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Knowledge and attitude of physicians towards prostate cancer screening in Baghdad

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Abstract

Background: Prostate cancer (PC) is a significant health concern for men worldwide, ranking as the second most common cancer and the fifth leading cause of cancer-related death among this population. This study examines Baghdad doctors' prostate cancer screening knowledge and attitudes. Assess the relationship between certain parameters and medical expertise and position.

Method: A cross-sectional study of 100 physicians from Al-Yarmouk and Al-Kadhimya teaching hospitals from January to December 2023. All doctors inquired about: Age groupings, Gender, education (Bachelors, diploma, board), and experience. The 20-question physician knowledge test provides positive answers 2 and negative answers 0, while I don't know gives 1. The knowledge score is: 16 (bad), 17-28 (average), 28+ (good). Physicians' attitudes examined by 4 questions.

Results: The study shows that 70% of doctors under 40 and 72% male, with 52% holding a Bachelor's and 41% a board degree. Sixty percent have good knowledge of prostate cancer screening, with significant correlations between knowledge and both academic degree and experience, but not with age or gender. Attitude towards screening does not significantly vary with sociodemographic factors.

Conclusion: The study shows that doctors' prostate cancer screening expertise differs, with more academic credentials and experience correlating to better understanding. No significant connection was discovered between doctors' age or gender and screening knowledge or attitudes. This emphasises the need for targeted educational programmes to improve cancer screening knowledge and attitudes across all medical demographics and professional groups.

Keywords: Knowledge, attitude, physicians, prostate, cancer, screening, Baghdad

Introduction

Prostate cancer (PC) is a significant health concern for men worldwide, ranking as the second most common cancer and the fifth leading cause of cancer-related death among this population ^[1]. The disease's incidence and mortality are closely associated with age, with the average diagnosis age being around 66 years ^[2, 3]. In the United States alone, projections for 2021 estimated that there would be 248,530 new cases and 34,130 deaths due to this malignancy ^[2]. This global health issue demands attention not only in Western countries but also across different regions, including the Middle East and specifically Iraq, where health care systems and cancer surveillance face unique challenges. In the Middle East, the prevalence and impact of prostate cancer vary significantly across the region, reflecting a combination of genetic, lifestyle, and environmental factors ^[4, 5]. Despite the lower incidence rates compared to Western countries, the Middle East has been experiencing a steady increase in prostate cancer cases. This rise is partly attributed to changing lifestyles, increased life expectancy, and possibly improved diagnostic capabilities ^[5]. Iraq, in particular, presents a case where public health data on prostate cancer is harder to ascertain due to ongoing conflicts and the resultant strain on the healthcare infrastructure ^[5]. The country, like many others in the region, is undergoing a transition in its disease burden profile, with non-communicable diseases, including cancers, becoming increasingly prevalent. The lack of systematic screening programs and comprehensive cancer control plans further complicates the efforts to address PC effectively in Iraq and similar Middle Eastern contexts ^[6, 7]. The American Cancer Society's recommendations for Prostate Specific Antigen (PSA) testing highlight the importance of early detection in managing prostate cancer ^[8]. Screening guidelines suggest that average-risk men begin testing at 50, while those at higher risk, including African Americans and men with a significant family history of the disease, should consider starting earlier ^[8].

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These recommendations underscore the crucial role of screening in improving cancer outcomes. However, in the Middle East and Iraq, the implementation of such guidelines faces obstacles, including limited public awareness and healthcare resources [9-13]. The role of healthcare professionals, especially physicians, is pivotal in enhancing awareness and screening for prostate cancer [5]. Their attitudes and recommendations can significantly influence patient adherence to screening protocols, emphasizing the need for educational initiatives targeting both the public and medical communities [5]. Despite the challenges, efforts are underway in various parts of the Middle East to improve cancer care, including enhancing infrastructure, increasing awareness, and aiming for the establishment of national cancer control programs [7, 8]. By focusing on improving diagnostic capabilities, implementing effective screening strategies, and fostering education about the disease, these regions can make significant strides in the battle against prostate cancer. Collaborative efforts are essential to ensure that men across these diverse landscapes have access to the information and healthcare services necessary for the early detection and management of prostate cancer, ultimately improving survival rates and quality of life for those affected by this disease [14]. The aim of study is to evaluate the understanding and stance of physicians in Baghdad regarding prostate cancer screening. Analyze the correlation between specific factors and the knowledge and stance of physicians.

Method

Cross section study of 100 physicians, the data collected from Al-Yarmouk and Al Kadhimya teaching hospitals from period January 2023 to December 2023 from. All physicians asked about: Age groups, Gender, academic degree (Bachelors, diploma and board), Experience (years).

The Knowledge of physicians assessed by 20 questions, all positive answer gives 2 and negative answer give 0 while I don't know give 1. Score of knowledge as following: 16 and below (poor), 17-28 (average), more than 28 (good). The attitude of physicians assessed by 4 questions, all positive answer gives 2 and negative answer give 0 while I don't know give 1. Score of attitude as following: 7 and below (poor), 8-12 (average), more than 12 (good). The statistical analysis was carried out using SPSS version 22, employing frequency and percentage for categorical data, and mean and standard deviation (SD) for continuous data. The chi-square test was utilized to determine the association between categorical variables, P-value of 0.05 or lower was considered statistically significant.

Results

Mean age 37.2 ± 8.1 years. 70% of doctors at age group less than 40 years, and 30% at age group more than 40 years. 72% of doctors are males and 28% are females. 52% of them have Bachelors academic degree and 41% of them have board academic degree. 58% of doctors have more than 10 years' Experience. As shown in table 1.

Table 1: Distribution of physicians according to study variables

Variables		Frequency	Percentage
Age groups (years)	<40	70	70
	≥40	30	30
Gender	Male	72	72.0
	Female	28	28.0
Degree	Bachelors	52	52.0
	diploma	7	7.0
	board	41	41.0
Experience (years)	10 and less	42	42.0
	>10	58	58.0

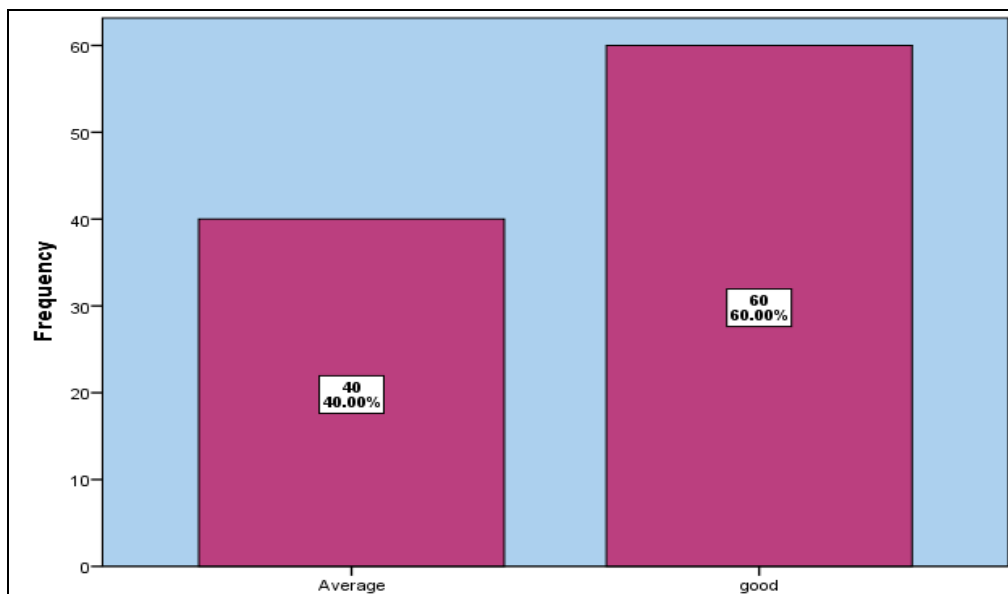


Fig 1: Doctor's knowledge

Fig 1; show that 60% of doctors have good knowledge about prostate cancer screening while 40% of them have average knowledge.

Fig 2; show that 41% of doctors have good attitude about

prostate cancer screening while 42% of them have average attitude and 17% of doctors have poor attitude about prostate cancer screening.

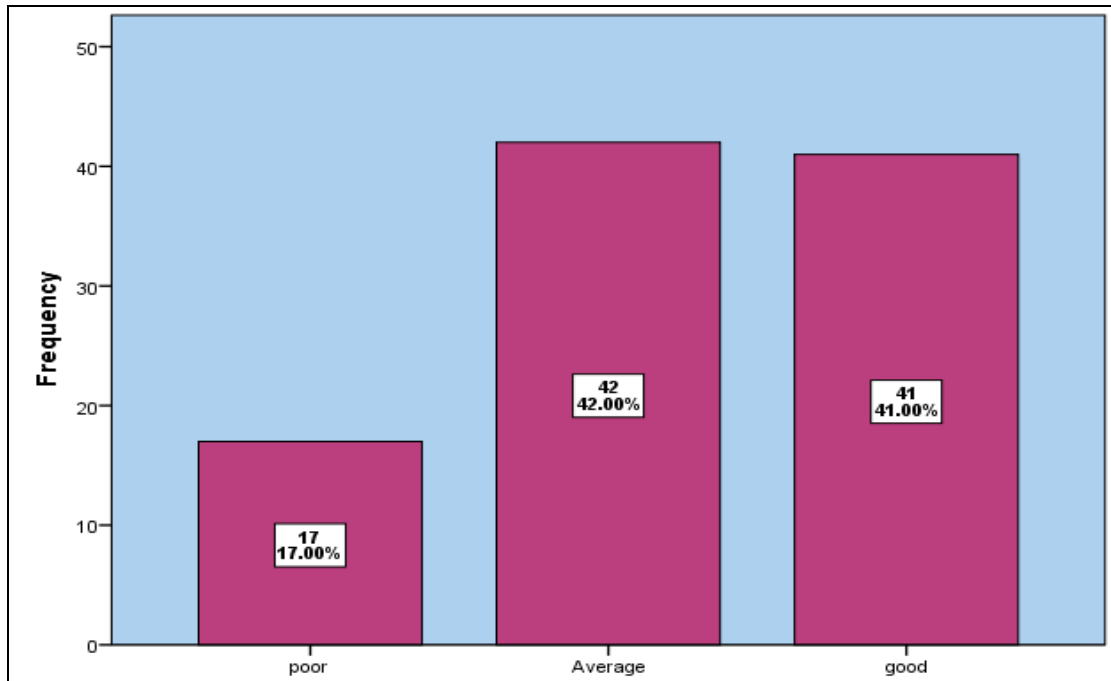


Fig 2: Doctor's attitude

There is significant association between Knowledge and academic degree, 78% of doctors with board academic degree have good knowledge and 71.4% of doctors with diploma academic degree have good knowledge. There is significant association between Knowledge and doctors

Experience, 74.1% of doctors with Experience more than 10 years have good knowledge. There is no significant association between Knowledge and doctors age and gender. As shown in table 2.

Table 2: Relation between Knowledge and sociodemographic data

Variables		Knowledge		P-value
		Average	Good	
Age groups (years)	<40	31 44.3%	39 55.7%	0.26
	≥40	9 30.0%	21 70.0%	
Gender	Male	27 37.5%	45 62.5%	0.5
	Female	13 46.4%	15 53.6%	
Academic Degree	Bachelors	29 55.8%	23 44.2%	0.003
	Diploma	2 28.6%	5 71.4%	
	Board	9 22.0%	32 78.0%	
Experience (years)	≤10	25 59.5%	17 40.5%	0.001
	>10	15 25.9%	43 74.1%	

There is no significant association between attitude and sociodemographic data (Age groups, Gender, academic

Degree and Experience). As shown in table 3.

Table 3: Relation between attitude and sociodemographic data

Variables		Attitude			P-value
		Poor	Average	Good	
Age groups (years)	<40	13 18.6%	31 44.3%	26 37.1%	0.5
	≥40	4 13.3%	11 36.7%	15 50.0%	
Gender	Male	13 18.1%	26 36.1%	33 45.8%	
	Female				

	Female	4	16	8	0.15
		14.3%	57.1%	28.6%	
Academic	Bachelors	10	25	17	
Degree		19.2%	48.1%	32.7%	
	Diploma	2	3	2	0.28
		28.6%	42.9%	28.6%	
	Board	5	14	22	
		12.2%	34.1%	53.7%	
Experience	≤10	8	16	16	
		20.0%	40.0%	40.0%	0.8
(years)	>10	9	26	25	
		15.0%	43.3%	41.7%	

Discussion

The results of this study offer insightful observations into the demographics, knowledge, and attitudes of doctors regarding prostate cancer screening. The mean age of the participating doctors is 37.2 years, with a majority being under 40 years of age. This younger demographic predominance suggests a workforce that could be more receptive to adopting new guidelines and educational interventions about prostate cancer screening. Furthermore, the gender distribution shows a significant male majority, which is reflective of the broader trend in the medical profession in many regions, although efforts continue to achieve gender balance ^[15]. The academic qualifications of the doctors surveyed reveal a strong educational background, with 52% holding Bachelor's degrees and 41% possessing board academic degrees. This indicates a highly educated group, which theoretically should correlate with a higher level of knowledge regarding prostate cancer screening. Indeed, 60% of the doctors reported good knowledge about prostate cancer screening, which supports the notion that higher academic qualifications may contribute to better understanding and awareness of screening practices ^[16]. Interestingly, the study findings show that there is a significant association between doctors' knowledge about prostate cancer screening and both their academic degree and years of experience. Specifically, 78% of doctors with a board academic degree and 74.1% of those with more than 10 years of experience reported good knowledge about screening. This suggests that higher academic achievement and more extensive clinical experience are important factors in enhancing doctors' understanding of prostate cancer screening. These findings are consistent with several similar studies that have demonstrated a positive correlation between the level of education, experience, and the knowledge of healthcare professionals regarding disease screening protocols ^[17]. However, the study also reveals some areas of concern. While a majority of doctor's exhibit good knowledge about prostate cancer screening, their attitudes towards screening practices present a mixed picture. Only 41% of doctors have a good attitude towards screening, with 42% displaying an average attitude and 17% having a poor attitude towards prostate cancer screening. The lack of significant association between doctors' attitudes towards screening and their sociodemographic data (age, gender, academic degree, and experience) suggests that these attitudes may be influenced by factors not captured in this study, such as personal beliefs, institutional policies, or perceived effectiveness of screening programs ^[18]. Comparatively, other studies in the field have highlighted similar disparities between knowledge and attitudes among healthcare professionals. For instance, research often points out that

despite having adequate knowledge, many doctors may still exhibit uncertainty or doubt towards certain screening programs due to concerns about over diagnosis, overtreatment, and the cost-effectiveness of such interventions.

Conclusion

The study highlights a notable disparity in prostate cancer screening knowledge among doctors, with a strong correlation between higher academic qualifications and extensive experience contributing to better knowledge. Despite varying levels of knowledge and attitudes towards screening, no significant association was found between these factors and the doctors' age or gender. This underscores the need for targeted educational interventions to uniformly enhance knowledge and attitudes towards cancer screening across all demographic and professional groups within the medical community.

Conflict of Interest

Not available

Financial Support

Not available

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