

Health Anxiety and Health-Seeking Behaviors in Individuals Living in Rural Areas of Türkiye: Descriptive and Relational Research

Türkiye'nin Kırsalında Yaşayan Bireylerde Sağlık Anksiyetesi ve Sağlık Arama Davranışları: Tanımlayıcı ve İlişki Arayıcı Araştırma

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ABSTRACT Objective: The aim of this study is to determine the relationship between health anxiety and health-seeking behaviors among adults living in rural areas and to identify the factors affecting these variables. **Material and Methods:** The research, carried out in a descriptive and correlational design, included individuals residing in a rural region in the Trabzon province of Türkiye. The sample group consisted of 499 individuals aged 18 and above who met the inclusion criteria for the study. **Results:** The participants' average Health Anxiety Scale score was 16.05 ± 7.41 , while the average Health Seeking Behaviors Scale score was 39.30 ± 6.17 . Among the Health Seeking Behaviors Scale subdimension, online health-seeking behavior scored the highest (16.16 ± 4.32), whereas traditional health-seeking behavior scored the lowest (10.61 ± 2.20). The study revealed a statistically significant positive correlation between the Health Seeking Behaviors Scale score and Health Anxiety Scale score ($r=0.36$, $p<0.05$), indicating that individuals with greater health anxiety exhibited increased health-seeking behaviors. **Conclusion:** Research has also indicated that individuals' health-seeking behaviors are influenced by factors such as sex, educational status, marital status, employment status, family structure, the presence of chronic illnesses, and complaints on the internet. Individuals living in rural areas regularly utilizing healthcare services at necessary intervals may have a protective effect against high health anxiety and negative health-seeking behaviors.

Keywords: Health anxiety; health-seeking behavior; adult individuals; rural area

ÖZET Amaç: Bu çalışmanın amacı, kırsal kesimde yaşayan erişkin bireylerin sağlık anksiyetesi ve sağlık arama davranışları arasındaki ilişki ve bu değişkenleri etkileyen faktörleri belirlemektir. **Gereç ve Yöntemler:** Tanımlayıcı ve ilişki arayıcı desende yapılan bu çalışmanın evrenini Türkiye'de Trabzon ilinde bulunan kırsal bir bölgede yaşayan bireyler oluştururken örneklem grubunu ise çalışmaya dâhil edilme kriterlerine uyan 18 yaş ve üzeri 499 birey oluşturmuştur. **Bulgular:** Araştırmaya katılan bireylerin Sağlık Anksiyetesi Ölçeği (SAÖ) toplam puan ortalaması $16,05 \pm 7,41$ olarak, Sağlık Arama Davranışları Ölçeği (SADÖ) toplam puan ortalaması ise $39,30 \pm 6,17$ olarak tespit edilmiştir. Bireylerin SADÖ alt boyutlarında online sağlık arama davranışının en yüksek puana ($16,16 \pm 4,32$) sahip olduğu, geleneksel sağlık arama davranışının ise ($10,61 \pm 2,20$) en düşük puana sahip olduğu belirlenmiştir. SADÖ ile SAÖ arasında istatistiksel olarak pozitif yönlü anlamlı bir ilişki olduğu sonucuna ulaşılmıştır ($r=0,36$ $p<0,05$). **Sonuç:** Sağlık anksiyetesi yüksek olan bireylerin sağlık arama davranışlarının artış gösterdiği belirlenmiştir. Bireylerin sağlık arama davranışlarının cinsiyet, eğitim durumu, medeni durum, çalışma durumu, aile yapısı, kronik hastalık varlığı, internette şikâyetleri araştırma durumlarından etkilendiği görülmüştür. Kırsal kesimde yaşayan bireylerin düzenli aralıklarla ve ihtiyaç olunan durumlarda sağlık hizmetlerinden yararlanmaları yüksek sağlık anksiyetesi ve olumsuz sağlık arama davranışlarına karşı koruyucu etki yapabilir.

Anahtar Kelimeler: Sağlık anksiyetesi; sağlık arama davranışı; erişkin bireyler; kırsal bölge

Rural areas encompass communities living in social environments where the economy is based on agriculture, face-to-face relationships are prevalent, and the division of labor and specialization have not

developed.¹ Rural areas can be classified as places distant from urban centers, with low population density and an economy primarily based on agriculture.² In urban environments, it can be challenging to pro-

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tect mental health and maintain well-being.³ The literature suggests that living in green spaces and natural environments may alleviate or prevent mental health issues.^{4,5} Although living in rural and green areas has been reported to have positive effects on mental health it has been noted that people living in rural areas are more likely to encounter barriers in seeking help to improve their health compared to their urban counterparts.^{6,7}

Many amenities that improve the quality of life in urban areas are less common in rural areas. Cities are especially more advantageous in terms of transportation, telecommunications, healthcare services, job opportunities, education, and other opportunities. However, since ancient times, people have intuitively sought to live in places with natural beauty, tranquility, and better health.⁸ This intuitive need, particularly during the coronavirus disease-2019 period, has highlighted the importance of living in rural areas in the face of social distancing, isolation, and the risk of infection.^{9,10} Despite the advantages of living in rural areas, there are barriers such as limited access to healthcare services, the availability of only the most basic tools in healthcare for cost-effectiveness, lack of transportation and technological resources, and limited access to social welfare services.¹¹ Additionally, rural populations often face significant inequalities in accessing health and healthcare resources, which can reduce or hinder the use of healthcare services and increase health-related anxiety among individuals living in rural areas.¹²

Health anxiety can be defined as ‘a persistent fear of illness, often involving the misinterpretation of bodily symptoms as indicators of serious disease.¹³ This anxiety may persist even when the individual is physically healthy and has appropriate medical assurance.¹⁴ A moderate level of health anxiety that does not disrupt the individual’s coping mechanisms can help them protect their health, take precautions, and avoid health-related risks.¹ However, individuals with high levels of health anxiety often cognitively distort bodily changes they notice, experience intense fear and tend to use medical services more frequently.¹⁵ Additionally, these individuals may experience higher levels of anxiety even during routine medical care.^{16,17} The literature indicates that feelings

of anxiety and worry about health can trigger information-seeking behavior, suggesting that individuals experiencing anxiety or fear may turn to various information-seeking behaviors to reduce this tension.^{16,18} Coping with health problems may involve seeking advice from doctors, following recommendations from close circles or trusted individuals, or obtaining information from the internet.^{19,20} Health behavior refers to observable actions taken by individuals with the goal of diagnosing diseases, prevention, and improving well-being. Actions taken to prevent diseases, diagnose them, protect health, and promote well-being are termed health behaviors. Health-seeking behavior, on the other hand, refers to actions taken by people to find appropriate solutions to actual or potential health problems.^{20,21} Determining the levels of health anxiety in individuals within a community and identifying the health-seeking behaviors based on these levels can enable individuals with high anxiety to be directed toward appropriate calming methods.²²

No study has been found in Türkiye that compares the prevalence of health anxiety between those living in rural and urban areas, but it is anticipated that factors such as access to treatment and cost may affect the health-seeking behaviors of people living in rural areas. Accordingly, this study addresses the health anxiety and health-seeking behaviors of adult individuals in Türkiye’s Eastern Black Sea region, who primarily earn their livelihoods through fishing and hazelnut farming. It is believed that determining the health anxiety and health-seeking behaviors of people living in this region, as they concentrate on seasonal agricultural and fishing work and face challenging working conditions, will contribute to the literature. In line with this belief, the following hypotheses were formed:

H1: There is a statistically significant relationship between health anxiety and health-seeking behaviors among individuals living in rural areas.

H2: There is a statistically significant relationship between health anxiety and sociodemographic characteristics among individuals living in rural areas.

H3: There is a statistically significant relationship between health-seeking behaviors and sociode-

mographic characteristics among individuals living in rural areas.

MATERIAL AND METHODS

MODEL OF THE RESEARCH

This study is a relational survey model, quantitative, and cross-sectional research.

PLACE AND TIME OF THE RESEARCH

The data for the study were obtained from adult individuals living in a rural area in the Trabzon province between June and November 2023. The research was conducted in the district of Vakfikebir in Trabzon province, specifically in two neighborhoods with a total population of 3,000. These villages are situated in a rural area characterized by low population mobility, with agriculture being the predominant source of livelihood.

UNIVERSE AND SAMPLE

This study population consisted of individuals living in a rural area in the Trabzon province. The sample size for the study was determined through G*Power analysis based on sample and power calculations, resulting in a minimum of 95 participants for a 95% confidence interval, 0.5 effect size, and 80% power. Participants in the study were reached through a snowball sampling method. The sample for the study consisted of 499 individuals aged 18 and above who could communicate and voluntarily agreed to participate in the research. Individuals who did not wish to participate or left the survey questions blank were excluded from the study.

DATA COLLECTION TOOLS

The data were collected by the researchers through face-to-face or online interviews with individuals utilizing the "Personal Information Form," "Health Anxiety Scale," and "Health-Seeking Behavior Scale."

Personal Information Form: The form prepared by the researchers contains 10 questions that inquire about individuals' characteristics such as age, gender, educational status, marital status, occupation, place of residence, and income level.

Health Anxiety Scale: Developed by Salkovskis et al. to assess health anxiety, the Health Anxiety Scale underwent reliability and validity testing in Turkish by Aydemir in 2013.^{1,23} The Health Anxiety Scale is a self-report scale consisting of 18 items. The first 14 items, which form the basis of the scale, measure the subdimension of excessive sensitivity to bodily symptoms, while the last 4 items assess the dimension related to anxiety about bodily illness. Each item on the scale is scored on a scale of 0-3. The minimum total score that can be obtained from the scale is 0, while the maximum total score is 54. As the score increases, individuals' level of health anxiety also increases.¹ In the study conducted by Karaer Karapıçak et al., the internal consistency coefficient of the health anxiety scale was reported to be 0.91.²⁴ For this study, the Cronbach's alpha internal consistency coefficient of the Health Anxiety Scale was determined to be 0.87.

Health-Seeking Behavior Scale: Developed by Kırış and Öztürk in 2021, this scale is a three-dimensional, 12-item scale that includes information on online health-seeking behavior (6 items), professional health-seeking behavior (3 items), and traditional health-seeking behavior (3 items). The items on the scale allow participants to express their opinions using Likert-type options ranging from 1 to 5 (1=strongly disagree, 5=strongly agree). The Cronbach's alpha coefficients calculated to determine the reliability of the scale were found to be 0.74 for online health-seeking, 0.71 for professional health-seeking, 0.63 for traditional health-seeking, and 0.71 for the overall scale.²⁰ The internal consistency coefficients for this study were 0.82 for online health-seeking, 0.75 for professional health-seeking, 0.74 for traditional health-seeking, and 0.78 for the total health-seeking behavior scale.

DATA ANALYSIS

Analyses were conducted using the SPSS 22.0 (IBM, USA) statistical program. Descriptive statistics such as number, percentage, mean, and standard deviation were utilized for the evaluation of the data. The normality of the distribution of the data was assessed using the Kolmogorov-Smirnov test, which revealed that the data were not normally distributed. There-

fore, the Mann-Whitney U test and Kruskal-Wallis test were employed to evaluate the mean scores of the scales according to demographic characteristics. Additionally, the Pearson correlation test was applied to determine the strength of the relationships between the scales.

Ethical Approval: Before starting the research, ethical approval was obtained from the Trabzon University Social and Human Sciences Research and Publication Ethics Committee (date: November 21, 2022, no: E-81614018-000-2200048238) and informed voluntary consent was obtained from the individuals included in the study. Written permissions have been obtained from the scale authors regarding the scales used in the study. All the stages of the research were conducted in accordance with the Helsinki Declaration.

RESULTS

According to Table 1, the average age of the participants in the study is 38.08 ± 18.44 years, with 52.7% being male, 52.92% being single, 30.26% having graduated from high school, 50.9% not working in any job, and 88.38% living in a nuclear family structure. It was found that 26.6% of the participants have a chronic illness, 29.86% use medication regularly, and 50.3% have a family history of chronic illness. Additionally, 81.2% of the participants had visited a doctor in the past three months, and 44.69% had visited a doctor three times or more during the same period.

The average total score for the Health-Seeking Behavior Scale was determined to be 39.30 ± 6.17 , and the average total score for the Health Anxiety Scale was 16.05 ± 7.41 among the individuals participating

TABLE 1: Presents the frequency and percentage distributions of participants' sociodemographic characteristics.

Variable		n	%
Gender	Male	263	52.71
	Female	236	47.29
Marital status	Married	235	47.09
	Single	264	52.91
Educational status	Primary education	150	30.06
	High school	151	30.26
	Associate degree	105	21.04
	Bachelor's degree	93	18.64
Employment status	Yes	245	49.10
	No	254	50.90
Family type	Nuclear family	441	88.38
	Extended family	58	11.62
Chronic disease status	Yes	133	26.65
	No	366	73.35
Medication use status	Yes	149	29.86
	No	350	70.14
Family history of chronic illness	Yes	251	50.30
	No	248	49.70
Number of visits to a doctor in the last 3 months	Yes	405	81.16
	No	94	18.84
The number of visits to a doctor in the last 3 months	1-2 times	182	36.47
	3 or more	223	44.69
	"I did not apply."	94	18.84
	Minimum	Maximum	$\bar{X} \pm SD$
Age	18	86	38.08 ± 18.44

SD: Standard deviation.

in the research. The subdimensions of the Health Seeking Behaviors Scale according to the total score average were ranked as follows: the highest was online health-seeking behavior (16.16 ± 4.82), followed by professional health-seeking behavior (12.53 ± 1.59) and traditional health-seeking behavior (10.61 ± 2.20) (Table 2).

TABLE 2: Presents the minimum, maximum, mean and standard deviation values along with Cronbach's alpha reliability coefficients and normality assumptions for the Health-Seeking Behavior Scale and Health Anxiety Scale.

"Independent variable."	Min	Max	Mean	SD	Cronbach alpha	Skewness	Kurtosis
Health-Seeking Behavior Scale	17	57	39.30	6.17	0.78	-0.27	0.45
Online health search	6	30	16.16	4.82	0.82	-0.12	-0.20
Professional health search	5	15	12.53	1.59	0.75	-0.78	2.17
Traditional health search	3	15	10.61	2.20	0.74	-1.10	1.12
Health Anxiety Scale	1	41	16.05	7.41	0.87	0.41	0.33

SD: Standard deviation.

Table 3 indicates that when examining the relationship between individuals' sociodemographic characteristics and total scores on the scales, there was a statistically significant difference in the total scores for online health-seeking behavior, professional health-seeking behavior, and traditional health-

seeking behavior based on sex ($p < 0.05$), with these scores being higher for females. A statistically significant relationship ($p < 0.05$) was found between the total Health-Seeking Behavior Scale score and marital status, with single individuals (16.73 ± 4.49) having higher total Health Seeking Behaviors Scale scores

TABLE 3: Comparison of the mean scores on the Health Anxiety Scale and Health-Seeking Behavior Scale according to demographic characteristics.

Variables	n	Health Seeking Behaviors Scale total score $\bar{X} \pm SD$	Online health search $\bar{X} \pm SD$	Professional health search $\bar{X} \pm SD$	Traditional health search $\bar{X} \pm SD$	Health Anxiety Scale $\bar{X} \pm SD$
Gender						
Male	263	38.85±6.06	15.68±4.68	12.37±1.59	10.80±2.02	15.68±7.49
Female	236	39.80±6.25	16.69±4.92	12.70±1.57	10.41±2.38	16.46±7.31
		t: -1.73, p: 0.08	t: -2.37, p: 0.02	t: -2.31, p: 0.02	t: 1.99, p: 0.04	t: -1.17, p: 0.24
Marital status						
Single	264	39.94±5.71	16.73±4.49	12.54±1.48	10.67±2.14	16.38±7.11
Married	235	38.58±6.58	15.52±5.09	12.51±1.70	10.54±2.28	15.68±7.73
		t: 2.47, p: 0.01	t: 2.82, p: 0.01	t: 0.16, p: 0.87	t: 0.66, p: 0.51	t: 1.06, p: 0.29
Educational status						
Primary education 1	150	37.33±6.10	14.01±4.68	12.49±1.54	10.83±2.11	15.47±8.16
High school 2	151	39.54±5.80	16.58±4.52	12.26±1.39	10.70±2.09	15.74±7.01
Associate degree 3	105	40.55±5.93	17.49±4.47	12.81±1.74	10.26±2.49	16.79±6.31
Bachelor's degree 4	93	40.66±6.38	17.43±4.78	12.70±1.72	10.53±2.16	16.65±7.88
		F: 8.48, p: 0.00 1<2,3,4	F: 16.53, p: 0.00 1<2,3,4	F: 2.98, p: 0.03 2<3	F: 1.52, p: 0.21	F: 0.95, p: 0.42
Employments status						
Yes	245	38.63±6.35	15.89±4.81	12.49±1.65	10.26±2.35	15.75±7.99
No	254	39.94±5.92	16.42±4.82	12.57±1.52	10.96±2.00	16.33±6.80
		t: -2.40, p: 0.02	t: -1.24, p: 0.21	t: -0.57, p: 0.57	t: -3.59, p: 0.00	t: -0.88, p: 0.38
Family type						
Nuclear family	441	39.72±6.07	16.42±4.80	12.55±1.48	10.75±2.15	16.05±7.35
Extended family	58	36.10±6.03	14.17±4.54	12.34±2.22	9.59±2.31	16.02±7.92
		t: 4.27, p: 0.00	t: 3.37, p: 0.00	t: 0.93, p: 0.35	t: 3.83, p: 0.00	t: 0.03, p: 0.97
Chronic disease status						
Yes	133	39.55±6.36	15.99±4.97	12.78±1.75	10.77±2.41	17.32±6.55
No	366	39.21±6.10	16.22±4.77	12.43±1.52	10.55±2.12	15.58±7.65
		t: 0.55, p: 0.59	t: -0.46, p: 0.64	t: 2.17, p: 0.03	t: 0.99, p: 0.32	t: 2.33, p: 0.02
Medication use status						
Yes	149	39.61±6.44	16.27±4.98	12.77±1.73	10.57±2.42	17.13±6.94
No	350	39.17±6.05	16.11±4.75	12.42±1.51	10.63±2.11	15.59±7.56
		t: 0.74, p: 0.46	t: 0.33, p: 0.74	t: 2.26, p: 0.02	t: -0.28, p: 0.78	t: 2.14, p: 0.03
The number of visits to a doctor in the last 3 months						
1-2 times 1	182	39.58±16.19	16.56±14.93	12.55±11.46	10.47±12.17	14.59±16.43
3 or more 2	223	40.03±15.59	16.55±14.23	12.63±11.51	10.85±12.00	18.69±16.77
I didn't apply 3	94	37.01±16.90	14.45±15.53	12.23±11.93	10.33±12.65	12.61±18.44
		F: 8.49, p: 0.00 3<1,2	F: 7.50, p: 0.00	F: 2.09, p: 0.12	F: 2.50, p: 0.08	F: 31.17, p: 0.00 1,3<2

t: Independent Samples t-test; F: One-way analysis of variance; SD: Standard deviation.

than married individuals (15.52±5.09). There was a statistically significant difference ($p<0.05$) in the total Health Seeking Behaviors Scale score based on education level with individuals with a primary school education having significantly lower scores than those with a high school education, associate degree, or undergraduate-postgraduate education. There was a significant relationship ($p<0.05$) between the employment status of individuals and the traditional health-seeking behavior subdimension and Health Seeking Behaviors Scale scores. When looking at the mean values, it is determined that individuals who are not employed have higher scores in the traditional health-seeking behavior subdimension and Health Seeking Behaviors Scale total scores than do those who are employed.

In the present study, there appeared to be a statistically significant difference ($p<0.05$) in the Health Seeking Behaviors Scale total scores, traditional health-seeking behavior, and online health-seeking behavior subdimensions based on the family structure of the individuals. According to the mean values, individuals with a nuclear family type had higher total score on the Health Seeking Behaviors Scale, traditional health-seeking behavior, and online health-seeking behavior subdimension than did those with an extended family type. There was a statistically significant difference ($p<0.05$) between individuals' professional health-seeking behavior scores and the presence of chronic illness. The mean values

revealed that individuals with chronic illness (12.78±1.75) had higher professional health-seeking behavior scores than did those without chronic illness (12.43±1.52). The total Health Anxiety Scale score significantly differed according to individuals' chronic illness status ($p<0.05$). Individuals with chronic illness (17.32±6.55) had higher Health Anxiety Scale total scores than did those without chronic illness (15.58±7.65).

There was a statistically significant difference ($p<0.05$) between the scores of the professional health-seeking behavior subdimension and individuals' continuous medication use status. According to the mean values, individuals who used medication continuously (12.77±1.73) had higher scores for professional health-seeking behavior than did those who did not use medication continuously (12.42±1.51). The total Health Anxiety Scale score significantly differed according to individuals' continuous medication use status ($p<0.05$). The mean values revealed that individuals who used medication continuously (17.13±6.94) had higher Health Anxiety Scale scores than did those who did not use medication continuously (15.59±7.56). There was a statistically significant difference in individuals' total scores on the Health Seeking Behaviors Scale based on the number of visits to the doctor in the last 3 months ($p<0.05$). The total scores of individuals who did not visit a doctor in the last 3 months were significantly lower than those of individuals who made 1-2 visits or 3 or more visits.

TABLE 4: Findings on the relations between age, scale, and subdimension scores.

		(1)	(2)	(3)	(4)	(5)	(6)
Online health search (1)	r	1.00	0.05	0.27	0.89	0.36	-0.26
	p		0.23	0.00	0.00	0.00	0.00
Professional health search (2)	r	0.05	1.00	0.14	0.35	0.05	0.02
	p	0.23		0.00	0.00	0.23	0.73
Traditional health search (3)	r	0.27	0.14	1.00	0.60	0.18	0.01
	p	0.00	0.00		0.00	0.00	0.89
Health-Seeking Behavior Scale (4)	r	0.89	0.35	0.60	1.00	0.36	-0.20
	p	0.00	0.00	0.00		0.00	0.00
Health Anxiety Scale (5)	r	0.36	0.05	0.18	0.36	1.00	-0.07
	p	0.00	0.23	0.00	0.00		0.12
Age (6)	r	-0.26	0.02	0.01	-0.20	-0.07	1.00
	p	0.00	0.73	0.89	0.00	0.12	

The r: Pearson correlation coefficient is a statistical measure that assesses the linear relationship between two variables. The coefficient value ranges from -1 to 1. The correlation degrees are as follows.

Certain associations were observed between the total scores of the Health-Seeking Behavior Scale and the Health Anxiety Scale in a moderately positive and statistically significant manner ($r=0.36$, $p<0.05$). There was a moderate positive relationship between online health-seeking behavior ($r=0.36$, $p<0.05$) and traditional health-seeking behavior ($r=0.18$, $p<0.05$) with Health Anxiety Scale (Table 4).

DISCUSSION

This study examined the relationship between health anxiety and health-seeking behaviors among adults living in rural areas and the factors affecting this relationship.

This study found that individuals living in rural areas of Türkiye have a level of health anxiety below the moderate range (16.05 ± 7.41) (Table 2). While mild health anxiety, which is commonly observed, can facilitate early medical diagnosis, severe health anxiety can lead to significant problems.²⁵ National studies show that there is no research specifically on health anxiety among people living in rural areas, but individuals in urban centers were found to have average levels of health anxiety.^{14,26} International studies indicate that people living in rural areas in the United States face difficulties in accessing healthcare, have a high likelihood of encountering inequalities and may experience higher health anxiety due to the challenges of monitoring and improving health in rural areas.^{27,28} To the best of our knowledge, there has been no study comparing health anxiety levels between urban and rural residents at the national level. The differences in health anxiety levels observed may be attributed to the study being conducted in various locations and with different sample groups. Additionally, the advantages of living in rural areas may reduce individuals' perceived level of health anxiety.

This study found that the average level of health-seeking behavior among individuals living in rural areas is above the average (39.30 ± 6.17), with online health-seeking behavior being the highest, followed by professional and traditional health-seeking behaviors (Table 2). A study conducted in the Marmara region found that individuals most frequently engaged

in professional health-seeking behavior, followed by traditional and online health-seeking behaviors.¹⁹ Health-seeking behavior is influenced by individuals' habitual practices, available health resources, socioeconomic needs, and cultural factors.²⁹ The lack of health service resources in rural areas may lead individuals to seek alternative means of accessing healthcare.³⁰ Studies in the literature with different populations show that university students primarily prefer health institutions for health-seeking behavior while studies with parents indicate that children's illnesses are first addressed with traditional remedies.^{31,32} These findings suggest that individual and population differences in health-seeking behavior may lead to different behavioral patterns.

The study found that an increase in health anxiety levels among individuals led to an increase in health-seeking behaviors ($p<0.05$) (Table 4). Difficulties related to their current health status, the need for reassurance, and negative emotions resulting from exaggerating sensations related to their health can trigger health-seeking behaviors.³³ Mild health anxiety can lead individuals to engage in health-protective behaviors and exhibit controlled health-seeking behaviors.^{34,35} However, intense health anxiety may result in individuals seeking uncontrolled or exaggerated results from online health information or attempting to consult multiple doctors to manage their anxiety.^{36,37} Health anxiety at a level that does not impair functionality can have a supportive effect on individuals' health protection and improvement, while excessively felt health anxiety may lead to a loss of control in health-seeking behaviors. Therefore, it is important to emphasize the need for health assessments by nurses, in addition to routine health screenings, for the mental health of individuals living in rural areas.

The study found that online health-seeking behaviors and professional health-seeking behaviors were higher among women compared to men ($p<0.05$) (Table 3). The literature indicates that women use television, the internet, social media, and mobile health applications more frequently than men to obtain health information and that women with chronic illnesses use the internet more for health information seeking compared to men.^{14,38,39} Addition-

ally, the study found that single individuals have higher health-seeking behaviors and online health-seeking behaviors compared to married individuals. Research shows that single individuals engage in online health-seeking behaviors more frequently than married individuals.⁴⁰⁻⁴² This literature is consistent with the results obtained from this study, suggesting that single individuals may use the internet more frequently.

The study found that individuals with a bachelor's degree or higher had the highest levels of health-seeking behavior, with online health-seeking behavior being the most frequently used method ($p < 0.05$) (Table 3). It is noted that as education level increases, health-seeking behavior also increases, and online health-seeking behavior is the most commonly used method.^{14,19,20,43} An increase in education level may enable individuals to take on more health-related responsibilities. Higher educational attainment can lead people to monitor their health more consciously and prefer preventive health services.

It was observed that individuals with chronic illnesses have higher professional health-seeking behaviors and health anxiety compared to those without chronic illnesses ($p < 0.05$) (Table 3). The literature review indicates that the presence of chronic illness is one of the factors affecting health anxiety.^{44,45} As age increases and chronic illnesses rise, individuals' physical abilities and quality of life tend to decrease, while health concerns tend to increase. The chronic illness process usually involves a long-term treatment plan. During this process, individuals may continue to engage in health-seeking behaviors, such as using medication and seeking treatment. In chronic illness histories, individuals use internet resources for health-seeking behavior to obtain rational information about symptoms and signs of the disease, research treatment and medications, share their illness experiences with others, and access different opinions and information on the same topic.^{46,47} A study in Mexico on cancer patients' health information-seeking behaviors observed that young cancer patients and women preferred the internet as a primary source of information.⁴⁸ High levels of professional health-seeking behaviors can be explained by individuals with chronic illnesses or a family history of chronic illness seeking professional medical help, such as

consultations with doctors or nurses, when facing health issues.

A significant relationship was found between the number of doctor visits made by individuals in the past three months and their health-seeking behaviors, online health-seeking behaviors, and health anxiety ($p < 0.05$) (Table 3). This can be explained by the increase in health anxiety resulting from the information obtained through online health-seeking behaviors. Conducting health research online can elevate levels of fear, anxiety, and concern.⁴⁹ Health anxiety can increase the severity of certain physical discomforts, leading to repeated visits to internal medicine, cardiology, and emergency departments.¹⁵ As a result, individuals may have visited doctors more frequently to alleviate their concerns.

Strengths, Limitations, and future directions:

The study data have been limited to adult individuals living in a single rural area and are accessible. In future research, exploring intermediary concepts accompanying the relationship between health anxiety and health-seeking behaviors is recommend.

CONCLUSION

In this study, which was conducted to determine the health anxiety and health-seeking behaviors of adults living in rural areas, it was found that the levels of health anxiety among individuals were below moderate while health-seeking behaviors were above moderate. It was also determined that individuals with greater health anxiety exhibit increased health-seeking behaviors. The study concluded that health-seeking behaviors are influenced by individuals' sex, education level, marital status, employment status, family structure, presence of chronic illness, medication use, number of visits to a doctor, and tendency to search for health issues on the internet. Considering these findings, it is believed that developing protective health policies to increase individuals' health awareness and promote positive changes in health-seeking behaviors would academically benefit society. Additionally, communication tools such as the press, media, and public service announcements should emphasize the importance of seeking professional healthcare rather than relying on traditional

health-seeking methods. Efforts are needed, particularly for individuals living in rural areas, to increase the awareness and education levels of society regarding health-seeking behavior. The press, media, and public service announcements should more frequently emphasize the importance of individuals with health issues seeking the assistance of a healthcare professional or healthcare institution rather than relying on traditional health-seeking methods.

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Conflict of Interest

No conflicts of interest between the authors and / or family members of the scientific and medical committee members or members of the potential conflicts of interest, counseling, expertise, working conditions, share holding and similar situations in any firm.

Authorship Contributions

Idea/Concept: Esra Bekircan, Neşe İşcan Ayyıldız; **Design:** Esra Bekircan; **Control/Supervision:** Neşe İşcan Ayyıldız, Esra Bekircan; **Data Collection and/or Processing:** Neşe İşcan Ayyıldız; **Analysis and/or Interpretation:** Esra Bekircan, Neşe İşcan Ayyıldız; **Literature Review:** Esra Bekircan, Neşe İşcan Ayyıldız; **Writing the Article:** Neşe İşcan Ayyıldız, Esra Bekircan; **Critical Review:** Esra Bekircan; **References and Fundings:** Esra Bekircan.

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