Original Research / Özgün Araştırma

Relationship between the prostate cancer screening attitudes, beliefs, and knowledge levels of men working in a healthcare institution

Bir sağlık kurumunda çalışan erkeklerin prostat kanseri taramalarına yönelik tutum ve inançları ile bilgi düzeyleri arasındaki ilişki

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Özet

Amaç: Bireylerin prostat kanseri taramalarına yönelik tutum ve bilgi düzeyi taramalara katılımı etkileyen önemli bir faktördür. Bu çalışmada, üçüncü basamak sağlık kurumunda çalışan erkeklerin prostat kanserine yönelik tutum ve inançları ile bilgi düzeyleri arasındaki ilişkinin belirlenmesi amaçlanmıştır.

Gereç ve Yöntemler: Bu çalışmaya bir eğitim ve araştırma hastanesinde çalışan 236 sağlık personeli dahil edildi. Verilerinin toplanmasında; Bilgi Formu, Prostat Kanseri Taramaları Sağlık İnanç Modeli Ölçeği ve Prostat Kanseri Taramaları Bilgi Testi kullanılmıştır.

Bulgular: Araştırmaya katılan erkeklerin yaş ortalaması 46.7±5.9 yıl idi. Katılımcıların Prostat Kanseri Taramaları Bilgi testi puan ortalaması 5.80±3.15 ve %67.4'ü düşük düzeyde bilgi sahibidir. Katılımcılar Sağlık İnanç Modeline göre "Duyarlılık Algısı" alt boyutundan 12.6±3.8, "Ciddiyet Algısı" 11.9±3.6, "Sağlık Motivasyonu Algısı" 32.9±7.6, "Engel Algısı" 38.5±10.3, "Yarar Algısı" alt boyutundan 24.8±5.7 puan almıştır. Prostat kanseri taramaları sağlık inanç modeli ölçeği ile prostat kanseri taramaları bilgi testinden aldıkları puanlar arasında anlamlı ilişki bulunmamıştır.

Sonuç: Çalışmaya katılan erkeklerin bilgi düzeyleri düşük, prostat kanseri taramalarına yönelik duyarlılık, ciddiyet, engel algısı orta düzeyde, sağlık motivasyonu ve yarar algısının yüksek düzeyde olduğu belirlenmiştir. Sağlık çalışanları tarafından erken teşhisin yararları ve taramalara yönelik eğitimler ile farkındalık yaratmak önemlidir.

Anahtar kelimeler: prostat kanseri, tarama, tutum, İnanç

Abstract

Objective: The attitudes and knowledge level of individuals toward prostate cancer screening are important factors affecting participation in screening. This study aimed to determine the relationship between prostate cancer screening attitudes, beliefs, and knowledge levels of men working in a tertiary healthcare institution.

Material and Methods: A total of 236 healthcare personnel working in education and research hospital were included in the study. In the collection of data, an information form, the Health Beliefs Model Scale for Prostate Cancer Screenings (HBM-PCS), and the Knowledge About Prostate Cancer Screening Questionnaire (KPCSQ) were used.

Results: The mean age of the participating was 46.7±5.9 years. The mean score of the participants in the Prostate Cancer Screening Knowledge Test was 5.80±3.15 and 67.4% had a low level of knowledge. When the subscales of HBM-PCS were examined, the participants had a mean score of 12.6±3.8 on susceptibility perception, 11.9±3.6 on seriousness perception, 32.9±7.6 on health motivation perception, 38.5±10.3 on barrier perception, and 24.8±5.7 on benefit perception. There was no significant relationship in the participants' HBM-PCS scores according to their KPCSQ scores.

Conclusion: It was determined that the men participating in this study had a low level of knowledge, moderate levels of susceptibility, seriousness, and barrier perceptions, and high levels of health motivation and benefit perceptions concerning prostate cancer screening. It is important to raise the awareness of healthcare workers about the benefits of screening and early diagnosis of prostate cancer through training programs.

Keywords: prostate cancer, screening, attitude, belief

INTRODUCTION

According to the GLOBOCAN 2020 data published by the International Agency for Research on Cancer, prostate cancer (PCa) is the second most common type of cancer in men both in Turkey and across the world (1). PCa rarely shows symptoms until it is incurable and may not present with any signs or findings until the tumor is locally advanced or metastatic (2). The European Association of Urology Guidelines recommend risk-based screening in patients with long life expectancies, although an individualized, risk-adapted strategy for early detection may still be associated with significant risks of unnecessary diagnosis and treatment (3). Despite the global applicability of a digital rectal examination and the wide accessibility of the prostate-specific antigen (PSA) test for the diagnosis of PCa, many studies have reported low rates of participation in PCa screening (4, 5).

It is very important to increase PCa screening participation rates and improve knowledge of and attitudes toward screening practices. The health belief model, which was developed by adapting the behavioral sciences theory to the field of health, is one of the oldest instruments frequently used in health behavior practices. This model is used to explain the relationship between a person's behaviors and beliefs and the effect of individual motivation on health behaviors. The health belief model defines what motivates individuals to take health-related actions, as well as the situations that are effective in the demonstration of healthy behaviors (6, 7).

When the literature on PCa screening among men is examined, it is seen that most have been conducted with patients and healthcare students (8-12), and none has targeted healthcare workers, such as physicians, nurses, and technicians. Determining the knowledge and attitudes of healthcare workers on this subject will increase the awareness of the society on the early diagnosis of prostate cancer by planning health training for both the promotion of screening and the protection and improvement of public health. Therefore, in this study, we aimed to determine the relationship between PCa screening attitudes, beliefs, and knowledge of men working in a healthcare institution.

MATERIAL AND METHODS

Research Design, Population, and Sample

The population of this descriptively designed research consisted of 424 men working in an education and research hospital affiliated with the University of Health Sciences. The sample size of the study was determined as 202 (95% confidence interval, 0.05 margin of error) using the sample number calculation formula for the known population. The study was carried out with 236 male participants aged 40-65 years who worked in a healthcare institution and were not diagnosed with any prostate-related disease.

Data Collection Tools: Data were collected using an information form, the Health Beliefs Model Scale for Prostate Cancer Screenings (HBM-PCS), and the Knowledge About Prostate Cancer Screening Questionnaire (KPCSQ).

Information Form: This form was prepared by the researchers in line with the literature and consisted of nine questions to obtain the descriptive data of the participants (age, occupation, marital status, education level, prostate examination history, PSA test history, PCa diagnosis in family/close contacts, thoughts about participating in PCa screenings in the future, and thoughts about whether prostate examination is embarrassing) (10-14).

HBM-PCS: This scale was developed by Çapık and Gözüm (2011) based on the health belief theory and found to be valid and reliable. In this five-point Likert-type scale, the response options are: 1- strongly disagree, 2-disagree, 3- undecided, 4- agree, and 5- completely agree. HBM-PCS comprises a total of 41 items presented under five subscales: susceptibility perception (five items), seriousness perception (four items), health motivation perception (12 items), barrier perception (16 items), and benefit perception (seven items). The score of each subscale is calculated separately, and there is no total score. Higher scores on the subscales of susceptibility, seriousness, health motivation, and benefit perceptions represent a positive situation, while a high score on the subscale of barrier perception indicates a negative situation. The Cronbach alpha coefficients of the HBM-PCS subscales were previously reported to be 0.90 for susceptibility

perception, 0.89 for seriousness perception, 0.96 for health motivation perception, 0.94 for barrier perception, and 0.91 for benefit perception (6). In the current study, the Cronbach's alpha coefficient values of the susceptibility, seriousness, health motivation, barrier, and benefit perception subscales were determined to be 0.76, 0.73, 0.84, 0.86, and 0.83, respectively, Accordingly, it can be stated that HBM-PCS was a very reliable instrument for this study.

KPCSQ: This scale was developed by Weinrich et al. in 2004, and the validity and reliability analyses of the Turkish version were undertaken by Çapık and Gözüm (15). KPCSQ consists of a total of 12 questions related to limitations (items 9-12), symptoms (items 2 and 4), risk factors (items 1 and 3), side effects (items 6-8), and screening age (item 5). There are three response options: "yes" (correct), "no" (incorrect), and "don't know". While each correct answer is scored 1, no points are given for the incorrect responses or the items marked "don't know". The correct answer of a total of eight questions (items 1, 2, 4, 5, 6, 7, 11, and 12) is "yes", while three questions (items 3, 8, 9, and 10) should be answered as "no". The score that can be obtained from the KPCSQ varies between 0 and 12, with a higher score indicating a higher level of knowledge (15). The KR-20 coefficient of the Turkish version of the prostate cancer screening knowledge test was determined to be 0.69.

Data Collection

Prior to data collection, the purpose of the study was explained to the participants. Data were collected from October 1, 2022, through December 1, 2022, from individuals who volunteered to participate in the study. The participants were informed that it was important for them to mark the most appropriate statement in each item included in the data collection forms and to fill in the forms completely. Whether all the forms were completed was checked by the researchers during the data collection phase to ensure that there would be no missing data and no sample loss.

Statistical Analysis

The Number Cruncher Statistical System (NCSS) 2007 statistical software (Kaysville, Utah, USA) was used for statistical analyses. Descriptive statistical methods (mean, standard deviation, median, first quartile, third quartile, frequency, percentage, minimum, and maximum) were used for the analyses of the study data. The conformity of the quantitative data to the normal distribution was tested with the Shapiro-Wilk test and graphical examinations. The Student t-test was used for the comparison of normally distributed quantitative variables between two groups. One-way analysis of variance and Bonferroni-corrected pairwise assessments were used for the paired comparison of more than normally distributed quantitative variables. Pearson's correlation analysis was used to evaluate the relationships between quantitative variables. The level of statistical significance was accepted as $p < 0.05$ (16).

RESULTS

The study was conducted with a total of 236 participants, of whom 45.8% were healthcare professionals and 54.2% were non-healthcare professionals. The ages of the male individuals participating in the study ranged from 40 to 65 years, with a mean of 46.7 ± 5.9 years. The descriptive characteristics of the participants are presented in Table 1.

The participants' scores on KPCSQ ranged from 0 to 11, with the mean score being calculated to be 5.8 ± 3.1. The KPCSQ scores of the participants are presented in Table 2.

Table 3 presents the distribution of the participants' KPCSQ scores according to their descriptive characteristics. The healthcare professionals had statistically significantly higher KPCSQ scores than the non-healthcare professionals ($p = 0.001$; $p < 0.01$). According to the evaluation of education level, the participants with postgraduate degrees had statistically significantly higher KPCSQ scores than the remaining education level groups ($p = 0.001$ for all comparisons; $p < 0.01$). The KPCSQ scores of the participants who had previously undergone a prostate examination were statistically significantly higher than those without a prostate examination history ($p = 0.003$; $p < 0.01$). The participants with a history of PSA test had statistically significantly higher KPCSQ scores than those who had

not previously undergone this test or did not know if they had (p = 0.001 for both; p < 0.01). The KPCSQ scores of the participants who had a PCa diagnosis in family/close contacts were found to be statistically significantly higher than the remaining participants (p = 0.003; p < 0.01). Lastly, the KPCSQ scores significant differed according to whether the participants thought about participating in PCa screening in future and whether they considered the prostate examination to be embarrassing.

The HBM-PCS scores of the participants are given in Table 4. The participants' mean scores on the susceptibility, seriousness, health motivation, barrier, and benefit perception subscales were 12.6 ± 3.8, 11.9 ± 3.6, 32.9 ± 7.6, 38.5 ± 10.3, and 24.8 ± 5.7, respectively.

Table 5 shows the comparison of the participants' HBM-PCS scores by descriptive characteristics. The results revealed no statistically significant differences in the participants' scores in the susceptibility, seriousness, health motivation, and barrier perception subscales according to occupation (p > 0.05). However, the non-healthcare professionals had a statistically significantly higher mean score in the benefit perception subscale compared to the healthcare professionals (p = 0.001; p < 0.01). No statistically significant differences were found in any of the HBM-PCS subscale scores of the participants according to education level, marital status, PSA test history, or PCa diagnosis in family/close contacts (p > 0.05). The participants with a prostate examination history had a statistically significantly higher mean score in the barrier perception subscale and a statistically significantly lower mean score in the benefit perception subscale compared to those without this history (p = 0.003 for both; p < 0.01).

The participants who planned to participate in PCa screenings in the future had statistically significantly higher mean scores on the health motivation and benefit perception subscales of HBM-PCS than those who did not plan to participate in such screenings. In addition, the mean barrier perception subscale score of the participants who did not consider the prostate examination to be embarrassing was statistically significantly higher when compared to those who thought that this examination was embarrassing or were undecided about this statement (p = 0.001 and p = 0.016, respectively; p < 0.05) (Table 5).

No statistically significant relationship was found between the participants' KPCSQ scores and the scores they obtained from any of the HBM-PCS subscales (p > 0.05) (Table 6).

Table 1. Descriptive Characteristics of the Participants

		n (%)
Occupation	**Healthcare professional**	108 (45.8)
	Non-healthcare professional	128 (54.2)
Education level	**High school**	92 (39)
	Associate degree	42 (17.8)
	Undergraduate	41 (17.4)
	Postgraduate	61 (25.8)
Marital status	**Married**	175 (74.2)
	Single	61 (25.8)
Prostate examination history	**Present**	33 (14.0)
	Absent	203 (86.0)
PSA test history	**Present**	38 (16.1)
	Absent	175 (74.2)
	Don't know	23 (9.7)
Prostate cancer diagnosis in family/close contacts	**Present**	58 (24.6)
	Absent	178 (75.4)

Thoughts about participating in prostate cancer screening in future	Positive	139 (58.9)
	Negative	51 (21.6)
	Undecided	46 (19.5)
Thoughts about whether prostate examination is embarrassing	Agree	48 (20.3)
	Disagree	172 (72.9)
	Undecided	16 (6.8)

PSA: prostate-specific antigen

Table 2. Distribution of Participants' KPCSQ Scores

Total score		
	Mean±SD	5,80±3,15
	Median (Min-Max)	6 (0-11)
	Low level of knowledge	159 (67,4)
	Moderate level of knowledge	64 (27,1)
	High level of knowledge	13 (5,5)

Table 3. Distribution of Participants' KPCSQ Scores by Descriptive Characteristics

		KPCSQ Score	P
		Mean ± SD	
Occupation	Healthcare professional	7.7 ± 2.7	[a]*0.001***
	Non-healthcare professional	4.1 ± 2.4	
Education level	High school	4.4 ± 2.4	[b]*0.001***
	Associate degree	4.2 ± 2.4	
	Undergraduate degree	4.9 ± 2.6	
	Postgraduate degree	9.5 ± 1.2	
Marital status	Married	6.0 ± 3.2	[a]*0.108*
	Single	5.2 ± 2.7	
Prostate examination history	Present	7.3 ± 2.9	[a]*0.003***
	Absent	5.5 ± 3.1	
PSA test history	Present	7.9 ± 2.5	[b]*0.001***
	Absent	5.4 ± 3.1	
	Don't know	4.7 ± 3.1	
Prostate cancer diagnosis in family/close contacts	Present	6.8 ± 3.1	[a]*0.003***
	Absent	5.4 ± 3.1	
Thoughts about participating in prostate cancer screening in future	Positive	6.1 ± 3.3	[b]*0.018**
	Negative	4.7 ± 2.6	
	Undecided	6.0 ± 2.9	
Thoughts about whether prostate examination is embarrassing	Agree	7.0 ± 2.6	[b]*0.008***
	Disagree	5.4 ± 3.2	
	Undecided	5.6 ± 3.2	

[a]Student t-test   [b]One-way analysis of variance & Dunn-Bonferroni test   *p < 0.05, **p < 0.01
KPCSQ: Knowledge About Prostate Cancer Screening Questionnaire; *min:* minimum; *max:* maximum; *SD:* standard deviation; *PSA:* prostate-specific antigen

Table 4. HBM-PCS Scores and Internal Consistency Values

	Number of items	Mean ± SD	Cronbach's alpha
Susceptibility perception	5	12.6 ± 3.8	**0.76**
Seriousness perception	4	11.9 ±3.6	**0.73**
Health motivation perception	10	32.9 ± 7.6	**0.84**
Barrier perception	15	38.5 ±10.3	**0.86**
Benefit perception	7	24.8 ± 5.7	**0.83**

HBM-PCS: Health Beliefs Model Scale for Prostate Cancer Screenings; *SD:* standard deviation

Table 5. Comparison of HBM-PCS Scores by Descriptive Characteristics

		Susceptibility perception	Seriousness perception	Health motivation	Barrier perception	Benefit perception
		Mean ± SD	Mean ± SD	Mean ± SD	Mean ± SD	Mean ± SD
Occupation	Healthcare professional	12.3 ± 2.9	12.2 ± 2.7	31.9 ± 5.8	38.4 ± 8.4	23.5 ± 4.6
	Non-healthcare professional	12.9 ± 4.3	11.7 ± 4.2	33.8 ± 8.8	38.5 ± 11.6	25.9 ± 6.3
	p	*0.189*	*0.275*	*0.065*	*0.950*	*0.001**
Education level	High school	13.0 ± 4.6	11.6 ± 4.3	33.4 ± 9.3	39.8 ± 12.5	25.4 ± 7.1
	Associate degree	12.1 ± 3.5	12.1 ± 3.9	34.2 ± 7.1	37.3 ± 7.4	25.3 ± 4.5
	Undergraduate degree	12.2 ± 3.0	12.2 ± 3.6	31.7 ± 6.7	37.9 ± 9.2	24.1 ± 5.7
	Postgraduate degree	12.6 ± 2.9	12.2 ± 2.3	32.2 ± 5.6	37.6 ± 8.7	24.0 ± 3.9
	p	*0.497*	*0.761*	*0.377*	*0.469*	*0.377*
Marital status	Married	12.9 ± 3.5	11.9 ± 3.4	33.3 ± 7.3	38.0 ± 9.8	24.9 ± 5.5
	Single	11.8 ± 4.3	11.9 ± 4.2	32.0 ± 8.6	39.7 ± 11.5	24.4 ± 6.3
	p	*0.077*	*0.969*	*0.257*	*0.277*	*0.592*
Prostate examination history	Present	13.3 ± 3.4	10.9 ± 2.4	30.8 ± 5.2	43.4 ± 8.8	21.8 ± 4.0
	Absent	12.5 ± 3.8	12.1 ± 3.8	33.3 ± 7.9	37.6 ± 10.3	25.3 ± 5.8
	p	*0.235*	*0.071*	*0.082*	*0.003**	*0.001**
PSA test history	Present	13.6 ± 2.9	11.5 ± 2.8	31.5 ± 6.1	41.4 ± 9.9	23.7 ± 4.4
	Absent	12.3 ± 3.7	12.0 ± 3.7	33.1 ± 7.7	37.6 ± 9.9	25.0 ± 6.0
	Don't know	13.5 ± 4.9	12.2 ± 4.6	34.0 ± 9.3	40.1 ± 12.8	25.1 ± 6.0
	p	*0.072*	*0.745*	*0.406*	*0.089*	*0.424*
Prostate cancer diagnosis in family/ close contacts	Present	13.5 ± 3.5	12.2 ± 3.0	32.4 ± 7.5	40.4 ± 9.0	24.6 ± 4.7
	Absent	12.3 ± 3.8	11.8 ± 3.8	33.1 ± 7.7	37.8 ± 10.6	24.8 ± 6.0
	p	*0.059*	*0.462*	*0.559*	*0.094*	*0.786*
Thoughts about participating in prostate cancer screening in future	Positive	12.9 ± 3.6	12.1 ± 3.5	34.6 ± 7.6	37.0 ± 10.3	26.0 ± 5.1
	Negative	11.5 ± 4.2	11.4 ± 4.2	29.5 ± 8.1	40.6 ± 11.9	21.7 ± 7.3
	Undecided	12.9 ± 3.5	12.1 ± 3.2	31.8 ± 5.7	40.5 ± 7.1	24.6 ± 4.3
	p	*0.056*	*0.484*	*0.001**	*0.036**	*0.001**
Thoughts about whether prostate examination is embarrassing	Agree	13.0 ± 3.4	12.2 ± 3.3	31.2 ± 5.9	42.8 ± 7.1	24.2 ± 5.1
	Disagree	12.4 ± 3.8	11.8 ± 3.8	33.6 ± 8.0	36.7 ± 10.5	25.2 ± 6.0
	Undecided	13.5 ± 4.4	12.3 ± 3.3	30.6 ± 7.7	44.0 ± 10.6	22.6 ± 4.8
	p	*0.440*	*0.725*	*0.069*	*0.001**	*0.180*

[a]Student t-test; [b]One-way analysis of variance & Dunn-Bonferroni test; *p < 0.01

Table 6. The Relationship between Health Beliefs Model Scale for Prostate Cancer Screenings and the Knowledge About Prostate Cancer Screening Questionnaire

Health Beliefs Model Scale for Prostate Cancer Screenings	Knowledge About Prostate Cancer Screening Questionnaire	
	r	p
Susceptibility perception	-0,079	0,229
Seriousness perception	0,036	0,587
Health motivation perception	-0,020	0,760
Barrier perception	-0,097	0,139
Benefit perception	-0,002	0,970

r:Pearson Correlation Test

DISCUSSION

This study was conducted to examine the relationship between the PCa screening attitudes, beliefs, and knowledge levels of men working in a healthcare institution, considering the high prevalence of this cancer in this gender. According to the results, the majority of the participants had not previously undergone a prostate examination or a PSA test and had a low level of knowledge about PCa screening. Similar studies have shown that the majority of participants do not have a history of prostate examination, do not tend to participate in PCa screening, and have insufficient information about this subject (8,10, 11,12,17). The majority of men not having undergone a prostate examination or screening test can be attributed to their low knowledge and awareness levels in this area. This demonstrates the need for training programs to increase the related level of knowledge.

In the current study, the participants who had a prostate examination history, those who had a PCa diagnosis in family/close contacts, and those who had previously undergone a PSA test were found to have higher knowledge levels than the remaining participants. Similarly, higher levels of knowledge about screening were previously reported among those with a PSA test history (12) and those with a prostate examination history and a PCa diagnosis in the close circle (10). The PSA test aims to detect cancer in a treatable period, which ensures that curative treatment can be performed to reduce deaths due to PCa (18). In addition, one of the known risk factors for the development of PCa is a family history (19). Therefore, it can be considered that individuals who have a family member diagnosed with PCa may be more aware that they are also in the risk group and tend to seek information about PCa and receive counseling and education from physicians and nurses to participate in cancer screening, which can explain their higher levels of knowledge in this area.

We determined that the participants who were positive about participating in PCa screening in the future had a higher level of knowledge about PCa screening than those who objected to this idea or were undecided. Similarly, in a study by Ceyhan et al. (10), men who considered participating in screening in the future were found to have higher knowledge levels. Insufficient knowledge is a factor in the low rates of participation in PCa screening (20). It can be stated that individuals who have knowledge in this area tend to undergo PCa screening, while those without sufficient knowledge are not as willing. With this awareness, nurses should direct individuals to early diagnosis and evaluate people in the risk group. In addition, nurses have a critical role in educating men about PCa cancer screening and contributing to compliance with the latest screening recommendations.

The men participating in this study had moderate levels of susceptibility, seriousness, and barrier perceptions and high levels of health motivation and benefit perceptions related to PCa screening. In a study by Demirbaş and Onmaz (11), it was reported that the susceptibility, seriousness, and barrier perceptions of

men toward PCa screening were at moderate levels, while they had high health motivation and benefit perception levels. This finding suggests that men generally consider PCa screening to be beneficial, and that they have a high level of motivation for PCa screening. In addition, the moderate level of barrier perception related to PCa screening among men is an important factor affecting applications for early diagnosis and participation in screening.

We determined that the non-healthcare professionals had a significantly higher level of benefit perception concerning PCa screening compared to the healthcare professionals. According to previous studies in the literature, a high level of knowledge is associated with a high level of benefit perception (9,21). In contrast, the higher benefit perception level of the group with a low level of knowledge in the current study may be related to non-health professionals paying more attention to practices that would be beneficial in the prevention of the disease.

The participants who had a prostate examination history had a higher barrier perception level and lower benefit perception level concerning PCa screening than those without this history. Similar studies on this subject have shown that individuals who have a prostate examination history have high levels of susceptibility, seriousness, health motivation, and benefit perceptions, while those without this history have a higher level of barrier perception (9,22). The discrepancy concerning the higher barrier perception levels of the participants with a prostate examination history in our study may be due to their insufficient knowledge or misconceptions and misguided beliefs concerning screening tests.

We found that the participants who considered participating in prostate cancer screening in the future had higher levels of health motivation and benefit perceptions related to PCa screening than those who did not have positive attitudes toward future PCa screening. On the other hand, the undecided participants had a higher level of barrier perception than those who planned to participate in future PCa screening. In a study by Demirbaş and Onmaz (11), the susceptibility, health motivation, and benefit perception levels were

found to be high in individuals who were positive about participating in PCa screening in the future. The low level of barrier perception and high level of benefit perception of individuals who are willing to participate in future screening can help provide an understanding of personal beliefs, attitudes, and perceptions in this area and guide the development of training programs for healthcare professionals. Especially for nurses who provide holistic care, understanding personal values from the perspective of not only disease management but also patient advocacy will be valuable in promoting participation in PCa screening.

In this study, no relationship was found between the participants' knowledge levels and their susceptibility, seriousness, health motivation, barrier, and benefit perceptions related to PCa screening. In contrast, in the literature, a significant relationship has been demonstrated between knowledge levels and positive attitudes toward participation in cancer screening (23,24). Unlike the literature, the absence of such a relationship in the current study can be attributed to all the participants working in a healthcare institution.

There are some limitations concerning the interpretation of the data obtained from this study. In particular, the study was conducted with men working in an education and research hospital, which limits the generalizability of the findings.

CONCLUSION

It was determined that 67.4% of the men participating in this study had a low level of knowledge about PCa screening. The participants with a prostate examination history, those with a PSA test history, and those who had family members/close contacts diagnosed with PCa had higher levels of knowledge in this area. The barrier perception level was significantly higher among the individuals with a prostate examination history, and the health motivation and benefit perception levels were significantly higher among those who considered participating in future PCa screening. PCa screening in individuals aged 40 years and over is crucial for early diagnosis and treatment. Among healthcare professionals, nurses help individuals make informed decisions by identifying factors affecting their health

behaviors and screening intentions, and increasing their level of knowledge. In addition, the integration of PCa screening into in-service training programs organized for healthcare workers will have a positive effect on knowledge, attitudes, and behaviors related to PCa. This will not only improve the health-protective behaviors of healthcare professionals themselves but will also be effective in raising the awareness of society in general within the scope of the roles of an educator and consultant for healthy/ill individuals served.

Conflict of Interest

The authors declare that they have no conflict of interest.

Financial Disclosure

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Informed Consent

Participation in the study was on a voluntary basis, and verbal and written informed consent was provided by all participants.

Ethical Approval

Approval for the study was granted by the Clinical Research Ethics Committee of Bakırköy Dr. Sadi Konuk Training and Research Hospital (decision number: 2022-18, date: 2022-09-19). Permission was also received from the institution where the study was conducted. The study protocol conformed to the ethical guidelines of the Declaration of Helsinki.

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