s10865-016-9755-5
- 20 Gencer N, Ayten A. Religion and health-concept, theory and research. *Journal of Sakarya University Faculty of Theology*. 2019;21(39):291-298. doi: 10.17335/sakaifd.484448
- 21 Zulqarnain Z, Aftab M, Mumtaz M, Rehman A. Depression, religious coping and quality of life in chronically ill patients. *ASEAN Journal of Psychiatry*. 2022;23(8):1-8. doi:10.54615/22317805.4747.
- 22 Catapano AL, Reiner Z, De Backer G, Graham I, Taskinen MR, Wiklund O, et al.; European Society of Cardiology (ESC); European Atherosclerosis Society (EAS). ESC/EAS Guidelines for the management of dyslipidaemias The Task Force for the management of dyslipidaemias of the European Society of Cardiology (ESC) and the European Atherosclerosis Society (EAS). *Atherosclerosis*. 2011;217(1):3-46. doi: 10.1093/eurheartj/ehr158
- 23 Wohlfahrt P, Stehlik J, Pan IZ, Ryan JJ. Empowering People Living with Heart Failure. *Heart Failure Clinics*. 2020;16(4):409-420. doi: 10.1016/j.hfc.2020.06.002
- 24 Dianati M, Rezaei Asmaroud S, Shafaghi S, Naghashzadeh F. Effects of an Empowerment Program on Self-Care Behaviors and Readmission of Patients with Heart Failure: a Randomized Clinical Trial. *Tanaffos*. 2020;19(4):312-321.
- 25 Kärner Köhler A, Tingström P, Jaarsma T, Nilsson S. Patient empowerment and general self-efficacy in patients with coronary heart disease: a cross-sectional study. *BMC Family Practice*. 2018;19(1):76. doi: 10.1186/s12875-018-0749-y

