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Examination of Healthcare Demand Procrastination Behaviors from a Societal Perspective

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ABSTRACT

Background: Health is one of the most fundamental rights of individuals from birth and is guaranteed by national and international texts. This study aims to evaluate individuals' healthcare demand procrastination behaviors from a societal perspective.

Methods: This descriptive cross-sectional study was conducted in the province of Kocaeli, located in the Marmara region of Türkiye. The population of the study consisted of literate individuals aged 18-65 residing in Kocaeli. The sample included 438 individuals who volunteered to participate in the study. Data were collected using a sociodemographic information form and the Healthcare Demand Procrastination Scale (HDPS) through face-to-face interviews employing the convenience sampling method. Descriptive statistics and SPSS 27 software were used for data analysis.

Results: Women were found to have statistically significantly higher total scores on the HDPS compared to men ($p = 0.016$; $p < 0.05$). Married individuals had significantly lower total scores for procrastination behaviors than single individuals ($p = 0.015$; $p < 0.05$). Participants with low income and no social security exhibited more healthcare demand procrastination behaviors ($p = 0.015$; $p = 0.042$; $p < 0.05$). A weak but significant negative relationship was found between age and procrastination behavior ($r = -0.133$; $p = 0.005$; $p < 0.01$).

Conclusion: To achieve a healthy society, it would be beneficial to implement policy regulations aimed at protecting disadvantaged groups who cannot seek healthcare services when needed due to various reasons.

Keywords: Health services needs and demand, Health services, Procrastination

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Introduction

Health is one of the most fundamental rights of individuals from birth and is guaranteed by national and international texts. The third goal of the United Nations Sustainable Development is identified as “Good Health and Well-being” (1). In Article 56 of the 1982 Constitution of the Republic of Türkiye, individuals' right to health is guaranteed by the government (2). Although the right to health is guaranteed through written texts, the diversity in economic, cultural, demographic, geographical, and social opportunities among countries means that there is no one-size-fits-all ideal health policy applicable to all nations. Health policies are key factors affecting individuals' ability to access healthcare services when needed (3).

Demand, from the perspective of economists, is considered a technical term that carries a precise meaning and should not be confused with "need," "want," or "desire." It is a concept that cannot be directly measured and is distinct in its definition within economic analysis (4). When individuals' healthcare needs are unmet, it can put both themselves and those around them and the wider community at risk. Due to these risk factors, it is important that individuals can access healthcare services whenever they need them, regardless of their purchasing power (5).

There are many factors that affect healthcare demand, including age, gender, income, education level, marital status, household size, healthcare cost, time cost, perceived severity of illness, geographical proximity, quality of service, and the presence of health insurance (6,7,8). In recent years, there has been increased scrutiny on factors influencing healthcare demand and the behaviors of those seeking healthcare services. The primary goal is to ensure timely fulfillment of individuals' healthcare needs and efficient utilization of the limited resources allocated to the healthcare sector (6). Moreover, identifying factors that affect healthcare demand is crucial for making future health-related plans, determining the health behaviors and status of the community, and assessing the effectiveness and efficiency of healthcare services (9).

Individuals may postpone their healthcare requests for various reasons (10). Procrastination behavior has been found to be associated with higher levels of stress, acute health issues, and less healthy lifestyle behaviors. It can pose a risk for poor health outcomes and increased costs, especially when it becomes habitual (10-13). Globally, healthcare systems are striving to meet the increasing demand for healthcare services by identifying and managing risks such as inequalities in economic conditions, resource scarcity, and rising healthcare costs (14). Individuals' ability to demand healthcare services is often made possible by understanding their health needs and gaining experience with the healthcare system (14). In a study conducted by Söyler (2024) on 1040 participants in Türkiye, there was a positive relationship between perceived barriers, perceived seriousness, perceived susceptibility, self-efficacy, and distrust in the health system and healthcare demand procrastination behavior. However, there was a negative relationship between perceived benefits and healthcare demand procrastination behavior. In the same study, single individuals were more likely to delay their healthcare requests (16). In a different study conducted in Türkiye on 408 participants, it was determined that the participants' health care procrastination behavior was at a moderate level (13). A significant relationship was observed between the demand for regular healthcare services and the presence of chronic illness (17). In a cross-sectional study conducted in China to assess the societal impact of delays in individuals seeking healthcare during a period of low COVID-19 prevalence, approximately 31.4% of participants reported delays in receiving healthcare, with the most common reason being fear of infection (53.5%). Middle age, chronic disease, pregnancy, access to internet-based medical care, and higher risk level of the region were found to be significant predictors of delay in seeking health care (18). A study in Nebraska found that more than one-third of adults delayed seeking health care because of

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financial concerns and low income (12). Financial inadequacies seem to have significant effects on the behavior of delaying healthcare service demand (19, 20). Early healthcare demand especially when symptoms of chronic diseases are detected is crucial for controlling the course and severity of the illness, facilitating earlier recovery for the individual, improving quality of life for both the individual and their family, and reducing healthcare costs. In addition, identifying the demand for healthcare services and factors influencing this demand is important for guiding managers in investment planning (21). This study aims to evaluate individuals' healthcare demand procrastination behaviors from a societal perspective.

Methods

This descriptive cross-sectional study was conducted in Kocaeli province, located in Marmara region of Türkiye. The population of the study consisted of literate individuals aged 18-65 residing in Kocaeli province. The sample included 438 volunteers who participated in the study. According to the Turkish Statistical Institute (22), the population of individuals aged 18-65 in Kocaeli province as of 2023 was 1.386,982. Research suggests that the sample size should be sufficiently large (N > 200) to minimize sampling error (23, 24).

Data for the study were collected through face-to-face interviews using convenience sampling method from January 15 to March 31, 2024. During data collection process, participants were informed in detail about the purpose and methods of the study, and were encouraged to participate. Informed voluntary consent was obtained from those who agreed to participate, and they were then asked to complete the survey questionnaire.

Model of the Research

The study dependent variable was healthcare demand procrastination behavior. The independent variables included participants' socio-demographic characteristics, presence of social security, average annual utilization of healthcare services, and access to healthcare services when needed (Figure 1).

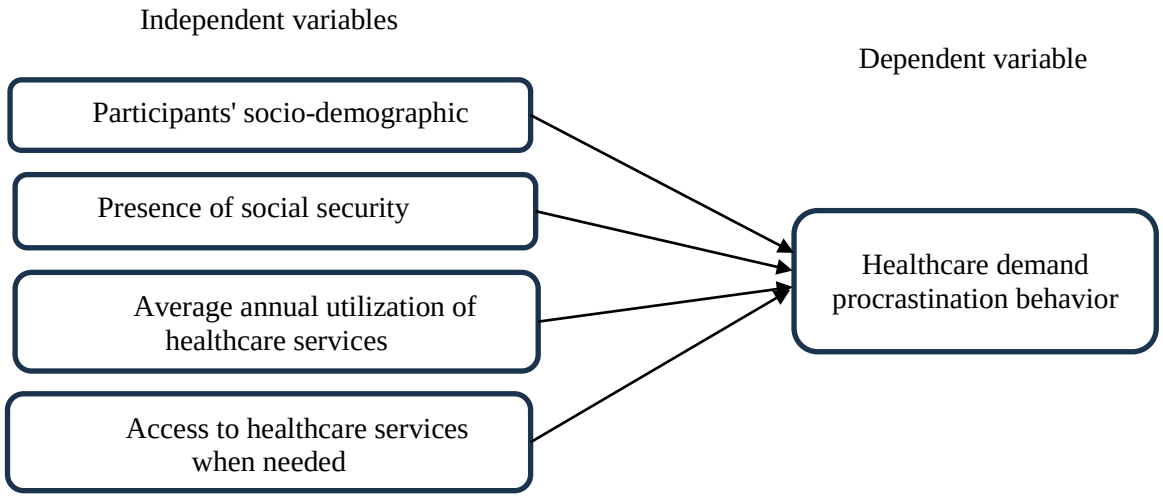

Figure 1. Research model

Study tools

The survey form used for data collection in the study consisted of two parts. The first part included questions prepared by the researchers regarding participants' socio-demographic characteristics such as age, gender, marital status, as well as statements related to access and utilization of healthcare services. After completing this section, participants were asked to complete the Healthcare Demand Procrastination Scale (HDPS) developed by Soyler at al. (2022). This scale is designed in a 5-point Likert scale ranging from "strongly

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disagree" (1) to "strongly agree" (5). It comprises three subscales: Self-Care Seeking (3 items), Avoidance (4 items), and Inaction (4 items), totaling 11 items. The scores for each subscale are calculated by summing the scores of the respective items and dividing by the number of items in that subscale. Item 10 is reverse-coded for calculation purposes (25).

The total scale score is calculated by summing all 11 items and dividing by 11. Possible scores range from 1 (minimum) to 5 (maximum), with a median score of 3. Higher scores indicate higher levels of healthcare demand procrastination behavior across the scale and its subscales (25).

Table 1. Healthcare Demand Procrastination Scale: Descriptive statistics and internal consistency

	Soru Sayısı	Ort±Ss	Medyan (Min-Maks)	Cronbach's Alpha
Self/individual remedy	3	2.72 ± 1.06	2.7 (1-5)	0.770
Avoidance	4	2.34 ± 0.97	2.3 (1-5)	0.815
Not taking action for health care	4	2.62 ± 0.86	2.5 (1-5)	0.724
Healthcare Demand Procrastination Scale Total	11	2.55 ± 0.79	2.5 (1-4.6)	0.863

Statistical analysis

Data analysis was conducted using SPSS 27. Descriptive statistics for quantitative variables included mean, standard deviation, minimum, maximum, and median. Qualitative variables were reported with frequency and percentage. The normality of data distributions was assessed using the Shapiro-Wilk test and Box Plot graphs.

For variables showing normal distribution, Student's t-test was used for comparisons between two groups, while One-Way ANOVA was employed for comparisons involving three or more groups, with Games-Howell test used to identify which groups differed significantly. Pearson correlation analysis was used to evaluate relationships between variables. According to Evans (1996), correlations were interpreted as follows: very weak (0.00 to 0.19), weak (0.20 to 0.39), moderate (0.40 to 0.59), strong (0.60 to 0.79), and very strong (0.80 to 1.00) (26).

Results were evaluated at a significance level of $p < 0.05$, with confidence intervals of 95%.

Results

Sociodemographic characteristics and access to healthcare services of participants are given in Table 2. The majority of participants were female (54.6%), married (60.7%), and had completed secondary education (44.5%). Additionally, 52.1% reported their income equal to their expenses. About 67.4% of participants were employed, 53.7% had children, and nearly all (94.1%) had social security coverage. Furthermore, 40.4% of participants utilized healthcare services 1 to 3 times annually, while 35.2% reported inability to access healthcare services when needed. About 42% of participants lived in district centers or rural areas (Table 2).

Table 2. Sociodemographic characteristics and access to healthcare services of participants (N = 438)

Variables		Number (n)	Percent (%)
Gender	Female	239	54.6
	Male	199	45.4
Age	*Mean ± SD*	34.52 ± 11.10	
	Median (Min-Maks)	33 (18-65)	
Marrital status	Married	266	60.7
	Single	172	39.3
Education	Primary	52	11.9
	Secondary	195	44.5
	Undergraduate/Graduate	191	43.6

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Variables		Number (n)	Percent (%)
Income	Income < expenses	139	31.7
	Income = expenses	228	52.1
	Income > expenses	71	16.2
Employment status	Yes	295	67.4
	No	143	32.6
Do you have children?	Yes	235	53.7
	No	203	46.3
Do you have social security?	Yes	412	94.1
	No	26	5.9
On average, how many times a year do you use health services?	Never	27	6.2
	1-3	177	40.4
	3-5	133	30.4
	6 and over	101	23.1
Can you access health services when you need?	Yes	284	64.8
	No	154	35.2
The region you live in	City center	254	58.0
	Town	160	36.5
	Village	24	5.5
Do you seek medical care when you experience mild illness symptoms that are not serious in your daily life?	Yes	100	22.8
	No	338	77.2

According to participants' sociodemographic characteristics, the total score on the scale for healthcare demand procrastination behaviors was found to be significantly higher among women compared to men ($p = 0.016$; $p < 0.05$). This finding indicates that women exhibit a higher tendency to procrastinate healthcare service demands (Table 3).

According to marital status, the total score on the procrastination behavior scale for married individuals was found to be significantly lower compared to single subjects ($p = 0.015$; $p < 0.05$). Single participants exhibited higher tendencies towards healthcare demand procrastination (Table 3).

According to income status, significant differences were found in total scores on the procrastination behavior scale. Upon examining the source of this difference, participants with lower income than expenses had significantly higher scores compared to those whose income matched their expenses ($p = 0.015$; $p < 0.05$). Lower-income participants exhibited higher tendencies towards healthcare demand procrastination (Table 3).

Participants who had children exhibited significantly lower scores on the procrastination behavior scale compared to those who did not have children ($p = 0.019$; $p < 0.05$). This indicates that individuals with children tend to access healthcare services without delaying their demand when needed (Table 3).

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Table 3. The comparison of Healthcare Demand Procrastination Scale scores based on sociodemographic characteristics

		Healthcare Demand Procrastination Scale Total		Self/Individual Remedy		Avoidance		Not Taking Action for Health Care	
		Mean±SD	Median (Min-Maks)	Mean±SD	Median (Min-Maks)	Mean±SD	Median (Min-Maks)	Mean±SD	Median (Min-Maks)
Gender	Female	2.63±0.75	2.5 (1-4.6)	2.89±1.02	3.0 (1-5)	2.38±0.93	2.3 (1-4.8)	2.68±0.83	2.8 (1-5)
	Male	2.45±0.81	2.5 (1-4.5)	2.51±1.07	2.7 (1-5)	2.3±1.01	2.3 (1-5)	2.54±0.9	2.5 (1-5)
	[a]p	0.016*		0.001**		0.408		0.096	
Marrital status	Married	2.47±0.80	2.4 (1-4.5)	2.59±1.05	2.7 (1-5)	2.31±0.98	2 (1-5)	2.55±0.88	2.5 (1-5)
	Single	2.66±0.75	2.6 (1.1-4.6)	2.93±1.04	3 (1-5)	2.39±0.95	2.3 (1-5)	2.73±0.82	2.8 (1-5)
	[a]p	0.015*		0.001**		0.408		0.033*	
Education	Primary	2.53±0.79	2.5 (1.3-4.5)	2.58±1.10	2.3 (1-5)	2.42±1.01	2.5 (1-5)	2.62±0.83	2.5 (1.3-4.5)
	Secondary	2.44±0.81	2.4 (1-4.5)	2.52±1.09	2.3 (1-5)	2.33±0.98	2.3 (1-5)	2.49±0.9	2.5 (1-5)
	Undergraduate/Graduate	2.66±0.74	2.7 (1-4.6)	2.96±0.97	3 (1-5)	2.34±0.95	2 (1-5)	2.75±0.82	2.8 (1-5)
	[b]p	0.021*		0.001**		0.829		0.012*	
Income	Income<expenses	2.68±0.79	2.6 (1-4.6)	2.84±0.97	3 (1-5)	2.46±0.98	2.3 (1-5)	2.79±0.89	2.8 (1-5)
	Income=expenses	2.44±0.79	2.4 (1-4.5)	2.59±1.10	2.7 (1-5)	2.29±0.96	2 (1-5)	2.49±0.85	2.5 (1-4.8)
	Income>expenses	2.60±0.73	2.6 (1.2-4)	2.91±1.04	3 (1-5)	2.3±0.96	2 (1-4.5)	2.67±0.8	2.8 (1-5)
	[b]p	0.015*		0.020*		0.234		0.005**	
Employment status	Yes	2.55±0.8	2.5 (1-4.5)	2.71±1.06	2.7 (1-5)	2.37±0.99	2.3 (1-5)	2.62±0.86	2.5 (1-5)
	No	2.53±0.76	2.5 (1-4.6)	2.75±1.05	2.7 (1-5)	2.29±0.91	2 (1-5)	2.61±0.87	2.5 (1-5)
	[a]p	0.772		0.697		0.412		0.869	
Do you have children?	Yes	2.46±0.81	2.4 (1-4.5)	2.55±1.05	2.3 (1-5)	2.32±0.99	2.3 (1-5)	2.54±0.87	2.5 (1-5)
	No	2.64±0.75	2.6 (1-4.6)	2.91±1.03	3 (1-5)	2.37±0.95	2.3 (1-5)	2.71±0.84	2.8 (1-5)
	[a]p	0.019*		0.001**		0.620		0.038*	

*[a]Student-t Test, [b]One Way ANOVA Test & Games Howell Test, **p<0.01. *p<0.05*

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Table 4. Comparison of Healthcare Demand Procrastination Scale scores according to access and utilization of health services

		Healthcare Demand Procrastination Scale Total		Self/Individual Remedy		Avoidance		Not Taking Action for Health Care	
		Mean±SD	Median (Min-Maks)	Mean±SD	Median (Min-Maks)	Mean±SD	Median (Min-Maks)	Mean±SD	Median (Min-Maks)
Do you have social security?	Yes	2.53±0.79	2.5 (1-4.5)	2.68±1.05	2.7 (1-5)	2.34±0.98	2.3 (1-5)	2.60±0.86	2.5 (1-5)
	No	2.85±0.73	3 (1.2-4.6)	3,31±1.09	3,3 (1-5)	2.45±0.76	2.4 (1-4.3)	2.9±00.88	3 (1-4.8)
	[a]p	0.042*		0.003**		0.561		0.079	
On average, how many times a year do you use health services?	Never	2.97±0.72	3,1 (1.6-4.2)	3,02±1.18	3 (1-5)	2.89±1.05	2.8 (1.3-4.8)	3,01±0.69	3 (1.8-4)
	1-3	2.63±0.80	2.6 (1-4.6)	2.72±1.04	2.7 (1-5)	2.49±0.95	2.5 (1-5)	2.71±0.85	2.8 (1-5)
	3-5	2.44±0.76	2.4 (1-4.5)	2.77±1.11	2.7 (1-5)	2.13±0.89	2 (1-5)	2.51±0.86	2.5 (1-5)
	6 and over	2.42±0.77	2.4 (1-4.4)	2.58±0.98	2.3 (1-4.3)	2.23±0.98	2 (1-5)	2.49±0.89	2.5 (1-4.5)
	[b]p	0.002**		0.232		0.001**		0.006**	
Can you access health services when you need?	Yes	2.43±0.75	2.4 (1-4.5)	2.61±1.06	2.7 (1-5)	2.22±0.92	2 (1-5)	2.51±0.83	2.5 (1-5)
	No	2.76±0.81	2.7 (1.1-4.6)	2.92±1.03	3 (1-5)	2.57±1.01	2.5 (1-5)	2.82±0.88	2.8 (1-5)
	[a]p	0.001**		0.004**		0.001**		0.001**	
The region you live in	City center	2.62±0.79	2.6 (1-4.6)	2.82±1.06	3 (1-5)	2.39±1	2.3 (1-5)	2.70±0.88	2.8 (1-5)
	Town	2.44±0.75	2.4 (1-4.5)	2.56±1.05	2.7 (1-5)	2.27±0.89	2.3 (1-4.5)	2.52±0.81	2.5 (1-5)
	Willage	2.5±0.93	2.4 (1.1-4.5)	2.74±1.03	2.7 (1-5)	2.42±1.15	2 (1-5)	2.41±0.94	2.3 (1-4.8)
	[b]p	0.073		0.057		0.441		0.049*	
Do you seek medical care when you experience mild illness symptoms?	Yes	2.36±0.80	2.2 (1-4.5)	2.50±1.06	2.3 (1-5)	2.17±0.98	2 (1-5)	2.45±0.87	2.5 (1-5)
	No	2.60±0.77	2.5 (1-4.6)	2.79±1.05	2.7 (1-5)	2.40±0.96	2.3 (1-5)	2.67±0.85	2.6 (1-5)
	[a]p	0.007**		0.016*		0.040*		0.025*	

*[a]Student-t Test, [b]One Way ANOVA Test & Games Howell Test, **p<0.01. *p<0.05*

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Table 4 presents the comparison of HDPS scores based on participants' social security status, access to healthcare services, and utilization. The total scale score of participants without social security was found to be significantly higher than those with social security ($p = 0.042$; $p < 0.05$). Participants without social security exhibit more delay behavior in seeking healthcare services (Table 4).

There was a statistically significant difference found in the HDPS scores among participants based on their utilization of healthcare services ($p = 0.002$; $p < 0.01$). Upon examining the difference, participants who never utilized healthcare services had significantly higher scores compared to those who utilized healthcare services 3-5 times and 6 times or more ($p = 0.008$; $p = 0.006$; $p < 0.01$). Participants who never utilized healthcare services exhibited more delay behavior in seeking healthcare (Table 4).

HDPS scores were significantly higher among participants who were unable to access healthcare services when needed compared to those who could access them ($p = 0.001$; $p < 0.01$). Ease of access positively affected the behavior of seeking healthcare when needed. Additionally, participants who did not seek medical care for mild illness symptoms tended to have higher delay behavior scores (Table 5).

Table 5. The relationship between age and Healthcare Demand Procrastination Scale

Scale and sub-dimensions		Age
Healthcare Demand Procrastination Scale total	r	-0.133
	p	**0.005****
Self/Individual Remedy	r	-0.205
	p	**0.001****
Avoidance	r	-0.026
	p	0.586
Not Taking Action for Health Care	r	-0.116
	p	**0.015***

*r:Pearson Korelasyon Katsayısı, **p<0.01. *p<0.05*

The relationship between age and HDPS scores is presented in Table 5. A statistically significant weak negative correlation was found between age and total scale scores ($r = -0.133$; $p = 0.005$; $p < 0.01$). This indicates that health service delay behavior tends to decrease with age.

Discussion

The evaluation of health service delay behaviors from a societal perspective indicated that women had significantly higher levels of delay behavior compared to men. It is possible to encounter similar research findings (27). Existing literature generally supports that women tend to prioritize their health more and exhibit less delay behavior (13, 28). Studies have indicated that in countries with generally lower socioeconomic levels, women may have unequal access to resources such as education, employment, and healthcare, leading to lower demand (29, 30). Evaluating current norms related to women's reproductive health services suggests that there may be a growing trend in women's healthcare demands over time (31). In terms of marital status, married participants exhibited significantly lower delay behavior scores compared to single individuals. Changes in lifestyle post-marriage, along with factors like pregnancy and childbirth, are noted to increase healthcare utilization (8, 13, 32, 33).

The study results indicated that participants with lower income than expenses exhibited higher levels of healthcare service delay behavior, while those with higher incomes tend to request healthcare services more frequently. Previous studies have consistently shown that income level is a significant determinant of healthcare demand, with an increase in income correlating with increased demand for healthcare services (12, 18, 27, 33-35). Akar and Arıkan (2023) found that the most important factor affecting the demand for

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health services is income level. In other countries, the second factor is found to be price and the third factor is education level; however,in Türkiye, the second most important factor is transportation, and the third factor is the price of healthcare services (36). In another study in Türkiye, Doğan (2020) examined the relationship between income level and healthcare demand, and reported both direct and indirect effects of income on healthcare demand. Specifically, the study highlighted a significant decrease in the likelihood of abstaining from medical care, dental care, medication, and mental health treatment with an increase in income (37). Yaylalı (2012) reported that income level increases as a factor that enhances healthcare demand (38). Mutlu and Işık (2012) noted that while rising income initially increases healthcare consumption, once a certain level of satisfaction is reached, consumption stabilizes, particularly excluding deferred and high-cost healthcare services (28). These findings underscore the importance of income level in shaping healthcare consumption patterns, suggesting implications for policy aimed at reducing financial barriers to healthcare access. On the other hand, Soyuğurlu and Yeşiltaş (2024) did not find a significant relationship between income level and the behavior of postponing healthcare service demand (13).

The findings indicated that individuals without social security demonstrate a higher tendency to postpone seeking healthcare services. Studies examining the relationship between having health insurance, hospital selection, and demand suggest that possessing health insurance reduces out-of-pocket expenses and consequently increases demand for healthcare services (3, 18, 33, 35, 39, 40). Similarly, Doğan (2020) found that social security ranks among the primary reasons influencing healthcare facility preferences (37). These insights underscore the role of social security systems in healthcare access and highlight the potential impact of health policies aimed at enhancing social security coverage to improve healthcare utilization.

Evaluating the relationship between annual healthcare utilization and healthcare delay behavior showed that those who do not use healthcare services at all exhibit significantly higher postponement scores compared to those who use healthcare services 3-5 times or 6 times and more. Moreover, individuals who do not seek healthcare facilities for mild illness symptoms also demonstrate higher postponement scores. These findings suggest that individuals may refrain from using healthcare services due to their perceived good health status, thus not generating unnecessary demand. A study conducted in Türkiye similarly evaluated delays in receiving services based on health conditions and concluded that delays are affected by individuals' perceived good or fair health conditions (37). However, those unable to access healthcare services when needed exhibit statistically higher postponement scores compared to those who can access them. Doğan (2020) also found that participants reporting moderate, poor, or very poor health conditions were more likely to experience delays in healthcare utilization (37). Similarly, studies in Türkiye by Akyürek and Orhaner (2017) and Gökkaya and Erdem (2017) indicated that the severity of illness increases the importance of timely healthcare utilization (6,41). Likewise, Çelik (2011) emphasized that worsening health conditions lead to an increase in healthcare utilization (39). International studies also support these findings, showing that the presence of health problems increases healthcare demand, while those perceiving their health as good tend to reduce their demand for healthcare services (16, 27). By increasing participants' age, a decrease in healthcare delay behavior was observed. Globally, demographic changes such as increasing elderly population aged 65 years and over, along with a rise in chronic diseases, may trigger an increase in healthcare demand. Studies have indicated a positive relationship between age, chronic diseases, and healthcare demand (12, 13, 18, 38, 42, 43). In addition, the research findings suggest that delays in healthcare demand among young adults may be linked to inadequate health insurance and rising healthcare costs (35, 44, 45).

Conducting the study in Kocaeli, a province located in the western part of Türkiye and known

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for its socioeconomic development, is valuable as it contributes to our understanding of the community's healthcare service demand delay behavior. This study has some limitations. The first limitation of the study is that it is restricted to data obtained from voluntary individuals in Kocaeli province. Second, individuals in the age range of 18-65 were included. The third limitation is that illiterate participants were not included in the study. The last limitation is that the research was conducted cross-sectionally, representing a specific period.

Conclusion

The study findings indicated that women, singles, younger age groups, individuals with lower income, those without social security, and those without any health problems or showing mild illness symptoms tend to postpone seeking healthcare services. There was also a significant weak negative correlation between age and healthcare delay behavior. As age increases, procrastination behavior decreases. Considering that delayed healthcare services can lead to worse health outcomes and increased costs, the following recommendations are made based on the study findings:

- Determining factors that cause delay behaviors in seeking health services in women and younger age,
- Developing supportive policies for individuals who are unable to sufficiently benefit from healthcare services due to low income,
- Regulations should be implemented to ensure that individuals without social security can access healthcare services when needed,
- Planning activities to increase the health literacy level of the population in order to assess the need for healthcare service demand,
- Strengthening primary health care services in Türkiye,
- Facilitating access to healthcare services for patients experiencing the initial symptoms of illness,
- Prioritizing preventive and developmental healthcare services at the community level,
- Increasing mobile health services can turn postponed health services into demand,
- Access to health services should be facilitated for individuals,
- Implementing policies to protect disadvantaged groups who cannot seek healthcare services for various reasons when needed would contribute to achieving a healthier society,
- It is recommended to conduct studies on larger sample groups in different regions of Türkiye,
- Furthermore, efforts should be directed towards effectively utilizing healthcare resources.

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Conflict of interest

The authors declared no conflict of interest.

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Ethical considerations

The study adhered to all ethical research principles, including voluntary participation, informed consent, anonymity, confidentiality, minimizing potential harm, and effective communication of results.

Code of ethics

The study has been approved by the Bandırma Onyedi Eylül University Health Sciences Non-Interventional Research Ethics Committee (2023-10/ 2023-224) and has followed the highest possible standards of code of ethics.

Authors' contributions

Y. Ö. and Y. A., equally participated in the writing and design of the study, analyzed the data and finalized the manuscript.

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