

# Examination of the Relationship Between Health Fatalism and Self-Management in Individuals with Chronic Disease

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## What is already known on this topic?

- *Health fatalism is commonly associated with negative health behaviors and poor self-management in individuals with chronic diseases.*
- *Previous studies suggest that higher levels of fatalism may reduce treatment adherence and self-care practices.*
- *The relationship between health fatalism and chronic disease self-management remains unclear, with limited research exploring potential positive associations.*

## What does this study add on this topic?

- *This study provides new insights by demonstrating that health fatalism does not necessarily hinder self-management in individuals with chronic diseases.*
- *A positive correlation was found between health fatalism and the health care effectiveness sub-dimension of self-management, suggesting that fatalism may serve as a coping mechanism.*
- *The findings highlight the need for future research to differentiate between active and passive fatalism when evaluating its impact on health behaviors.*

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## ABSTRACT

**Objective:** The aim of this study is to investigate the relationship between health fatalism and disease self-management in individuals with chronic health problems.

**Methods:** The data of this descriptive cross-sectional study were collected between March and May 2023. A total of 248 patients with chronic diseases formed the study sample. The Patient Information Form, the Health Fatalism Scale, and the Chronic Disease Self-Management Scale were used to collect data.

**Results:** The mean score of the patients' fatalism scale was 51.6 ( $\pm 16.5$ ). When comparing the fatalism scale by socio-demographic characteristics, it was found that there was no significant difference by age, gender, work status and income level ( $P > .05$ ). However, it was found that the mean fatalism score was higher among those with a low level of education ( $P < .001$ ) and those with 2 or more chronic health problems ( $P = .054$ ). When examining the correlation between the sub-dimensions of the self-management scale of the health fatalism scale, it was found to have a positive correlation with the health care effectiveness sub-dimension ( $P = .006$ ).

**Conclusion:** It was found that health fatalism does not negatively influence self-management in individuals with chronic health problems, but on the contrary shows a positive correlation with the health management sub-dimension. This suggests that patients may have used fatalism as a coping mechanism. It is therefore recommended to differentiate between active and passive fatalism in future studies.

**Keywords:** Chronic disease, health fatalism, self-management

## Introduction

Chronic diseases are health problems that can cause irreversible changes, extend over a long period of time, and require continuous medical care and treatment. The basic approach to chronic disease management is to provide treatment and care management. The success of chronic disease treatment and care management is closely linked to good self-management by the individual.<sup>1</sup> Self-management of chronic diseases is a process in which patients actively try to deal with their illnesses. Good self-management has a positive effect on the patient's health behavior and coping with illness. The patient's symptom burden decreases, the need for care and care costs decrease, and the quality of life increases.<sup>2</sup> Self-management behavior is influenced by many factors, such as knowledge about the disease, self-efficacy, social support, cultural differences, and health beliefs.<sup>3</sup> In particular, individuals' health beliefs lead them to adopt different health behaviors and have a direct impact on their self-management. A recent study of diabetics

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found that positive health beliefs can improve blood glucose levels and lipid profiles.<sup>4</sup> On the contrary, it has been reported that patients with negative health beliefs have poorer compliance with the disease and treatment.<sup>5</sup>

"Fatalism" is defined as a concept that is widely reported to have a negative impact on individuals' health behaviors.<sup>6</sup> Fatalism is the belief that things that happen are predetermined by a supernatural power or God and that the individual has no influence to change them.<sup>7</sup> Therefore, it is emphasized that health fatalism affects health behaviors and leads to negative consequences.<sup>8-11</sup> A study in geriatric patients reported that fatalism was negatively correlated with treatment compliance.<sup>12</sup> Similarly, in a different study with older patients, inappropriate use of medications was found to be predictors of both fatalism tendency and health beliefs about medication use.<sup>13</sup> In a study conducted with epilepsy patients, it was reported that high fatalistic thoughts decreased treatment compliance and increased the tendency toward complementary and alternative treatments.<sup>14</sup> In a different study conducted on patients with heart failure, it was reported that symptom burden was positively correlated with fatalism and that high fatalism was associated with decreased self-care behaviors.<sup>15</sup> In a study including patients with epilepsy and multiple sclerosis, health fatalism was associated with decreased quality of life.<sup>16</sup> A recent systematic review of diabetes patients examined the effects of self-efficacy and fatalism on clinical and psychosocial outcomes. According to the findings of this study, fatalism has a direct and indirect negative effect on clinical findings (such as hemoglobin A1c, blood glucose level) and self-care behaviors (such as compliance with diet, foot care behaviors). In the same article, it was emphasized that the concept of fatalism is little studied and that more research is needed on this subject.<sup>17</sup> In line with these studies, it is concluded that health fatalism in chronic diseases is negatively correlated with self-management concepts such as self-care, treatment compliance, self-efficacy, and disease compliance. However, literature review reveals that existing studies on this topic have predominantly focused on diabetic patients.<sup>17-21</sup> Although scientific research on health fatalism in Türkiye has gained momentum in recent years, the current body of evidence has not yet reached sufficient saturation to draw definitive conclusions. The aim of this study is therefore to investigate the relationship between health fatalism and illness self-management in people with chronic health problems.

#### Research Questions

- Is there a significant relationship between health fatalism and chronic disease self-management?
- Does this relationship vary according to sociodemographic characteristics?

#### Methods

##### Study Design and Participants

The data of this descriptive, cross-sectional study was conducted by face-to-face data collection between March and May 2023. The study population consisted of patients who were treated as inpatients in the internal clinics of Ondokuz Mayıs University Hospital in Samsun, Türkiye. Patients were included in the study if they were diagnosed with a chronic disease, had suffered from this disease for at least 3 months, were over 18 years old, could read and write, had no communication problems, and were willing to participate in the study. A convenience sampling method was employed, including all consecutive patients who met the eligibility criteria during the study period. The sample size was determined based on similar studies in the literature and calculated using G\*Power 3.1.9.7 software. The calculation was performed with a 95% CI and 0.95 power, yielding a minimum required sample size of 220 participants.<sup>22,23</sup> Anticipating a potential

10% dropout rate, the study aimed to include at least 242 patients. The study was ultimately completed with a total of 248 participants (Figure 1).

#### Data Collection

Data were collected through face-to-face interviews conducted in patient rooms. Following informed consent procedures, participants were instructed to self-complete the questionnaires. To ensure unbiased responses, accompanying relatives and other patients were informed about confidentiality protocols to prevent interference. For patients unable to complete forms independently, arrangements were made to provide privacy either by clearing the room or relocating to a dedicated assessment area. The average time required for data collection per participant was 15-20 minutes.

#### Measures

##### Patient Information Form

It contains questions on the patient's sociodemographic (age, gender, educational level, etc.) and clinical characteristics (disease diagnosis, duration of the disease, presence of another disease, etc.).

Health Fatalism Scale, whose Turkish validity and reliability scale was created by Bobov and Çapık in 2020,<sup>22</sup> was developed by Franklin, Schlundt and Wallston in 2008.<sup>24</sup> The scale consists of 17 questions and is a 5-point Likert-type scale. The scores that can be obtained with the scale range from 17 to 85. The Turkish version of the scale consists of a one-factor structure, and an increase in the score obtained on the scale means an increase in fatalism. In the Turkish version of the scale, the Cronbach's  $\alpha$  coefficient was reported as 0.91.<sup>22</sup> In this study, the scale's Cronbach's  $\alpha$  coefficient was found to be 0.95.

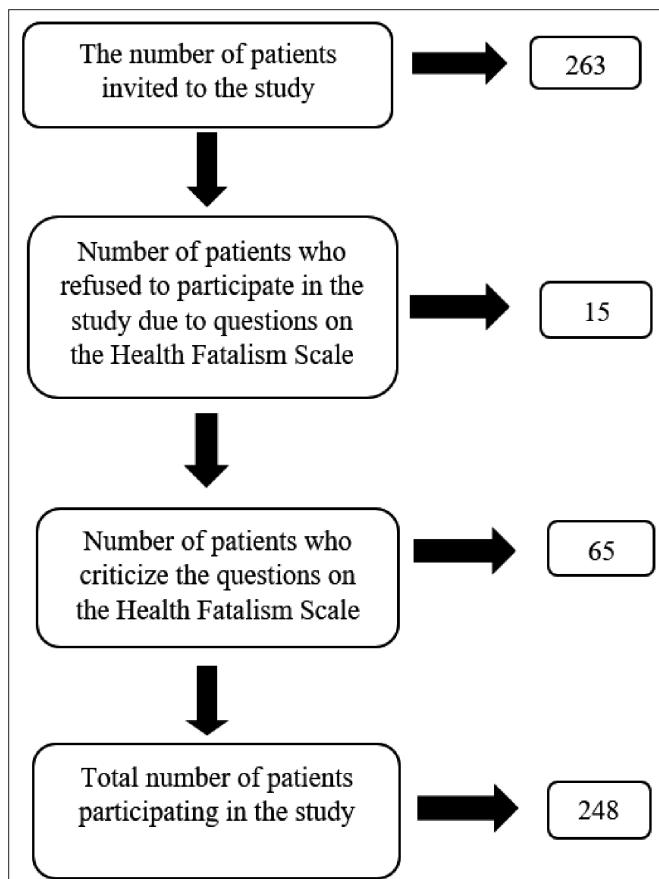


Figure 1. The figure of study sample.

Chronic Disease Self-Management Scale, the original version of the scale developed by Ngai et al (2020),<sup>25</sup> consists of 4 sub-dimensions and 23 items: self-stigma, coping with stigma, health care effectiveness, and adherence to treatment. However, it has been reported that it is appropriate to use the form with 21 items in the Turkish version and the Cronbach's  $\alpha$  coefficients of the sub-dimensions of the scale vary between 0.789 and 0.876. There is no total score of the scale, but the mean scores of the sub-dimensions are calculated. A high mean value from all sub-dimensions, with the exception of the self-stigma sub-dimension, is a desirable situation and means that self-management is good. A low value in the self-stigma subscale is desirable and means that the degree of stigmatization of the person is low.<sup>26</sup> In this study, the scale's Cronbach's  $\alpha$  coefficients were found to be 0.82 for the stigma subscale, 0.73 for the stigma coping subscale, 0.81 for health care efficacy subscale, and 0.88 for treatment adherence subscale.

### Statistical Analysis

The IBM SPSS Statistics 22 program (IBM SPSS Corp.; Armonk, NY, USA) was used for the statistical analysis of the data. The Kolmogorov-Smirnov test was used to check whether the data correspond to a normal distribution. Data were analyzed using descriptive statistics (means  $\pm$  standard deviations and frequencies/percentages), independent samples  $t$ -tests, 1-way ANOVA, and Pearson's correlation. For significant ANOVA results ( $P < .05$ ), post-hoc pairwise comparisons were performed with Tukey's honestly significant difference test to control for family-wise type I error rates while preserving statistical power. Significance was assessed at the  $P < .05$  level.

### Ethical Consideration

Prior to data collection, approval was obtained from Ondokuz Mayıs University Clinical Research Ethics Committee (Approval No: 2023/49, Date: February 24, 2023) and institutional approval was obtained from the institution where the study was to be conducted. In addition, patients were informed about the research and their written consent was obtained.

### Results

The mean age of the 248 patients included in the study was 52.1 ( $\pm 16.1$ ) and 52.8% were female. The majority of patients (61.3%) had primary/secondary education and more than half (55.2%) had 2 or more chronic diseases. The most prevalent diseases in the patient population were diabetes mellitus (41.4%) and hypertension (29.4%). It was found that 31.9% of patients did not take their medication and 20.6% did not attend regular check-ups. (Table 1).

The mean values of the subscales of the self-management scale and the fatalism scale are shown in Table 2.

When the mean of the fatalism scale was compared by sociodemographic characteristics, it was found that there was no significant difference by age, gender, work status, and income level ( $P > .05$ ). Although no statistically significant difference was found by marital status and place of residence, the fatalism score was higher among those who were divorced/widowed and who lived in villages/rural area ( $P > .05$ ). The mean fatalism score was significantly higher among individuals with a low education level ( $P < .001$ ) and tended to be elevated in those with 2 or more chronic diseases, though this association approached but did not reach statistical significance ( $P = .054$ ) (Table 3).

When the sub-dimensions of the self-regulation scale were compared with patients' sociodemographic and clinical variables, significant associations were found with multiple factors. Individuals with higher education levels exhibited better healthcare effectiveness scores

**Table 1. Sociodemographic and Clinical Characteristics of Patients (N = 248)**

	N	%
Age (mean $\pm$ SD)	52.1 $\pm$ 16.1	
Time of diagnosis (months) (mean $\pm$ SD)	10.3 $\pm$ 8.4	
Sex		
Female	131	52.8
Male	117	47.2
Education		
Primary/secondary school	152	61.3
High school	49	19.8
University and higher	47	19.0
Employment		
Employed	59	23.8
Homemaker	91	36.7
Student	14	5.6
Retired	63	25.4
Unemployed	21	8.5
Marital status		
Married	198	79.8
Single	30	12.1
Divorced/widowed	20	8.1
Income		
Good	33	13.3
Average	190	76.6
Bad	25	10.1
Place of residence		
Village/rural area	46	18.5
City center	202	81.5
Number of chronic diseases		
1	111	44.8
2 or more	137	55.2
Chronic diseases that patients have		
Diabetes mellitus	102	41.1
Hypertension	73	29.4
Cardiovascular diseases	67	27.8
Respiratory system diseases	49	19.8
Neurological diseases	32	12.9
Rheumatological diseases	30	12.1
Oncological diseases	28	11.3
Kidney diseases	27	10.9
Endocrine system diseases	21	8.5
Psychiatric diseases	16	6.5
Skin diseases	12	4.8
Do you take your medication regularly		
Yes	169	68.1
No	76	31.9
Do you go for regular check-ups?		
Yes	197	79.4
No	51	20.6
Do you seek alternative treatment?		
Yes	40	16.1
No	208	83.9

Diabetes mellitus and hypertension were presented separately from other endocrine and cardiovascular diseases.

**Table 2. Mean Score of the Fatalism and the Self-Management Scales of the Patients**

Scales	Mean $\pm$ SD	Min-Max
HFS	51.6 $\pm$ 16.5	17-85
*CDSMS_self stigma	1.85 $\pm$ 0.77	1-4.8
CDSMS_coping with stigma	3.31 $\pm$ 0.88	1-5
CDSMS_health care effectiveness	3.61 $\pm$ 1.04	1-5
CDSMS_treatment compliance	4.03 $\pm$ 0.94	1-5

CDSMS, Chronic Disease Self-Management Scale; HFS, Health Fatalism Scale; IQR, interquartile range.

\*It is desirable that the mean scores of the CDSMS subscales are high, except for self-stigmatization.

**Table 3.** Comparison of Patients' Mean Fatalism Scores According to Sociodemographic and Clinical Characteristics

Characteristics	Mean $\pm$ SD	Test/P
Age		$r = -0.065$ $P = .308$
Sex		
Male	50.46 $\pm$ 18.15	$t = -1.104$
Female	52.78 $\pm$ 14.98	$P = .271$
Education		
Primary/secondary school	55.58 $\pm$ 15.88	$F = 12.512^*$
High school	43.73 $\pm$ 16.43	$P < .001$
University and higher	47.38 $\pm$ 15.03	$\eta^2 = 0.093$
Marital status		
Married	49.80 $\pm$ 14.50	$F = 1.579$
Single	46.15 $\pm$ 15.37	$P = .208$
Divorced/widowed	52.53 $\pm$ 16.90	
Employment		
Working actively	50.18 $\pm$ 17.49	$t = -0.798$
Not working actively (homemaker, retired etc.)	52.15 $\pm$ 16.28	$P = .426$
Place of residence		
Village/rural area	55.80 $\pm$ 18.45	$t = 1.876$
City center	50.75 $\pm$ 16.00	$P = .062$
Income		
Good	47.69 $\pm$ 16.49	$F = 1.165$
Average	52.16 $\pm$ 16.02	$P = .314$
Bad	53.36 $\pm$ 20.30	
Do you seek alternative treatment?		
Yes	53.25 $\pm$ 15.40	$t = 0.650$
No	51.38 $\pm$ 16.79	$P = .516$
Do you go for regular check-ups?		
Yes	51.60 $\pm$ 17.09	$t = -0.159$
No	52.01 $\pm$ 14.46	$P = .874$
Do you take your medication regularly?		
Yes	50.38 $\pm$ 17.40	$t = -1.651$
No	54.15 $\pm$ 14.46	$P = .100$
Number of chronic diseases		
1	49.44 $\pm$ 16.71	$t = -1.935$
2 or more	53.51 $\pm$ 16.27	$P = .054$
		$\eta^2 = 0.015$

$\eta^2$ , effect size, F, 1-way ANOVA test; r, Pearson correlation coefficient; t, t-test.

\* $\eta^2$  values are presented for significant values.

\*Tukey HSD test was used as post-hoc test.

( $P = .011$ ). Divorced/widowed individuals had higher self-stigma scores ( $P = .011$ ), while those actively employed showed lower treatment adherence scores ( $P = .042$ ). Participants with low income levels demonstrated higher self-stigma scores ( $P = .018$ ) and lower healthcare effectiveness scores ( $P = .043$ ). Those who attended regular check-ups had significantly higher healthcare effectiveness ( $P = .002$ ) and treatment adherence scores ( $P < .001$ ). Additionally, individuals who regularly took their medications displayed higher treatment adherence scores ( $P < .001$ ) (Table 4).

When examining the correlation between the fatalism scale and the self-management scale, it was found that fatalism has a weak positive correlation with the sub-dimension of the self-management scale effectiveness of health care ( $P = .006$ ) (Table 5).

## Discussion

The success of treatment and care management in chronic diseases is closely linked to the individual's self-management. Although individuals' self-management behavior is influenced by many factors, the tendency toward fatalism is one of these factors. In this study, the relationship between individuals' fatalism levels and self-management was examined.

When comparing the patients' mean fatalism scores according to sociodemographic characteristics, a significant difference was only found in the level of education. It was found that the tendency toward fatalism was higher in patients with a lower level of education. This can be explained by the fact that patients with low education levels have low health behaviors and are fatalistic instead of taking an active role in their health.<sup>27,28</sup> However, from another perspective, patients may also have used fatalism as a coping mechanism.

The level of fatalism did not differ statistically significantly by marital status and place of residence, but the fatalism score was higher among those who were divorced/widowed and who lived in villages/rural areas. Questioning the patient's marital status actually means questioning the spouse's support. Spousal support is one of the most important social supports.<sup>29-31</sup> The fatalistic tendency of people with chronic health problems in the absence of spousal support can be seen as a defense or coping mechanism.

The relatively high fatalistic tendency of people living in villages or rural areas may be associated with education level. In this study, the educational level of people living in rural areas was lower (this information is not included in the table, but is given as additional information). As previously mentioned, this could be due to the low health behaviors and health literacy of individuals with low education levels or their insufficient knowledge of active coping mechanisms.<sup>32</sup>

When examining the relationship between fatalism and patient self-management, it can be said that the results were surprising. The hypothesis put forward by the researchers was: "The higher the level of fatalism, the lower the self-management." The result of the study, however, shows that the situation is completely different. While the fatalism scale showed no significant correlation with the 3 subscales of the self-management scale (self-stigmatization, dealing with stigmatization, adherence to treatment), a significant positive correlation was found with the effectiveness of healthcare. This means that people with high fatalism scores have a higher level of health management. This means that the hypothesis put forward at the beginning of the study was rejected.

Fatalism is the idea that events are predetermined by God/Allah and that man therefore has no influence on a situation. Fatalism in health refers to the idea that the individual cannot prevent the occurrence of a disease or control its treatment to eliminate it. It is claimed that people with high health fatalism generally exhibit poorer disease prevention behaviors and are more passive in treatment.<sup>23,33</sup> Therefore, the concept of fatalism is generally seen as having a negative impact on self-management. Several studies conducted with diabetic patients have reported that fatalism negatively affects self-management, adherence to treatment, and clinical outcomes.<sup>9,17,20,21,34</sup> Similarly, it has been reported that it reduces treatment compliance in elderly patients,<sup>12</sup> reduces the quality of life in patients with epilepsy and multiple sclerosis,<sup>16</sup> and prevents self-care behaviors in heart failure.<sup>15</sup> These findings suggest that fatalism may be a universal risk factor in chronic disease management. In the current study, however, different results were obtained than in the literature. There may be several reasons for this, but the most important factor is probably the Health Fatalism Scale questions used in the study. This is because many of the questions in the scale were ticked by the patients with hesitation.

Additionally, many items on the scale were criticized by patients. Some of the criticized scale items were as follows: "When I am sick, I leave my troubles to God and expect his solution. If God wants me to be healthier, He will make it happen. Religious people should accept whatever

**Table 4.** Comparison of Patients' Self Management Scores According to Sociodemographic and Clinical Characteristics

	Self Stigma	Coping with Stigma	Health Care Effectiveness	Treatment Compliance
Characteristics	Mean $\pm$ SD ( <i>P</i> )	Mean $\pm$ SD ( <i>P</i> )	Mean $\pm$ SD ( <i>P</i> )	Mean $\pm$ SD ( <i>P</i> )
Age ( <i>r, P</i> )	<i>r</i> = -0.21 <i>P</i> = .737	<i>r</i> = 0.063 <i>P</i> = .319	<i>r</i> = -0.067 <i>P</i> = .294	<i>r</i> = 0.096 <i>P</i> = .133
Sex				
Male	12.80 $\pm$ 5.75	17.04 $\pm$ 4.32	14.59 $\pm$ 4.51	20.46 $\pm$ 4.49
Female	13.09 $\pm$ 5.13 <i>P</i> = .669	16.15 $\pm$ 4.49 <i>P</i> = .115	14.35 $\pm$ 3.88 <i>P</i> = .654	19.90 $\pm$ 4.95 <i>P</i> = .354
Education				
Primary/secondary school	13.03 $\pm$ 5.60	16.59 $\pm$ 4.21	13.90 $\pm$ 4.21	20.02 $\pm$ 4.76
High school	13.30 $\pm$ 4.82	15.55 $\pm$ 4.82	14.81 $\pm$ 4.27	20.44 $\pm$ 5.05
University and higher	12.36 $\pm$ 5.51 <i>P</i> = .673	17.57 $\pm$ 4.53 <i>P</i> = .081	15.93 $\pm$ 3.65 <b><i>P</i> = .011</b>	20.31 $\pm$ 4.40 <i>P</i> = .838
Marital status				
Married	12.46 $\pm$ 5.17	16.69 $\pm$ 4.34	14.54 $\pm$ 4.19	20.37 $\pm$ 4.52
Single	14.30 $\pm$ 6.32	16.16 $\pm$ 4.91	15.20 $\pm$ 3.59	19.40 $\pm$ 5.46
Divorced/widowed	15.80 $\pm$ 5.52 <b><i>P</i> = .011</b>	15.95 $\pm$ 4.65 <i>P</i> = .671	12.65 $\pm$ 4.56 <i>P</i> = .092	19.20 $\pm$ 5.66 <i>P</i> = .367
Employment				
Working actively	12.01 $\pm$ 4.95	16.76 $\pm$ 4.58	14.86 $\pm$ 4.63	19.06 $\pm$ 5.33
Not working actively	13.25 $\pm$ 5.54 <i>P</i> = .127	16.51 $\pm$ 4.39 <i>P</i> = .707	14.34 $\pm$ 4.04 <i>P</i> = .410	20.50 $\pm$ 4.50 <b><i>P</i> = .042</b>
Place of residence				
Village/rural area	13.32 $\pm$ 5.34	16.80 $\pm$ 3.65	14.30 $\pm$ 4.24	21.00 $\pm$ 4.36
City center	12.87 $\pm$ 5.45 <i>P</i> = .613	16.51 $\pm$ 4.59 <i>P</i> = .695	14.50 $\pm$ 4.18 <i>P</i> = .764	19.97 $\pm$ 4.81 <i>P</i> = .187
Income				
Good	11.36 $\pm$ 5.12	16.60 $\pm$ 5.14	15.33 $\pm$ 3.95	19.60 $\pm$ 5.43
Average	12.91 $\pm$ 5.14	16.73 $\pm$ 4.15	14.56 $\pm$ 4.01	20.48 $\pm$ 4.47
Bad	15.40 $\pm$ 7.10 <b><i>P</i> = .018</b>	15.32 $\pm$ 5.41 <i>P</i> = .327	12.64 $\pm$ 5.29 <b><i>P</i> = .043</b>	18.48 $\pm$ 5.48 <i>P</i> = .107
Do you go for regular check-ups?				
Yes	12.95 $\pm$ 5.56	16.74 $\pm$ 4.39	14.89 $\pm$ 4.11	21.16 $\pm$ 4.14
No	12.98 $\pm$ 4.91 <i>P</i> = .976	15.92 $\pm$ 4.57 <i>P</i> = .240	12.84 $\pm$ 4.07 <b><i>P</i> = .002</b>	16.31 $\pm$ 4.96 <b><i>P</i> &lt; .001</b>
Do you take your medication regularly?				
Yes	12.76 $\pm$ 5.08	16.82 $\pm$ 4.20	14.82 $\pm$ 4.20	21.65 $\pm$ 4.09
No	13.28 $\pm$ 6.30 <i>P</i> = .523	15.70 $\pm$ 4.84 <i>P</i> = .082	14.01 $\pm$ 3.97 <i>P</i> = .186	17.04 $\pm$ 4.22 <b><i>P</i> &lt; .001</b>
Number of chronic diseases				
1	12.40 $\pm$ 4.88	16.62 $\pm$ 4.79	14.82 $\pm$ 4.05	20.66 $\pm$ 4.38
2 or more	13.40 $\pm$ 5.81 <i>P</i> = .148	16.53 $\pm$ 4.13 <i>P</i> = .876	14.18 $\pm$ 4.27 <i>P</i> = .227	19.75 $\pm$ 4.99 <i>P</i> = .134

For variables with 2 categories, a *t*-test was used; for 3 or more categories, a 1-way ANOVA test was conducted. For correlation analysis, Pearson correlation analysis was performed.

God has decreed for them." Patients' typical response when they read these scale items is, "I do my best for my health; I use all medical methods, but I pray to God." Similarly, patients stated that if they said "I disagree" with these items, it would be disrespectful to the God/Allah they believe in. The fact that 15 patients refused to participate in the study due to the questions in the scale, and 65 patients criticized the scale questions despite being included in the survey questions, raises the suitability of this scale for Turkish society. Therefore, this section introduces the concepts of "active" and "passive" fatalism.

Shahid et al (2020)<sup>35</sup> divided fatalism in health into 2 in their article and defined active and passive fatalism. Classical or passive fatalism refers to the individual's belief that he can do nothing in the face of his illness and that he does not take any action to recover. Active fatalism, on the other hand, states that the individual accepts their situation and asks for help from Allah/God while making efforts to recover. It can be described as a kind of spiritual coping mechanism. Additionally, Shahid et al (2020)<sup>35</sup> show that active fatalism has a negative correlation with an external locus of control and depression and a positive correlation with active coping, which supports this situation.

Active fatalism can also be associated with spiritual well-being. Asking God for help after doing everything he can for his treatment will not make the individual passive; on the contrary, it will help him find inner peace and cope with the disease. Examples of this include reading the Quran or religious practices of cancer patients receiving chemotherapy.<sup>36-38</sup> In a recent article, belief in fate is a defense mechanism and emotion-focused coping strategy when not adequately understood. It has been stated that if a correct belief in fate is developed, it is

**Table 5.** Relationship Between Fatalism and Self-management

Scales_Subscales	<i>r</i>	<i>P</i>
CDSMS_self stigma	0.071	.265
CDSMS_coping with stigma	0.030	.642
CDSMS_health care effectiveness	0.173	<b>.006</b>
CDSMS_treatment compliance	-0.092	.149
CDSMS, Chronic Disease Self-Management Scale; <i>r</i> , Pearson correlation coefficient.		

used as a coping strategy based on problem-solving.<sup>39</sup> Therefore, it is predicted that active fatalism will positively affect self-management in chronic diseases. In contrast, passive fatalism will have adverse effects on every stage of the disease (such as disease prevention behaviors, diagnosis, and treatment processes). However, this study did not empirically measure the distinction between active and passive fatalism, relying instead on theoretical frameworks from prior literature. Future research should validate these constructs using dedicated scales (e.g., assessing fatalism subtypes in relation to coping behaviors) to strengthen causal inferences. Despite this limitation, the proposed model aligns with established findings on adaptive vs. maladaptive coping in chronic illness, suggesting its utility for hypothesis-driven interventions.

The finding that only the healthcare effectiveness subscale of the self-management measure showed significant correlation, while other subscales did not demonstrate significant associations, represents a noteworthy observation. Healthcare service utilization effectiveness may be more directly influenced by fatalistic beliefs as this dimension encompasses concrete behaviors such as adherence to medical appointments or trust in healthcare providers. In contrast, other dimensions like self-stigma, stigma coping, or treatment adherence might be more strongly affected by psychological (e.g., depression) or sociocultural factors (e.g., health literacy) that were not measured in the study. Furthermore, dimensions such as self-stigma and treatment adherence may require more culturally specific or detailed measurement tools to accurately detect their relationship with fatalism. For instance, self-stigma scales typically assess internalized shame, which might have a stronger association with passive fatalism—a construct not directly measured in the study. Therefore, the use of more comprehensive measurement tools and conduction of similar studies in different populations are recommended to further investigate these relationships.

The findings of this study reveal that, contrary to the existing literature, health fatalism does not exhibit an absolute negative correlation with self-management behaviors. In fact, the positive correlation observed with the healthcare behaviors subscale suggests that fatalism may be perceived as a coping strategy. However, due to the high criticism rate of the scale used in the current study and its inability to measure active and passive fatalism separately, definitive conclusions cannot be drawn. Therefore, it is crucial for healthcare professionals to plan future research using scales that can distinguish between active and passive fatalism, as this will more clearly elucidate the impact of fatalistic tendencies on patients' self-management practices. Furthermore, it should be emphasized that patients' fatalistic tendencies play a significant role in care effectiveness, and appropriate education and counseling interventions should be provided when necessary.

### Strengths and Limitations

This cross-sectional descriptive study demonstrates several methodological strengths, including an appropriate sample size, the use of validated and reliable instruments for data collection, and the presentation of original findings that contribute new perspectives to the literature. However, it is important to acknowledge that the research also has some inherent limitations. The use of convenience sampling from a single center may limit the generalizability of findings. Future studies should employ multicenter designs with randomized sampling to enhance external validity. The reliability of the findings may have been impacted by 2 key factors: (1) participants' evident hesitation when responding to items referencing divine will (e.g., questions containing "God/Allah"), and (2) widespread criticism of multiple scale items, with many patients reporting difficulty selecting appropriate responses.

These measurement challenges suggest potential issues with item phrasing or cultural adaptation of the instrument. Therefore, the scale should be studied in different disease groups. In addition, the fact that the research data were collected face to face may have affected the responses of the patients to a certain extent. This situation should be taken into consideration when interpreting the research findings.

### Conclusion

Contrary to the literature, this study found a positive association between fatalism and self-management (especially health care utilization effectiveness). This unexpected finding challenges the traditional view that fatalism undermines self-management in all situations and suggests that this relationship may be more complex than documented in the literature. However, because the present study did not measure fatalism subtypes (such as active/passive), it is not possible to attribute these results to unmeasured constructs. Further studies in different disease groups are recommended to better understand the impact of health fatalism on self-management.

**Data Availability Statement:** The data that support the findings of this study are available on request from the corresponding author.

**Ethics Committee Approval:** Ethics committee approval was received for this study from Ondokuz Mayıs University Clinical Research Ethics Committee (Approval No.: 2023/49; Date: February 24, 2023).

**Informed Consent:** Written informed consent was obtained from all patients who participated in this study.

**Peer-review:** Externally peer-reviewed.

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### References

1. Hancerlioglu S, Senuzun Aykar F. Validity and reliability of Turkish version of the self care management process in chronic illness. *Gümüşhane Univ J Heal Sci.* 2018;7(1):175-183.
2. O'Connell S, Mc Carthy VJC, Savage E. Frameworks for self-management support for chronic disease: a cross-country comparative document analysis. *BMC Health Serv Res.* 2018;18(1):583. [\[CrossRef\]](#)
3. Mackey LM, Doody C, Werner EL, Fullen B. Self-management skills in chronic disease management: What role does health literacy have? *Med Decis Making.* 2016;36(6):741-759. [\[CrossRef\]](#)
4. Muñoz-Torres AV, Medina-Bravo P, Valerio-Pérez BE, Mendoza-Salmeron G, Escobedo-de la Peña J, Velázquez-López L. Positive health beliefs are associated with improvement of glycated hemoglobin and lipid profiles in Mexican patients with type 2 diabetes mellitus: a cross-sectional study. *BMC Public Health.* 2020;20(1):761. [\[CrossRef\]](#)
5. Gagnon MD, Waltermaurer E, Martin A, Friedenson C, Gayle E, Hauser DL. Patient beliefs have a greater impact than barriers on medication adherence in a Community Health Center. *J Am Board Fam Med.* 2017;30(3):331-336. [\[CrossRef\]](#)
6. Jashanloo M. The relationship between fatalistic beliefs and well-being depends on personal and national religiosity: a study in 34 countries. *Heliyon.* 2022;8(6):e09814. [\[CrossRef\]](#)
7. Morgan PD, Tyler ID, Fogel J. Fatalism revisited. *Semin Oncol Nurs.* 2008;24(4):237-245. [\[CrossRef\]](#)
8. Pehlivan I, Aktas B. Relationship between medication compliance and fatalistic tendency in patients with hypertension. *Int J Caring Sci.* 2022;15(1):167-176.

9. Walker RJ, Smalls BL, Hernandez-Tejada MA, Campbell JA, Davis KS, Egede LE. Effect of diabetes fatalism on medication adherence and self-care behaviors in adults with diabetes. *Gen Hosp Psychiatry*. 2012;34(6):598-603. [\[CrossRef\]](#)
10. Elsaba HAHF, Abd El-Maksoud ASA. Relationship of fear and fatalism with breast cancer screening among women using health belief model. *Int J Adv Nurs Stud.* 2020;9(2):52-60.
11. Shen L, Condit CM, Wright L. The psychometric property and validation of a fatalism scale. *Psychol Health.* 2009;24(5):597-613. [\[CrossRef\]](#)
12. El-Sayed MM, Mohsen HA, El-Ashry AM, Khaled AMS, Shoukr EMM. Association of health anxiety, fatalism and medication adherence among geriatric clients: an exploratory study. *Geriatr Nurs.* 2023;54:8-15. [\[CrossRef\]](#)
13. Kulakçı-Altıntaş H, Ayaz-Alkaya S. Fatalism tendency and health beliefs about medication use in older adults: a predictive correlational design. *Geriatr Nurs.* 2024;55:29-34. [\[CrossRef\]](#)
14. Özer Z, Turan GB, Karaman S. Effects of fatalism perception and attitudes towards complementary and alternative medicine on medication adherence in patients with epilepsy. *Eur J Integr Med.* 2023;61:102271. [\[CrossRef\]](#)
15. Thapa A, Chung ML, Wu JR, et al. Mediation by fatalism of the association between symptom burden and self-care management in patients with heart failure. *J Cardiovasc Nurs.* 2024;39(3):229-236. [\[CrossRef\]](#)
16. Kavuran E. Fatalism, self-management and self-esteem: how do they shape the quality of life in MS and epilepsy Patients? *Epilepsy Behav.* 2025;162:110148. [\[CrossRef\]](#)
17. Egede LE, Campbell JA, Walker RJ, Fraser RA, Ekwunife O. Understanding the roles of fatalism and self-efficacy on clinical and behavioral outcomes for African American with type 2 diabetes: a systematic review. *Curr Diab Rep.* 2025;25(1):31. [\[CrossRef\]](#)
18. Egede LE, Bonadonna RJ. Diabetes self-management in African Americans: an exploration of the role of fatalism. *Diabetes Educ.* 2003;29(1):105-115. [\[CrossRef\]](#)
19. Gonzalez-Zacarias AA, Mavarez-Martinez A, Arias-Morales CE, Stoica N, Rogers B. Impact of demographic, socioeconomic, and psychological factors on glycemic self-management in adults with type 2 diabetes mellitus. *Front Public Health.* 2016;4:195. [\[CrossRef\]](#)
20. Abbott L, Slate E, Graven L, Lemacks J, Grant J. Fatalism, social support and self-management perceptions among rural African Americans living with diabetes and pre-diabetes. *Nurs Rep.* 2021;11(2):242-252. [\[CrossRef\]](#)
21. Berardi V, Bellettieri J, Nativ O, Ladislav S, Hovell MF, Baron-Epel O. Fatalism, diabetes management outcomes, and the role of religiosity. *J Relig Health.* 2016;55(2):602-617. [\[CrossRef\]](#)
22. Bobov G, Capik C. The reliability and validity of the religious health fatalism scale in Turkish language. *J Relig Health.* 2020;59(2):1080-1095. [\[CrossRef\]](#)
23. Dayapoglu N, Ayyıldız Ni, Şeker D. Determination of health fatalism and the factors affecting health fatalism in patients with epilepsy in the North of Turkey. *Epilepsy Behav.* 2021;115:107641. [\[CrossRef\]](#)
24. Franklin MD, Schlundt DG, Wallston KA. Development and validation of a religious health fatalism measure for the African-American faith community. *J Health Psychol.* 2008;13(3):323-335. [\[CrossRef\]](#)
25. Ngai SS, Cheung C, Ng Y, Tang H, Ngai H, Wong KH. Development and validation of the chronic illness self-management (CISM) scale: Data from a young patient sample in Hong Kong. *Child Youth Serv Rev.* 2020;114:105077. [\[CrossRef\]](#)
26. ÖzTÜRK YE, Yeşildal M, Arik Ö, Fidan Y. Kronik hastalık öz yönetim Ölçeğinin türkçe geçerlilik Güvenilirliği. *Int J Acad Value Stud (Javstudies JAVS).* 2021;3(3):375-381. [\[CrossRef\]](#)
27. Espinosa de los Monteros K, Gallo LC. The relevance of fatalism in the study of latinas' cancer screening behavior: a systematic review of the literature. *Int J Behav Med.* 2011;18(4):310-318. [\[CrossRef\]](#)
28. Espinosa de los Monteros K, Gallo LC. Fatalism and cardio-metabolic dysfunction in Mexican-American women. *Int J Behav Med.* 2013;20(4):487-494. [\[CrossRef\]](#)
29. Soulsby LK, Bennett KM. Marriage and psychological wellbeing: the role of social support. *Psychology.* 2015;6(11):1349-1359. [\[CrossRef\]](#)
30. Ekundayo O, Elegbede O, Gabriel-Alayode O, et al. Relationship between perceived spousal social support and blood pressure control among hypertensive patients attending general outpatient clinic in federal teaching hospital, Ido-Ekiti, Nigeria. *Arch Clin Hypertens.* 2020;6(1):22-28. [\[CrossRef\]](#)
31. Murat H, Beydağ KD. The relationship between life satisfaction and spouse support in women with multiple sclerosis. *Bezmialem Sci.* 2022;10(4):500-506. [\[CrossRef\]](#)
32. Bahçecioğlu Turan G, Çiftçi B. Examination of health fatalism and health literacy in patients with heart failure. *East J Med.* 2023;28(2):211-218. [\[CrossRef\]](#)
33. Durmaz H, Çapık C. Are health fatalism and styles of coping with stress affected by poverty? A field study. *Iran J Public Health.* 2023;52(3):575-583. [\[CrossRef\]](#)
34. Mendoza-Catalán G, Figueroa-Perea JG, Gallegos-Cabriales EC, Salazar-González BC, Onofre-Rodríguez DJ, González-Ramírez J. Fatalistic beliefs, self-care, and HbA1c in Mexican men with type 2 diabetes mellitus: a cross-sectional study. *Med (Baltimore).* 2023;102(31):e34594. [\[CrossRef\]](#)
35. Shahid F, Beshai S, Del Rosario N. Fatalism and depressive symptoms: active and passive forms of fatalism differentially predict depression. *J Relig Health.* 2020;59(6):3211-3226. [\[CrossRef\]](#)
36. Al-Jubouri MBA, Isam SR, Hussein SM, Machuca-Contreras F. Recitation of Quran and music to reduce chemotherapy-induced anxiety among adult patients with cancer: a clinical trial. *Nurs Open.* 2021;8(4):1606-1614. [\[CrossRef\]](#)
37. Khan I, Shareef H. Impact of Quran therapy as a complementary and alternative medicine in cancer. *Pak J Heal Sci.* 2023;4(12):183-189. [\[CrossRef\]](#)
38. Kamian S, Tabatabaeefar M. The effect of hearing Quran verses on reducing chemotherapy-induced nausea and vomiting in cancer patients referring to Imam Hossein Hospital. *J Res Reli Heal.* 2019;5(3):45-58. [\[CrossRef\]](#)
39. Aydin C. Kader İnancının Savunma Mekanizması ve Dini Başa Çıkma Kavramları Açılarından Değerlendirilmesi (evaluation of the faith of destiny in terms of the defense mechanism and the religious way of coping). *J Divin Fac Hıtit Univ.* 2019;18(35):101-122. [\[CrossRef\]](#)