DEVELOPMENT OF HEALTHCARE DEMAND PROCRASTINATION SCALE: A RELIABILITY AND VALIDITY STUDY

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ABSTRACT

Purpose: Maintaining a healthy life is the right of every individual. The important matter at this point is accepting early intervention without delaying healthcare demand and taking action for this intervention. Through this study, it was aimed to develop a measurement tool in order to determine the procrastination behavior for healthcare services demand among the individuals at the age of 18 and over.

Methods: In the study, a questionnaire form that consists of the demographic variables (gender, age, marital status, education, chronic diseases, number of applications to the physician, access to physician, and health insurance) and informed consent was employed. Healthcare Demand Procrastination Scale (HDPS) was employed as well as the Health Seeking Behavior Scale (HSBS) for the validity of criteria. Analyses were conducted by SPSS (Statistical Package for Social Sciences) and AMOS (Analysis of Moment Structures).

Results: No significant difference was found between the scores obtained through Kendall's test which was conducted in order to test the content validity of the scale. Exploratory and confirmatory factor analyses were performed and as a result of the analysis, values of the goodness of fit were found normal and acceptable. HSBS was employed to ensure the criteria validity of the scale. A positive relationship was found between HDPS and traditional health-seeking behavior while there was a negative relationship with professional health-seeking behavior. In the Pearson correlation coefficient analysis which was conducted to reveal the correlation between test-retest scores, a statistically significant and positive relationship was observed between two measurements.

Conclusions: As a result of the research, a scale which measures the healthcare demand procrastination behavior in Turkey was developed and validated. In addition, the healthcare procrastination behavior of individuals with a certain disease can also be examined through the developed scale.

Keywords: Health, health procrastination behavior, health-seeking behaviors, scale development

INTRODUCTION

Health is a concept that has been on the agenda in every period since the existence of humanity. As a result of the developments throughout history, the understanding of health was also developed through modern health technologies and advanced health

systems. With this changing and developing understanding, the presentation of and access to health services also progressed in the same direction. When it is considered from the perspective of the countries, health systems and as a result of this, access to health services differs greatly. In this sense, it is important to access and benefit from health service for people in all countries.

Individuals desire to be healthy throughout their lives. Maintaining a healthy life is the right of every individual. However, individuals seek health when their health conditions deteriorate rather than activities that will improve or protect their health. When their health conditions deteriorate, they try to get professional health care as soon as possible so that they can return to their normal lifestyles. Thanks to the health services received when symptoms begin to appear, early diagnosis can be performed as soon as possible and more effectively. However, individuals can procrastinate their healthcare demand as long as the symptoms do not aggravate. The concept of procrastination means in general that doing the work that needs to be done later than their time, not starting it or delaying the completion of it. This concept is generally examined in psychology. According to Ferrari and Tice (2000), procrastination is delaying the start or the completion of objectives and tasks which are necessary to complete, and it is characterized by self-regulation problems [1]. Additionally, it is known that procrastination has many negative consequences including anxiety and depression which affect the state of emotional well-being [2,3]. Emerging researches show that chronic procrastination can also negatively affect physical health, and those who procrastinate, report more stress and more health problems [4-6]. Procrastination occurs not only as a condition that will adversely affect health, but also as a less frequent practice of health-protective behaviors [4,7,8]. Procrastination behavior is associated with higher stress, acute health problems, and less healthy lifestyle behavior practices [9].

Healthcare can be defined as protecting and improving the health of individuals, preventing diseases, diagnosing, and treating people, preventing impairments, providing appropriate medical and social rehabilitative services for the disabled, and providing services for people to live a happy, and long life [10]. According to our developing understanding of the health services, there is an encouragement for health. The World Health Organization also supports

the emphasis on protective/preventive health services due to the high costs of therapeutic health care [11]. It is important to follow adequate sleep, exercise, and medical advice for health and well-being. Since such behaviors may have negative consequences if they are not performed, encouraging healthy behaviors have become important [12]. Applying to healthcare services on time can be listed among health behaviors. In a study analyzing the health-related procrastination behaviors among the nurses, it was found that there was a gap between the attempts of the nurses about checking their health status and their intention to implement it. In other words, nurses consider getting support from a specialist, but they do not operationalize their intentions. It was determined that the intentions to receive services for checking their health conditions are associated with the severity of their symptoms [13]. In a study conducted in the United Kingdom, it was stated that people diagnosed with lung cancer applied to health care services late despite having symptoms in the months before diagnosis. Prior to diagnosis, even severe symptoms in individuals were linked to daily causes and were considered as small indicators of unsanitariness. It was observed that some people delay applying due to uncertainties about whether their symptoms are normal or not and some others procrastinated the request for service because they feel they are insufficiently cared, disregarded, and underrated about the medical care given by the experts [14]. In a cross-sectional study conducted in Italy which analyzes the determinants of healthcare demand procrastination among the patients with the diagnosis of tuberculosis, the average period for procrastination of diagnosis was found as 66 days. The most common reasons for delaying the application are mild symptoms and considering themselves healthy [15]. In another study examining action on healthcare demand and seeking help for mental health problems at an Australian clinic, it was emphasized that seeking help for anxiety and depression had been delayed for at least a month. Lack of knowledge about mental problems was regarded as the primary reason for this. However, it is seen that the application for treatment occurs when the severity of the disorder increases. At the same time, the lack of mental health literacy of the participants was listed as one of the reasons for delaying the application [16]. In the eastern Gojjam Region in the northwest of Ethiopia, a study examining the delay in receiving services found

Table 1. Socio-Demographic Data of Participants

		Number (n)	Percentage (%)
Gender	Female	321	71,3
	Male	129	28,7
Age	18-29	236	52,4
	30-39	118	26,2
	40-49	65	14,4
	50 and above	31	6,9
Marital Status	Married	190	42,2
	Single	260	57,8
Learning Status	Primary school	30	6,7
	Secondary school	9	2,0
	High School	56	12,4
	Associate Degree-Bachelor	256	56,9
	Postgraduate	99	22,0
Chronic Disease	Yes	71	15,8
	No	379	84,2
Application to a Physician	1-3	292	64,9
	4-6	96	21,3
	7-9	39	8,7
	10 and above	23	5,1
Access to a Physician	Yes	426	94,7
	No	24	5,3
Health Insurance	SSI or green card	272	60,4
	SSI + Complementary	84	18,7
	SSI + Private Insurance	48	10,7
	Private insurance only	17	3,8
	No health insurance	29	6,4

n=450

similar delays in applying for the diagnosis of tuberculosis. Reasons for procrastination include working life and conditions, using different alternatives, the use of over-the-counter medications. It has been stated that intervention is needed in terms of incentives for modern health services [17]. In a study examining procrastination in healthcare, the main reasons for procrastination have been reduced to three dimensions as barriers, self-perception, and aging. The aforementioned reasons were determined

as limited access to health care, having no time to apply to a physician, and disliking the visit to a physician [18].

As seen in the literature, many different factors and causes can be found in healthcare procrastination behaviors. Those factors and causes can be listed as the health care conditions in the country and region, access to health services, having no time, having no health insurance, financial opportunities, ignoring the symptoms, denying, dislike taking professional health care, feeling of ignorance and underrate while taking professional health care, preferring alternative healing methods, and not receiving health assistance until the symptoms become severe. Regardless of the reason, procrastination of the demand for professional health care can lead to aggravation of health conditions and result in the loss of the benefits of early diagnosis. Especially, procrastination of the demand for professional health care can lead to irreversible problems in several progressive diseases such as cancer. On the other hand, it is foreseen that procrastination behavior can cause disruptions in preventive health services and cause delays in the display of healthy lifestyle behaviors when we consider that professional health consultancy is among the services evaluated within the framework of primary preventive health services. Within this context, to develop and validate the healthcare demand procrastination scale is aimed in this study.

MATERIAL AND METHOD

This methodological research aimed to develop a measurement tool which can determine the healthcare demand procrastination behavior of individuals aged 18 and over.

Study group

Inclusion criteria are being 18 and above and being literate. The exclusion criterion is being healthcare

Table 2. Factor Analysis Results

	Total Variance Explained								
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4,034	36,676	36,676	4,034	36,676	36,676	2,467	22,430	22,430
2	1,459	13,268	49,944	1,459	13,268	49,944	2,330	21,185	43,615
3	1,263	11,484	61,427	1,263	11,484	61,427	1,959	17,812	61,427

workers. Therefore, individuals aged 18 and above, apart from healthcare workers, were included in the study throughout Turkey. There are some opinions that the sampling should be 3-6 times (Cattell, 1978), 5 times (Hair, Black, Babin, Anderson, & Tatham, 2010), and 10 times (Everitt, 1975) higher of the total number of the items in the scale while conducting EFA and CFA. Therefore the sample was considered to be enough.There are two different groups of participants in the study. Exploratory and Confirmatory factor analyses were conducted on the first sample (450 participants), and test-retest analysis was conducted on the second group (50 participants). In the second group, the data was collected in the interval of two weeks and test-retest analysis was conducted in order to control the invariance of time.

Data Collection
Due to the current situation of the COVID-19 pandemic, surveys had to be created and sent online through social networks. After the surveys were distributed, a reminder was made every two weeks. Data were collected for four weeks in total between the dates of 1-28th February 2021. A total of 512 surveys were collected at the end of the data collection process. 62 of the obtained surveys were excluded from the study because they were not filled out properly. In conclusion, 450 people who voluntarily agreed to participate in the study and filled out the questionnaire correctly were included in the study. The group which was included in the research for test-retest analysis consisted of 50 people. The test was conducted on March 1, 2021, and the re-test was conducted on March 18, 2021. Test-retest results are included in the findings section.

Ethical Approval
The ethics committee approval was obtained from "T.C Kahramanmaraş Sütçü İmam University Rectorate Social and Human Sciences Ethics Committee" on 21.01.2021 with number E-72321963-020-6749.

Data Collection Tools
Generally, researches can be classified as instantaneous, cross-sectional, and longitude according to the time of collection of the data [22]. Accordingly, the data was collected instantly by the researchers employing the questionnaire form. In the survey, there weresections such as informed

consent, demographic characteristics (gender, age, marital status, education, chronic disease status, number of applications to the physician, access to physician, and health insurance), Healthcare Demand Procrastination Scale (HDPS), and Health Seeking Behavior Scale (HSBS) for the validity of criteria. SPSS (Statistical Package for Social Sciences) and AMOS (Analysis of Moment Structures) program were used to conduct analyses. In order to determine whether data were distributed suitably, the values of Skewness and Kurtosis were examined [23,24] and it was observed that the data ranged between ±1.5. Therefore, it is accepted that the distribution is normal.

Healthcare Demand Procrastination Scale
HDPS consists of 15 statements and has been reduced to 11 statements after validity and reliability analyses. The scale includes three factors and was prepared by the Likert methods follows; 1 "I totally disagree", 2 "I do not agree", 3 "I partially agree," 4 "I agree", and 5 "I totally agree". Of the scale factors, avoidance of health care consists of 4 statements, not taking action for health care consists of 4 statements, and self/individual remedy search consists of 3 statements. The increase in scores taken from the scale indicates increased procrastination behavior. In the 11-item scale obtained as a result of factor analyses, statement 10 is the reverse item and should be reverse-coded in the calculation of scores.

Health Seeking Behavior Scale
The scale developed by Kıraç (2019) was prepared usingthe Likert method and consists of 12 statements and 3 factors [25]. There are no reverse items in the scale. The items of the scale are listed as 1 "I strongly disagree", 2 "I disagree", 3 "I Partially Agree", 4 "I agree", and 5 "I strongly agree". Scale dimensions; online search (6 items), traditional search (3 items) and professional search (3 items).

RESULTS
Content validity, structural validity, and criteria validity were investigated in the development of HDPS. Content validity study is carried out to determine the degree to which statements of a scale are valid in measuring the whole of defined behaviors to be measured and to test the suitability of the scale for measuring [22,26]. The validity of the structure indicates the degree to which a test can accurately measure the concept in the context of the behavior to

Table 3. Varimax Values After Rotation

Rotated Component Matrix[a]			
	Component		
Item	FactorValue-1	FactorValue-2	Factor Value-3
Item1			,475
Item2			,597
Item3	,525		
Item4	,453		
Item5			,747
Item6	,516		
Item7	,715		
Item8	,719		
Item9	,743		
Item10			,481
Item11		,658	
Item12			,841
Item13		,646	
Item14		,854	
Item15		,800	
Explained Variance	22,430	21,185	17,812

be measured [27]. In order to determine the validity of the structure, factor analysis are being used [28].

Content validity

In order to ensure content validity, related literature was primarily reviewed [15, 18, 29 - 36] and then a 5-point statement pool was created with the help of experts. A pilot test by 25-item scale was applied in order to determine language clarity, then sent to 10 experts in the field and reduced to 15 statements in the end. Kendall's test was performed to determine whether there was a significant difference between the average of the scores given by the experts. No significant difference was found between the obtained scores (p>0.05, W=0.083). The participants were expected to express their own perceptions in a 5-type Likert scale as "I totally agree", "I agree", "I partly agree", " I disagree" and "I totally disagree ". For each item, 5 points were given for "I totally agree", 4 points for "I agree", 3 points for "I partly agree", 2 points for "I disagree" and 1 point for "I totally disagree.

Structural validity

Factor analysis was used to examine the structural validation of the scale [28]. Exploratory (EFA) and confirmatory (CFA) factor analyses were conducted.

Exploratory Factor analysis

In order to reveal the structure of the scale, EFA was used. First, Kaiser-Meyer Olkin (KMO) and Bartlett

tests were conducted to determine the suitability of the data for EFA. KMO was found 0.858 and the Bartlett test was found to be significant (p<0.05). Accordingly, the data was found to be suitable for EFA [27, 37]. The load value of the statements below 0.45 and interlaced statements were excluded [27, 29]. Therefore, 15 statements were analyzed.

As shown in Table 2, there are 3 factors with a value above 1. The values after the rotation indicate that the scale has 3 factors. The total variance explained by three factor together is 61.427%.

The first factor consists of 6 items. The variance explained by this factor having factor load values between 0.453 and 0.743 is 22,430. The second factor consists of 4 items. The variance explained by this factor consisting of items with factor loads ranging from 0.646 to 0,854 is 21,185. The third factor consists of 5 items. The variance explained by this factor consisting of items with factor loads ranging from 0.475 to 0.841 is 17,812.

Confirmatory Factor Analysis

The structure revealed by EFA was confirmed by CFA.

As a result of the analysis, items with estimate values below 0.45 (3, 4, 6 and 12) were removed from the model [40, 41]. Then, a covariance was made between items 14 and 15 to improve the goodness of fit indices. Goodness of fit index values showing the accuracy of this diagram were determined as follows: Chi-Square (X2) / Degrees of Freedom (df) = 2.141, Standardized Root Mean Square Residual (SRMR)=0.050, Comparative Fit Index (CFI) = 0.973, Goodness of Fit Index (GFI) = 0.968, Adapted Goodness of Fit Index (AGFI) = 0.947, Root Mean Square Error of Approximation (RMSEA) = 0.068, and Normed Fit Index (NFI)= 0.951. These values of

Table 4. Estimate Values for Confirmatory Factor Analysis

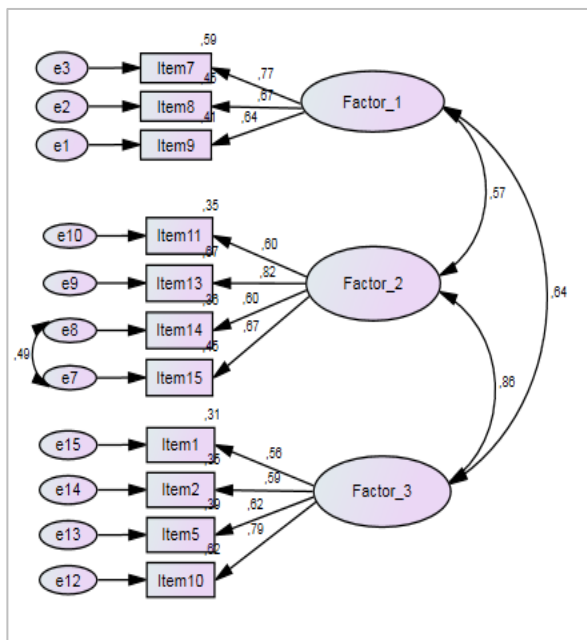| Item					
Item9	<---	Factor_1			0,642
Item8	<---	Factor_1			0,671
Item7	<---	Factor_1			0,770
Item15	<---		Factor_2		0,795
Item14	<---		Factor_2		0,600
Item13	<---		Factor_2		0,820
Item11	<---		Factor_2		0,600
Item10	<---			Factor_3	0,790
Item5	<---			Factor_3	0,623
Item2	<---			Factor_3	0,592
Item1	<---			Factor_3	0,550

Figure 1. Path diagram of CFA is given.

the goodness of fit index show a good fit and an acceptable fit [42-48, 25]. In Table 4, estimate values for the scale are given. As a result of the analysis, estimate values in all factors were found significant.

Criteria Validity
Similar scales validity was used for the criteria validity. HSBS was used to ensure the validityof the criteria. No correlation was detected between HDPS and online searchbehavior (r=0.069) (p>0.05). A positive relationship (r= 0.530) was found between HDPS and traditional health-seeking behavior while there is a negative relationship (r=-0.342) with professional health-seeking behavior (p<0.05). It is cleae that individuals who do not seek professional health care procrastinate their healthcare demands. However, the increase in traditional health-seeking behavior is associated with the procrastination of the demand for health care.

Findings on the Reliability of Scale
Cronbach alpha reliability coefficients and item-total correlations are shown in table 5.

Table 5. Health Care Demand Procrastination Scale Item-Total Correlation Analysis and Cronbach's Alpha

			Fixed Total Question Correlation	Cronbach Alpha When Questions are erased	Factors Cronbach Alpha	Cronbach Alpha
Factor-1	1	**Item 7**. When some of my symptoms/ailments appear, I follow the recommendations of my elders or friends rather than immediately contacting the physician.	0,543	0,842	0,737	
	2	**Item 8**. When some of my symptoms/ailments appear, I research solutions online rather than immediately contacting the physician.	0,466	0,847		
	3	**Item 9**. When some of my symptoms/ailments appear, I ask people who have experienced similar symptoms what to do.	0,402	0,852		
Factor -2	4	**Item 11**. I would rather live with my symptoms than be subjected to a number of medical tests (tests, X-rays, etc.) and/or treatment.	0,513	0,844	0,804	0,854
	5	**Item 13**. Even though I know I have to go to the doctor, I put it off as long as possible.	0,681	0,831		
	6	**Item 14**. I do not consult a physician unless it is life-threatening.	0,533	0,843		
	7	**Item 15**. I only consult a physician in case of an emergency.	0,628	0,835		
Factor-3	8	**Item 1**. Although I have some symptoms/disorders, I deny being sick.	0,488	0,846	0,739	
	9	**Item 2**. When some of my symptoms/ailments appear, I think it's temporary.	0,508	0,844		
	10	**Item 5**. When some of my symptoms/ailments appear, I immediately contact a physician.	0,515	0,843		
	11	**Item 10**. I expect my symptoms to get heavier to consult a doctor.	0,679	0,830		

Table 5. Health Care Demand Procrastination Scale Item-Total Correlation Analysis

It was found that the Cronbach-Alpha value of the first factor was 0.737 and for the second factor was 0.804, the Cronbach-Alpha value of the third factor was 0.739, and the general Cronbach-Alpha value of the scale was 0.854.

Table 6. Correlation analysis of Healthcare Demand Procrastination Scale factors.

The correlations among all three factors are statistically significant ($p<0.05$). The fact that the correlations between components are less than 0.80 indicates that the distinctive validity of the scale structure is high [49].

Test-Retest Analysis

In the Pearson correlation analysis, a statistically significant, positive relationship was found between the two measurements ($r=0.51$; $p<0.05$). Additionally, the difference betweenthe two measurement results obtained in a 2-week interval was examined using t-test analysis in dependent groups (paired samples t test). It was found that the difference between the two applications was not statistically significant ($t=1,239$; $p>0.05$).

DISCUSSION

Health-related behaviors are considered as the most important factor in premature deaths [50]. Health behaviors are intentional or unintentional actions carried out by individuals that affect health and mortality. Health behavior also includes activities for the purpose of protecting and improving health, preventing the occurrence of health problems, and providing a positive body image [51]. There are many elements within the scope of health behaviors. Health behaviors are generally divided into two as protective or promoting health behaviors and behaviors harmful to health [52]. Behaviors such as alcohol, tobacco, drug use, and excessive fat and fast food

Table 6. Correlation analysis of Healthcare Demand Procrastination Scale factors.

		Factor 1	Factor 2	Factor 3
Factor 1	r	1	,391**	,451**
	p		,000	,000
Factor 2	r	,391**	1	,507**
	p	,000		,000
Factor 3	r	,451**	,507**	1
	p	,000	,000	

P<0,001

consumption, which we can briefly call unhealthy nutrition, are among the behaviors that are harmful to health, while behaviors such as exercising, using a seat belt, and adequate and balanced nutrition are among the health protective/improving behaviors. Early diagnosis can be achieved by participating in the screening programs and applying to healthcare services in time when some symptoms occur. Early diagnosis is critical in the treatment of many diseases [53]. Therefore, healthcare demand procrastination behavior can bring along several negativities. Numerous studies in the literature draw attention to the effect of early diagnosis on various diseases [54-57]. However, no measurement tool measures the healthcare demand procrastination. Therefore, this research aimed to develop a scale to measure health care demand procrastination behavior. Within this context, a pool of 25 statements related to the scale was created first. Then, the created questions were redacted by the researchers and another pool consisting of 15 items was created. The statements created to test the validity of the content were sent to 10 researchers who are experts in the field. Questionnaires were sent to the experts separately. Thus, they were prevented from knowing the names of other experts. Experts evaluated the scale statements by giving each item a score ranging from 0 to 3. In order to test whether there was a statistical difference between the responses of the experts Kendall's test was used and it was determined that there was no difference between the answers ($p>0.05$). After pilot testing and expert evaluations, the scale was given its final shape. The HSBS scale was used for the criteria validity. Although there is no statistically significant relationship between online health care seeking behavior and HDPS, a positive relation was observed with traditional health-seeking behavior while there was a negative relation with professional health-seeking behavior. It was concluded that individuals who do not show professional health-seeking behavior procrastinate health services demand. Therefore, it can be stated that the scale meets the criteria validity. The consistency of the scale over time was measured by Pearson correlation analysis. In the analysis, a statistically significant, positive relationship was found between two measurements. Accordingly, the scale is consistent with time. Both EFA and CFA were performed for the validity of the scale. There are some opinions that the sampling should be 3-6 times [19], 5 times [20], and 10 times [21] higher of the total

number of the items in the scale while conducting EFA and CFA. Therefore, the sample was sufficient for analysis. As a result of EFA, it was observed that the scale consisted of three dimensions and the structure was confirmed by CFA.

In the current research, the Healthcare Demand Procrastination Scale (HDPS)" scale has been developed and validated. The scale has good reliability and validity. This scale measures the procrastination behavior of possible health care demands in the general population. It is possible to prevent the negative effect of procrastination behavior on health which can be determined through using this scale. In addition, the healthcare demand procrastination behavior of individuals with a certain disease can also be examined through the developed scale.

Limitations

The research is limited to Turkish society and its generalizability for other countries is unknown. Besides, the sample consists of highly educated participants and it can be considered that there is a limitation for representing all the different levels of education groups. The literature could be reviewed in Turkish and English.

CONCLUSION

As a result of the research, a scale which measures the healthcare demand procrastination behavior in Turkey was developed and validated. The scale was developed with a large sample group with different characteristics. Therefore, it is considered that it can be used in different studies. It can also be adapted to measure the healthcare demand procrastination behavior of individuals in certain diseases in the future.

Conflict of interest: authors declare that there is no conflict of interest.
Ethical approval: The ethics committee approval was obtained from "T.C Kahramanmaraş Sütçü İmam University Rectorate Social and Human Sciences Ethics Committee" on 21.01.2021 with number E-72321963-020-6749.
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	SAĞLIK HİZMETİ TALEP ERTELEME DAVRANIŞI ÖLÇEĞİ	Kesinlikle Katılmıyorum	Katılmıyorum	Kısmen Katılıyorum	Katılıyorum	Kesinlikle Katılıyorum
	Kendi Kendine/Bireysel Çare Arama					
1	Bazı hastalık belirtilerim/ rahatsızlıklarım ortaya çıktığında hemen hekime başvurmaktansa büyüklerimin veya arkadaş çevremin önerilerini uygularım.	1	2	3	4	5
2	Bazı hastalık belirtilerim/ rahatsızlıklarım ortaya çıktığında hemen hekime başvurmaktansa internetten çözüm önerileri araştırırım.	1	2	3	4	5
3	Bazı hastalık belirtilerim/ rahatsızlıklarım ortaya çıktığında benzer belirtileri yaşamış kişilere ne yapmam gerektiğini sorarım.	1	2	3	4	5
	Kaçınma					
4	Bir takım tıbbi test (tahlil, röntgen vb.) ve/veya tedaviye maruz kalmaktansa belirtilerimle yaşamayı tercih ederim.	1	2	3	4	5
5	Hekime gitmem gerektiğini bilsem de mümkün olduğunca ertelerim.	1	2	3	4	5
6	Hayatımı tehdit eden bir durum olmadığı sürece hekime başvurmam.	1	2	3	4	5
7	Sadece acil durumlarda hekime başvururum.	1	2	3	4	5
	Harekete Geçmeme					
8	Bazı hastalık belirtilerim/rahatsızlığım olsa da hasta olduğumu inkar ederim.	1	2	3	4	5
9	Bazı hastalık belirtilerim/rahatsızlıklarım ortaya çıktığında geçici bir şey olduğunu düşünürüm.	1	2	3	4	5
10	Bazı hastalık belirtilerim/ rahatsızlıklarım ortaya çıktığında vakit kaybetmeden bir hekime başvururum.*	1	2	3	4	5
11	Hekime başvurmak için belirtilerimin ağırlaşmasını beklerim.	1	2	3	4	5

*Ters madde

Birinci Faktör: Kendi Kendine/Bireysel Çare Arama

Bu faktör 3 maddeden (1,2,3) oluşmaktadır. Bu üç maddeden alınan puanların toplanması ve 3'e bölünmesiyle hesaplanmaktadır. Faktörden alınabilecek minimum puan 1, maksimum puan 5 ve ortanca puan 3'tür. Yükselen puanlar kendi kendine/bireysel çare arama davranışının arttığını dolayısıyla sağlık hizmeti talep erteleme davranışının da arttığını göstermektedir.

İkinci Faktör: Kaçınma

Bu faktör 4 maddeden (4,5,6,7) oluşmaktadır. Bu dört maddeden alınan puanların toplanması ve 4'e bölünmesiyle hesaplanmaktadır. Faktörden alınabilecek minimum puan 1, maksimum puan 5 ve ortanca puan 3'tür. Yükselen puanlar kaçınma davranışının arttığını dolayısıyla sağlık hizmeti talep erteleme davranışının da arttığını göstermektedir.

Üçüncü Faktör: Harekete Geçmeme

Bu faktör 4 maddeden (8,9,10,11) oluşmaktadır (Madde 10 ters sorudur ve hesaplamada ters kodlanmalıdır). Bu dört maddeden alınan puanların toplanması ve 4'e bölünmesiyle hesaplanmaktadır. Faktörden alınabilecek minimum puan 1, maksimum puan 5 ve ortanca puan 3'tür. Yükselen puanlar harekete geçmeme davranışının arttığını dolayısıyla sağlık hizmeti talep erteleme davranışının da arttığını göstermektedir.

Ölçek Toplam Puanı Hesaplanması

Ölçek toplam puanının hesaplanması 11 maddenin toplanması ve 11'e bölünmesiyle hesaplanmaktadır. Ölçekten alınabilecek minimum puan 1, maksimum puan 5 ve ortanca puan 3'tür. Yükselen puanlar sağlık hizmeti talep erteleme davranışının arttığını göstermektedir. Toplam puan hesaplanırken madde 10 ters kodlanmalıdır.

	HEALTHCARE DEMAND PROCRASTINATION SCALE	I totally disagree.	I don't agree.	I Partially Agree.	I Agree.	I totally agree.
	Self/Individual Remedy Search					
1	When some of my symptoms/ailments appear, I follow the recommendations of my elders or friends rather than immediately contacting the physician.	1	2	3	4	5
2	When some of my symptoms/ailments appear, I research solutions online rather than immediately contacting the physician.	1	2	3	4	5
3	When some of my symptoms/ailments appear, I ask people who have experienced similar symptoms what to do.	1	2	3	4	5
	Avoidance					
4	I'd rather live with my symptoms than be subjected to a number of medical tests (tests, X-rays, etc.) and/or treatment.	1	2	3	4	5
5	Even though I know I have to go to the doctor, I'll put it off as long as I can.	1	2	3	4	5
6	I don't consult a doctor unless it's life-threatening.	1	2	3	4	5
7	I only consult a physician in an emergency.	1	2	3	4	5
	Not Taking Action					
8	Although I have some symptoms/disorders, I deny being sick.	1	2	3	4	5
9	When some of my symptoms/ailments appear, I think it's temporary.	1	2	3	4	5
10	When some of my symptoms/ailments appear, I immediately contact a physician. *	1	2	3	4	5
11	I wait my symptoms to get worsen to consult a doctor.	1	2	3	4	5

*Reverse item

Factor One: Self/Individual Remedy Search

This factor consists of 3 statements (1,2,3). This is calculated by collecting the points from the three items and dividing them by 3. The minimum score of this factor is 1, the maximum score is 5, and the median score is 3.

Second Factor: Avoidance

This factor consists of 4 statements (4,5,6,7). This is calculated by collecting the points from the four items and dividing them by 4. The minimum score of this factor is 1, the maximum score is 5, and the median score is 3.

Third Factor: Not Taking Action

This factor consists of 4 statements (8,9,10,11) (statement 10 is the reverse statement and must be reverse coded in the calculation). This is calculated by collecting the points from the four items and dividing them by 4. The minimum score of this factor is 1, the maximum score is 5, and the median score is 3.

Calculation of Total Score of the Scale

The total score of the scale is calculated by collecting 11 items and dividing them by 11. The minimum score of the scale is 1, the maximum score is 5, and the median score is 3. Rising scores show increased health care demand procrastination behavior. Item 10 must be reverse-coded when calculating the total score.