

**Examining Factors Affecting Screening Behaviour of
Prostate Cancer**

Assignments Help Provider

Abstract

Background

Prostate cancer is one of the most commonly diagnosed non-skin cancers among men. The screening process for prostate cancer is worldwide accepted, the main concern about the screening process is the harm outweighs the advantages of screening. African American men have the highest rate of prostate cancer and mortality across the world. In comparison to African American, Asian men have a lower rate of prostate cancer. The main purpose of this study is to determine possible factors that affect screening behaviours among Asian, black, and ethnic minority men.

Methods

Thematic analysis and systematic review of different qualitative studies on the perspective of black, Asian, and ethnicity minor group's men prostate cancer screening has been collected. In order to conduct this study, electronic databases and reference lists were critically searched until February 2023.

Findings

A total of 10 studies were included in this review among these studies 8 were from the US, 2 were from the UK, and 3 were from Asian countries. Results have shown that African American males more than 50 years old have increased positive health values. These individuals were more likely to achieve prostate cancer screening. It has been also found that less than a 40% uptake rate of prostate cancer screening among Asian Ethnic minorities. Language issues, health literacy, limited access to health data as well as screening services, and cultural issues were the primary barriers to the utilization of cancer screening.

Conclusion

It has been seen that men are interested in participating in the screening process for prostate cancer in order to prevent cancer if they are promoted through their social networks. The

findings of this study have revealed crucial information for both health professionals and policymakers in order to properly understand the needs of Asian ethnic minorities. The findings of this study have provided the significance of health values, education, and screening intervention for “younger African American men”.

Assignments Help Provider

Acknowledgement

Foremost I would like to express my sincere gratitude to the professor and advisor.....for their continued and valuable support. His/ her guidance has significantly assisted me every time doing research and writing this study. I could not have expected to have a better advisor and mentor than.....

The completion of this study could not have been completed without the help of my classmates.

Thank you all for allowing me time away from your writing and research.

It was impossible without the help and support of my parents. Thanks to my respected parents because your mental support and love have motivated me to do this research. The time you gave to my research during your hectic schedule will not be forgotten.

Assignments Help Provider

Table of Contents

1.0 Introduction.....	7
1.1 Background	8
1.2 Research Aim	10
1.3 Research Objective.....	10
1.4 Research Question.....	10
1.5 Research Problem.....	10
1.6 Research Rationale	11
1.7 Significance for Evidence-Based Practice	12
Chapter 2.0: Methodology	13
2.1 Introduction	13
2.2 Selection of Method	13
2.3 Justification of the Selected Method and Its Significance in Health Research	14
2.4 Identification of Search Terms	14
2.5 Final Research Question, Aim and Objectives.....	16
2.6 Inclusion and Exclusion Criteria.....	16
2.7 Search Strategy.....	17
2.7.1 Eligibility and Selection Criteria	17
2.7.2 Data Sources and Searches	18
2.8 Critical Appraisal and Risk of Bias.....	18
2.9 Result of Search	23
2.10 Prisma Diagram.....	23

2.11 Characteristics of Studies	24
2.12 Data Analysis or Synthesis Methodology	25
3.0 Results and Findings	26
3.1 Thematic Analysis.....	26
3.2 Implication of the Result.....	34
4.0 Discussion.....	35
5.0 Conclusion	38
5.1 Recommendation.....	40
5.2 Limitation.....	41
5.3 Future Direction	41
References.....	42

Assignments Help Provider

1.0 Introduction

Prostate cancer is one of the most common malignancies as well as the major cause of cancer death for men. Significantly, prostate cancer is also a major disease characterized by racial/ethnic differences in mortality and incidence. African American men have the maximum rate of this disease and are very close to 2.6 times more chances to die from prostate cancer compared to white men. While considering the male population in Asian countries, the uptake rate of “prostate-specific antigen” was very low (So et al., 2014). In terms of ethnic minorities in Asia, people have faced several barriers to utilizing cancer screening. This study aims to evaluate the responsible factors that influence early prostate cancer screening as well as uptake among Black, Asian, and ethnic minority men. The systematic review method will be used to collect existing data on the rate and inflecting factors on the uptake of prostate screening. The development of research in the systematic review process has helped to collect reliable data. In order to find reliable qualitative findings, thematic analysis has been performed properly. This entire study has been classified into 6 chapters. The first section (Introduction) has provided a brief overview of the study and a suitable method to achieve the goal of this review. The second section (method) has provided an overview of the method, each step of the systematic review, and the way the study has been conducted. This section has been justified through the conduction of relevant literature. The third section (Result) of this study will find out the qualitative outcomes of this study by utilizing thematic analysis. Chapter four (discussion) will discuss the identified results by linking them with the collected literature. Chapter five (conclusion) has provided a brief understanding of the identified result from the research questions. Suitable recommendations based on the identified outcomes to improve the current scenario of the uptake of prostate cancer screening.

1.1 Background

The prostate is one of the most commonly diagnosed non-skin cancers with 48 deaths among 100,000 people in the United Kingdom. It has been determined that the current rate of prostate cancer will develop in the UK by 75 years old as well as 129 men among 100,000 in the United States. Furthermore, this disease is one of the most common and second primary causes of cancer death in the United States (So et al., 2014). When it comes to Asian men, it has been seen that ethnic minorities in different Western countries including South Asians showed a low uptake rate of screening cancer. Although the main reasons for prostate cancer are not completely understood, it has been believed that advanced age (more than 50), family background of prostate cancer as well as African-American ethnic background are major risk factors. Early detection is significantly affected through "Serum Prostate Specific Antigen" (PSA) screening, transrectal ultrasound (TRUS) as well as digital rectal examination (DRE). In these three different methods, PSA has been found as an effective single diagnostic tool and more cost-effective than others (Mandair et al., 2014).

However, the screening process for early prostate cancer of serum PSA has remained highly controversial. (Lehto et al., 2010) has found that the impact of screening on death and comprehensive mortality from "prostate cancer" was highly insignificant. In contrast, a randomized controlled trial" has shown a 20% reduction in the deaths of prostate cancer and decrease in mortality.

The uptaking rate of prostate rate screening among African Americans was 36% as well as Canadians at 45% and Asian ethnic minorities have comparatively low (12.4-29.4%).

Several studies have been conducted to identify the possible factors related to "participation in prostate cancer screening". (Lehto et al., 2010) a qualitative study has found insufficient knowledge, fear of cancer and embarrassment were barriers whereas family background of prostate cancer, doctor's recommendation, and urinary symptoms were facilitators in Asian

ethnic minority men. Educational, age, household income, attainment, as well as marital status, and insurance coverage, are basic predictive factors. Other significant factors are medical visits, acute illness, and perception of health. (Lehto et al., 2010) has concluded that African American men have a higher tendency to be diagnosed with prostate cancer at the age of 45 years old. (James et al., 2017) identified that the presence of “healthcare insurance” and different intrapersonal factors like health values and different positive health behaviours is directly related to "prostate cancer screening" among African American men. Other factors such as sufficient support from health providers and family are also related to the prostate cancer behavior of American women. The purpose of this entire study is to identify the most significant factors that influence Asian, Black, and minority ethnic men. The proposed hypothesis of this study included higher age, education level, insurance coverage, and lack of support from family and healthcare providers.

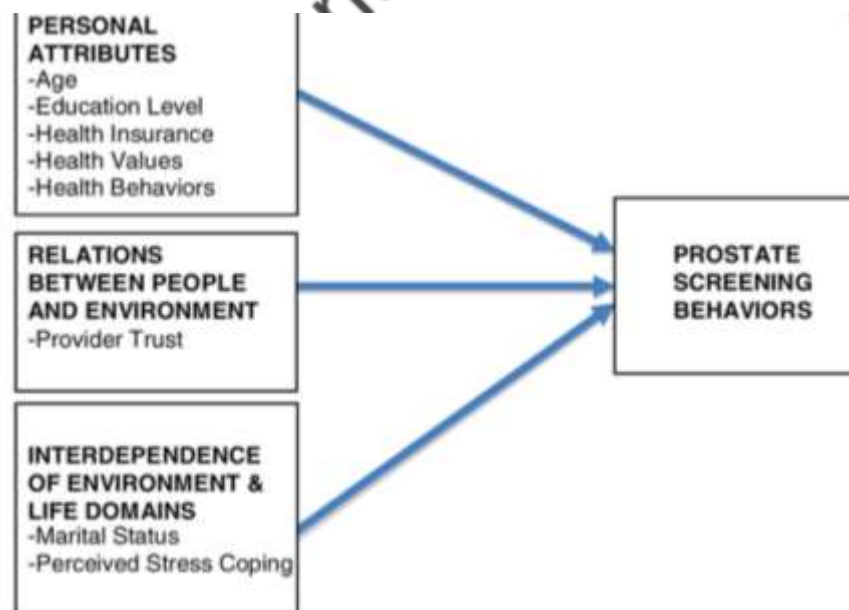


Figure: Different Socio-Ecological Factors that Influence the “Prostate Cancer Screening Behaviour”

Source: (Lehto et al., 2010)

1.2 Research aim

The primary aim of this research is to identify the common factors that influence the screening of early prostate cancer and its uptake among Asian, Black, and ethnic minority men.

1.3 Research Objective

- To identify the possible causes of occurring prostate cancer in men
- To identify possible factors that influence the “uptake of prostate cancer screening” in African American men
- To identify factors that influence the uptake of prostate cancer screening in Asian men and Asian ethnic minority men
- To recommend a possible solution to uptake or participate in prostate cancer screening

1.4 Research Question

- How do different factors influence the uptake of prostate cancer screening?
- Why do Asian, Black and ethnic minority men show less tendency in participating in prostate cancer screening?
- Why do Asian men have less uptake rate of prostate cancer screening?
- How to improve the rate of prostate screening among Asian, black, and ethnic minority men?

1.5 Research Problem

Currently, a concern about overdiagnosis has been raised. (So et al., 2020) has stated that early detection through the screening process may lead to overdiagnosis that significantly may need more unnecessary investigations such as radiation therapy and prostatectomy. As a result, the

current rules and procedures of prostate-specific antigens are widely used. The conflicting result from different trials has shown that potential harm is directly related to the screening algorithm. Guidelines of clinical practice regarding prostate screening have shown the crucial role of patient preference. In terms of this preference, (Kinsella et al., 2018) have concluded that different factors such as personal, social, and healthcare providers play a vital role in uptaking prostate screening cancer. While analysing the uptake rate among Black, Ethnic minority, and Asian men, it has been seen that the uptaking rate in these groups is different due to different factors. Thus, the main problem associated with prostate screening cancer uptake is different factors. This is the main problem behind the conduction of this study. This study aims to identify possible factors among the above-mentioned groups. In order to solve this problem, all of these factors have been identified and evaluated to provide a suitable solution to solve the problem.

1.6 Research Rationale

It has been seen that screening for prostate cancer significantly reduces the 20% of deaths due to prostate cancer. This screening stage is also related to an increased diagnosis of “early-stage prostate cancer” and reduces the chance of moving into the advanced stage along with high survival rates. Furthermore, a lower uptake rate of prostate cancer screening is associated with more acute disease presentation among “African American men” (Lehto et al., 2010). The optimum risk group mortality and morbidity are reflective of insufficient knowledge regarding prostate cancer and the significance of early screening and treatment for aggressive disease. Regarding prostate screening, patients are not able to make decisions due to several factors such as lack of knowledge, family history, insufficient support, education, and other personal and social factors (Kinsella et al., 2018). Based on these influencing factors, it is essential to recommend sufficient information about chronic prostate cancer” such as African American

and Asian Ethnic minority men with sufficient information regarding prostate cancer screening by their prescribed physicians. This will allow each patient to make “informed personal healthcare decisions” (So et al., 2020). Thus the main rationale of this research is to provide information about associated factors that influence the uptake of prostate cancer screening among Asian, Black, and Ethnic minority men. This research will help to increase awareness about uptaking prostate cancer screening by providing solutions to overcome associated factors.

1.7 Significance for Evidence-Based Practice

It has been understood that evidence-based practice significantly includes the association of the appropriate existing evidence, patient values as well as circumstances and clinical expertise related to the patient. This helps both healthcare professionals and patients to make informed decision making. There are three components of evidence-based decision best available: evidence, skills, and knowledge of clinicians as well as patient preference and demands. As the aim of this study is to evaluate related factors with uptaking prostate cancer screening, this study can help in making evidence-based decisions by providing sufficient knowledge and solution (Young et al., 2018). The collection of literature and identification of reliable factors will provide the best available evidence. Critical analysis of different factors among Asian, Black, and ethnic minority men will help to improve the common barriers in uptaking “prostate cancer screening”. Through the information and evidence of this research, patients will be able to increase their knowledge and benefits of prostate cancer screening. This will help them to know the need for uptaking prostate cancer screening.

Chapter 2.0: Methodology

2.1 Introduction

This study has focussed to identify and evaluate associated influencing factors in “prostate cancer screening uptake”. Thus it is essential to provide appropriate information and make that evidence and information more accessible to decision-makers. So, the selection of appropriate research methods was necessary to complete this research. A systematic review method has been followed to complete this entire research and achieve the goal. Initially, all of the articles have been searched by developing relevant inclusion and exclusion criteria to increase accuracy. Achievement of the goal and objectives of this study has been done through the development of a reliable search strategy that includes a database, a range of years, search engines, a PEO framework, and peer-reviewed articles. While screening relevant articles, the PRISMA flow diagram has been used to screen only relevant and appropriate articles. CASP tool has helped to evaluate the quality of collected literary sources. In this way, the selected systematic review method has helped to conduct this entire study.

2.2 Selection of Method

The systematic review method has been considered to conduct this entire study over the scoping review. The main focus of the systematic review is to determine, evaluate and summarise the results of each study regarding a health-related issue. Furthermore, this method significantly makes the evidence easily accessible to decision-makers. The utilisation of systematic review attempts to "collate empirical evidence" from a small number of studies based on developed research questions. On the other hand, scoping reviews mainly focussed on presenting a brief overview of a large number of articles on a broad topic. Thus, it has been clearly understood that systematic review is more appropriate in making evidence-based decisions on healthcare-

related issues in contrast to scoping review. This is the reason for selecting systematic review over scoping review.

2.3 Justification of the Selected Method and Its Significance in Health Research

(Kinsella et al., 2018) has stated that a systematic review is a convenient evidential summary for healthcare professionals which acts as a powerful tool for the decisions of patient care. This method has been considered as a base for guidelines of "medical practice" recommending efficient ways for new research. This scientific review has been developed through different well-defined methods, this method has a crucial role in "evidence-informed healthcare" which refers to applying innovative treatments and therapies that are proven to be efficient for specific treatment by the quality and authentic research. Similarly, a systematic review in this study will help patients and healthcare professionals to know potential factors in "prostate cancer screening uptake". This will help to make evidence-based healthcare decisions regarding prostate cancer screening (Kinsella et al., 2018). However, healthcare professionals can not depend on a single study to make decisions in their clinical practice. The solution in this context is systematic review as this method provides a short informative summary of a specific topic and several benefits over narrative reviews. Thus, it has been understood that systematic review is one of the crucial methods in making evidence-based healthcare decisions. This is the reason for considering this method to conduct this study.

2.4 Identification of Search Terms

Initially, a complete research topic was followed to collect relevant literary sources but it was insignificant. The search results were not completely relevant and the PEO framework has been used for the further search process. The PEO stands for population, exposure, and outcome.

Table 1: PEO Framework

Population	Exposure	Outcome
Afro-Caribbean men		PSA
Asian men	Prostate cancer	PSA
Black men	Prostate cancer	early prostate cancer screening
Ethnic minority men	Prostate cancer	Prostate cancer screening
Asian Ethnic minority men	Prostate cancer	PSA

The search terms have been addressed in the following table

Search phrase 1	African American men
Search phrase 2	Prostate cancer
Search phrase 3	Asian men
Search phrase 4	Asian ethnic minority men
Search phrase 4	Ethnic minority men
Search phrase 5	Prostate cancer screening
Search phrase 6	PSA (prostate-specific antigen)
Search phase 7	Factors associated with uptaking prostate cancer screening
Search phrase 8	Facilitators, barriers and Prevention or

	solution
--	----------

2.5 Final Research Question, Aim and Objectives

Research aim

The primary aim of this research is to identify the common factors that influence the screening of early prostate cancer and its uptake among Asian, Black, and ethnic minority men.

Research Objective

- To identify the possible causes of occurring prostate cancer in men
- To identify possible factors that influence the uptake of prostate cancer screening in African American men
- To identify factors that influence the uptake of prostate cancer screening in Asian men and Asian ethnic minority men
- To recommend a possible solution to uptake or participate in prostate cancer screening

Research Question

- How do different factors influence the uptake of prostate cancer screening?
- Why do Asian, Black and ethnic minority men show less tendency in participating in prostate cancer screening?
- Why do Asian men have less uptake rate of prostate cancer screening?
- How to improve the rate of prostate screening among Asian, black, and ethnic minority men?

2.6 Inclusion and Exclusion Criteria

Inclusion Criteria

- Randomised, quasi-randomized, and controlled trials of screening and no screening prostate cancer were included in this review

- All men who participate in the studies of “prostate cancer screening” were included in this review
- Ethnicity, age, and presence of lower urinary tract symptoms were included
- Studies with different interventions such as DRE, PSA, and transrectal ultrasound were also included
- Full texts were assessed between 2000-2023
- Only peer review journals were selected

Exclusion Criteria

- Patients with previous diagnoses and under treatment are excluded
- Studies without English were excluded
- Incomplete findings of studies were excluded
- Studies without any intervention were excluded

2.7 Search Strategy

2.7.1 Eligibility and Selection Criteria

This study has included both qualitative and quantitative studies that have followed focus groups and interviews that significantly elicited “perspectives of adult men” of any age with prostate cancer screening. In order to achieve a massive range of perspectives on different attitudes to screening, studies of adult men without any history of screening or already screened for prostate cancer by utilizing DRE or PSA were not included. Studies published from 2000-2023 were identified through a systematic approach of different electronic databases. As this entire research was based on a specific group of men, the PEO framework has been utilized to determine relevant articles prior to initiating the systematic review process. The utilization of a few essential search terms has helped to explore relevant information in less time. Initially,

titles and abstracts of searched articles were properly studied but it was comparatively time-consuming after that key search terms were used.

2.7.2 Data Sources and Searches

Initially, the time range was set between 2000-2023. In order to conduct this research, a total of six databases have been searched. These databases are Embase, Pubmed, British Journal of Nursing, PsycINFO, “Cumulative Index to Nursing and Allied Health Literature (CINAHL)” and Google Scholar. While searching, titles and abstracts of searched results were screened, and those studies were excluded that did not meet the selection criteria. Full texts were assessed of remaining articles through the utilization of the PRISMA flow diagram.

2.8 Critical Appraisal and Risk of Bias

Critical appraisal of methodological quality and risk of bias of included literary sources has been performed by the following CASP tool. Through the CASP tool, the accuracy of qualitative data sources and analytical processes has been assessed. The context and study sets have been also assessed. The utilization of this CASP tool has significantly helped to systematically assess the relevance, trustworthiness, and results. The quality assessment of the included literary sources has been developed in the following table.

Question	Author									
	So et al., 2014	Mandair et al., 2014	Kinsella et al., 2018	Lehto et al., 2010	Rogers et al., 2017	James et al., 2017	Young et al., 2018	So et al., 2020	Powell, 2011	Cheng et al., 2009
Did the	Yes	Yes	yes	yes	yes	yes	yes	yes	yes	yes

review address a clearly focused issue?										
Did the author utilise an accurat e method to address researc h questio ns?	yes	yes	yes	yes	yes	yes	yes	yes	yes	Yes
Did the author include relevant studies?	yes	yes	yes	yes	yes	yes	yes	No	yes	No

Assignments Help Provider

Did the author dedicate a means to bias?	yes	yes	yes	yes	no	yes	yes	yes	yes	yes
Have the authors taken potential factors in the analysis and design?	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Are the results precise?	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Do the results fit with	yes	yes	yes	no	yes	yes	yes	yes	yes	no

other existing evidence?										
What are the comprehensive results of the review?	Health professionals have a direct relationship with the uptake of PSA TESTING	Consuming dietary fat, red meat and milk should be reduced as it increases the chances of prostate cancer	There are different factors that influence men's preference and "adherence to active surveillance" on different levels. Common factors are social	African American men can make more than 50 years have more tendency to participate in the screening process	Social support is highly related to the uptake of CRC screening while racism and masculinity are comparatively less	There is a direct relationship between patients and health care providers in screening uptake in the UK	Men show interest in participating in "prostate cancer screening" due to the support of health care providers	Low (40%) uptake rate of "prostate cancer screening" among Asian ethnic minority men"	Familial history of prostate cancer are at high risk of being detected with prostate	Socioeconomic status is not only responsible for prostate cancer among American men. Age and ethnicity are

			and family support as well as a healthcare organisation and health policy		related		and social networks		ate cancer	directly related to socioeconomic status and prostate cancer.
Can the result be applied to evidence-based decisions?	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes

Assignments Help Provider

2.9 Result of Search

The overall searching process searched a total of 900 articles and among them, 10 articles had been included in this study. Among these 900 articles, 500 articles were removed due to duplication as well as 55 articles were screened due to unclear titles and abstracts. 145 articles were removed due to the inclusion of patients with a previously screened history of prostate cancer. 120 articles were removed due to the inclusion of under-treatment patients and the rest of the articles were 80. After that it has been found that 30 articles had unclear findings, 25 articles had inappropriate information as well as a limited rigour of 15 articles. Finally, 10 articles were included to conduct this study.

2.10 Prisma Diagram

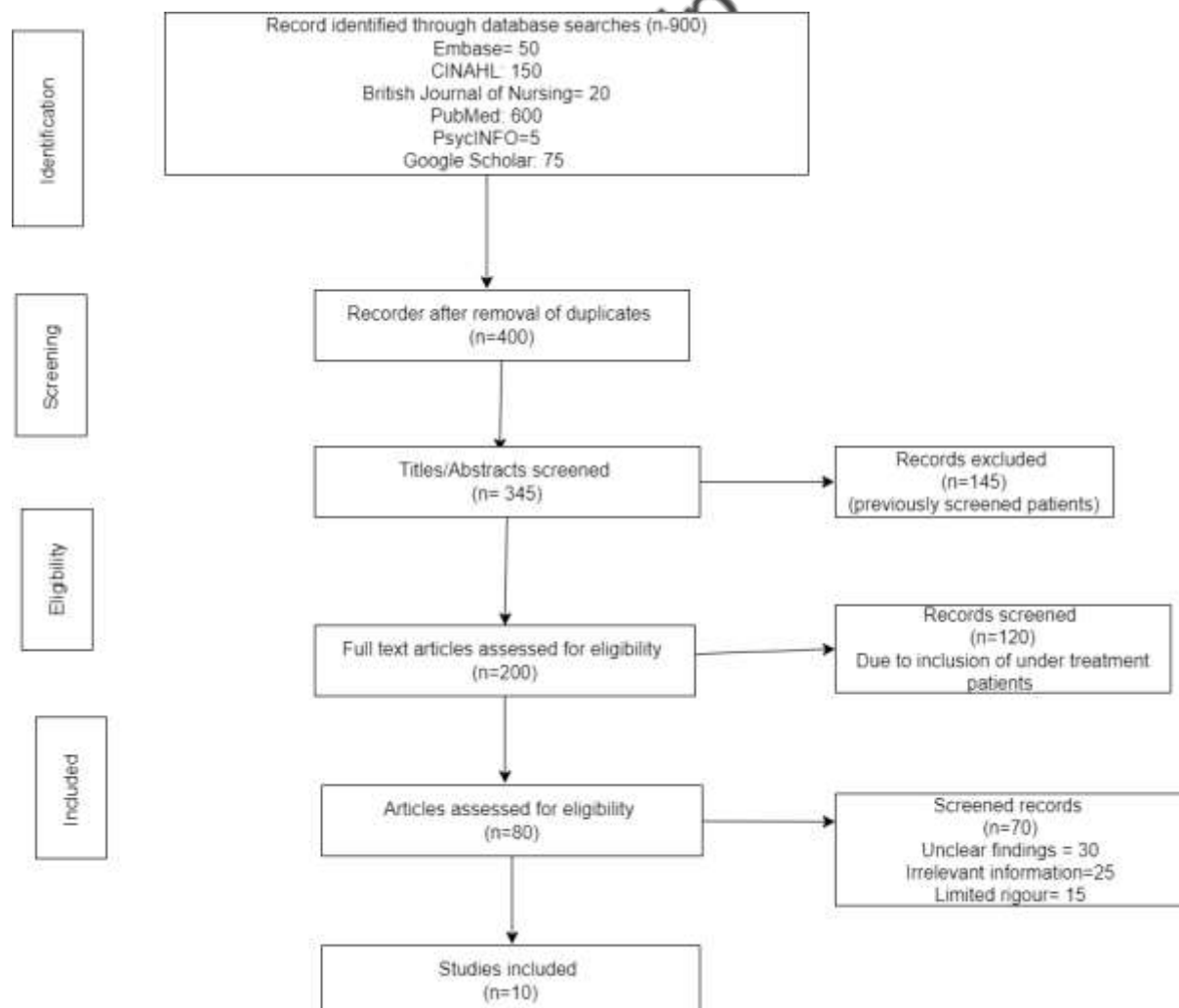


Figure: PRISMA Flow Diagram

Source: Self-made

2.11 Characteristics of Studies

(So et al., 2004) has conducted a population-based survey among Chinese men which includes 1002 men over the age of 50 or more than 50. This study has focussed to determine the uptake rate of prostate cancer screening and found a low uptake rate among the population due to a few potential behaviours such as the influence of health professionals.

(Mandair et al., 2014) has conducted a systematic review on the impact of dietary factors in increasing prostate cancer.

(Kinsella et al., 2018) has researched the uptaking of active surveillance. This research has evaluated a few potential factors such as patient level, characteristics of cancer, and others.

(Lehto et al., 2010) has conducted a descriptive cross-sectional study in identifying the influencing factor in uptaking “prostate cancer screening” among African American men. There are several prostate screening behaviours among black men that have been identified in this study such as education level, age, trust, and others.

(Rogers et al., 2017) has conducted a systematic review to identify the impact of different social and cultural factors in uptaking colorectal cancer screening among African American women. This has determined that racism, masculinity, and social support play an efficient role in uptaking colorectal cancer screening.

(Young et al., 2018) has conducted a meta-ethnography qualitative study based on all types of cancer in the UK population. In this study, the author has identified the significance of the patient and healthcare professional’s relationship in screening uptake.

(James et al., 2017) has conducted a systematic review of qualitative studies to evaluate men's tendency to prostate cancer screening. The findings of this study have suggested that men show

interest to participate in prostate cancer screening while they are supported or promoted through healthcare professionals and social networks.

(So et al., 2020) has conducted a mixed method study by recruiting 1547 patients in phase 1 and 34 participants in phase 2. It has been seen that South Asian ethnic minorities have reported that they faced different barriers in utilising cancer screening which resulted in low screening uptake. This study has depicted the factor influencing prostate cancer screening in Asian ethnic minorities men as well as Western ethnic minorities men.

2.12 Data Analysis or Synthesis Methodology

As this entire research is qualitative, thus it is necessary to bring useful and informative results rigorously and methodically. Being qualitative research, it was realised that data analysis should be conducted in a consistent, precise, and exhaustive manner. Data analysis is one of the most difficult phases of qualitative research. Data analysis in a systematic way can be transparently communicated to others. Due to this reason, a thematic analysis of qualitative research has been conducted. (Kinsella et al., 2019) has stated that thematic analysis needs to be a foundational method because it provides major skills for organising the different forms of qualitative analysis. The main reason for considering thematic analysis is that this method is very useful to summarise key features of a large dataset because it helps to maintain a well-structured approach to monitoring data. In this way, this study has produced organised and final research.

Thematic analysis is an efficient process of determining themes and patterns of qualitative data. There are six different steps in conducting thematic analysis. Each step has been followed in this research.

- Familiarisation with collected data
- Generating initial codes

- Generating themes
- Accurately reviewing every theme
- Explaining identified themes
- Write up

3.0 Results and Findings

3.1 Thematic Analysis

The initial step of conducting a thematic analysis is *familiarisation* with the data. It is important to ensure all the data that are taken are relevant to the research interest. To confirm this the collected research papers are reviewed before starting analysis and extracting insights from it. In the next stage, *coding* is conducted. The potential observations from the research papers are selected as a source text from specific studies then codes are generated from that sourced text. The qualitative data is prioritised to generate codes.

Contributing Studies	Source text	Generated Codes
(So et al., 2020)	<p>‘Physicians recommended for a PSA test</p> <p>‘Promoted signs and symptoms</p> <p>‘Regular body checkup scheduling encourages testing PSA’</p>	<ul style="list-style-type: none"> ● Healthcare Provider trust ● Health values
(Kinsella et al., 2018), (James et al., 2017)	<p>‘US CaPSURE database showing active surveillance</p>	<ul style="list-style-type: none"> ● Socio-economic status

	<p>in prostate cancer</p> <p>'Anxiety and depression in men predicting poor health-related quality of life</p> <p>'Less engagement of younger generation in health decision making</p>	<ul style="list-style-type: none"> ● Age ● Fear of side effects ● Health policy ● Family support ● Social support
<p>(Lehto et al., 2010), (So et al., 2020)</p>	<p>'African American men are likely less engaged with a screening of prostate cancer</p> <p>'American College of Preventive Medicine is not suggesting PSA as a routine screening test in general populations'</p> <p>'Relationships and interdependence of environment perceive stressful conditions</p>	<ul style="list-style-type: none"> ● Education ● Healthcare behaviour ● Marital status ● Health system policy
<p>(Mandair et al., 2014)</p>	<p>'Red meat, processed meat and well-cooked meat is related with increased risk of prostate cancers'</p> <p>'Many confounding factors,</p>	<ul style="list-style-type: none"> ● Dietary factor ● Healthy supplements intake

	<p>heterogeneity, and environmental factors also contribute to low risk of prostate cancer ’</p>	
<p>(Rogers et al., 2017), (Mandair et al., 2014)</p>	<p>‘Screening uptake is considerably low in African American Men’</p> <p>'Association at the societal level, relationships and types of support influences health outcomes</p> <p>‘Behavioural factors also contributed to morbidity and mortality disparities ’</p> <p>'Healthcare-related racism and racial discrimination is also a leading cause of routine preventive screening'</p>	<ul style="list-style-type: none"> ● Lack of health awareness ● Lack of health education ● Influence of societal network ● Diet and physical activity ● Socio-economic discrepancies
<p>(James et al., 2017)</p>	<p>'Preparing for screening for prostate cancer is dependable on psychological factors</p> <p>‘Invasive procedure of screening is often anticipated</p>	<ul style="list-style-type: none"> ● Social support ● Decisional confidence ● Preserving masculinity

	with loss of personal dignity and compromisation with masculinity' 'Lack understanding of symptomatic obscurity'	<ul style="list-style-type: none"> • Avoidance of unknown uncertainties
(Young et al., 2018), (Rogers et al., 2017)	'Screening decisions are often influenced by visual symptoms of the disease 'Social deprivation, ethnicity and are some important social determinants influencing uptake of screening decision' 'Psychological motivation also playing a role in screening decision'	<ul style="list-style-type: none"> • Inabilities in decision making • Social deprivation • Gender • Ethnicity • Lack of knowledge • Embarrassment • Psychological motivations

The above table shows generated codes for thematic analysis. All the codes are generated from the analysis of qualitative text from authorised and scientific studies. The codes are further used to identify patterns. Several codes are combined to generate a single theme. In this stage of thematic analysis, *multiple themes will be generated* using all the codes to identify the potential factors that are influencing prostate cancer screening decision-making of Asian, African American and Ethnic minority males.

Generated Themes	Codes
------------------	-------

<p><i>Socio-cultural influences in the decision-making of prostate cancer screening</i></p>	<ul style="list-style-type: none"> ● Socio-economic status ● Family support ● Social support ● Influence of societal network ● Socio-economic discrepancies ● Social deprivation ● Ethnicity ● Embarrassment ● Lack of health education ● Marital status
<p><i>Behavioural influences preventing PSA Screening</i></p>	<ul style="list-style-type: none"> ● Age ● Fear of side effects ● Education ● Preserving masculinity ● Lack of health awareness ● Diet and physical activity ● Decisional confidence ● Avoidance of unknown uncertainties ● Gender ● Inabilities in decision making ● Psychological motivations
<p><i>Healthcare behaviour determining routing screening of PSA screening</i></p>	<ul style="list-style-type: none"> ● Healthcare Provider trust ● Health values ● Health policy

	<ul style="list-style-type: none"> ● Lack of health awareness ● Lack of health education
<i>Dietary habits act as a catalyser of prostate cancer</i>	<ul style="list-style-type: none"> ● Dietary factor ● Healthy supplements intake ● Diet and physical activity

The generated themes include “*Socio-cultural influences in the decision-making of prostate cancer screening*”, “*Behavioural influences preventing PSA screening*”, “*Healthcare behaviour determining routing screening of PSA screening*” and “*Dietary habits act as a catalyser of prostate cancer*”. Rereviewing the used code for themes it can be assured that the codes are represented accurately.

Reviewing the names of generated themes it is identified that the second theme needs to be reformulated to describe it more accurately, the better name for the second theme is decided as “*Personal attribute influencing PSA screening*.” In the next step, the themes are analysed to address the predefined research questions of this research.

Theme 1: Socio-cultural influences in the decision-making of prostate cancer screening

The theme identified impacts of socio-cultural factors that affect screening behaviours in specifically African and American men. The social-cultural framework indicates the level of education, social network and status influencing screening behaviour. The cultural influences barrier largely deals with threats to masculinity. It is observed that social promptings such as family motivations, social support, and physician support often facilitate screening decisions. Men with poor socio-economic conditions are often observed to make screening decisions depending upon their socioeconomic status. Social factors such as support and prompting facilitate screening decisions by increasing the vicinity of the disease and its pernicious consequences collectively. It has been obtained that trust in professionals' opinions and

treatment options fosters a cure for prostate cancer via early screening. On the other hand, (Young et al., 2018) evaluated that factors such as social deprivation, ethnicity and gender are some crucial determinants in uptaking screening decisions. The decline in positive social attitudes juxtaposed with the development of negative psychological barriers to cancer treatment preventing the uptake of screening. Another socially influenced barrier is emerging within social norms manifesting negative notions about PSA testing. The factor embarrassment of having a PSA test is another social orthodox and potential barrier to less accessibility of routine screening and well-being.

Theme 2: Personal attribute influencing PSA Screening

Social-ecological dimensions greatly influence the personal attributes of individuals in their clinical decision-making. The study examines Asian, African American and Ethnic minorities screening decision-making. It indicates at a personal level, relationship factors, and interdependence of environment influence PSA screening behaviour. Age is considered as an important factor in determining screening for prostate cancer. It acts in both roles such as facilitator and barriers. Distinctly, older men are likely more engaged with screening than younger men (Kinsella et al., 2018). Additionally, fear of side effects has been captured as another leading cause of showing contradiction to having screening and receiving radical treatment. Most of the patients are afraid of invasive screening to ignore the potential harm of treatment. This factor is also interconnected with persevering masculinity. It is obtained that men who did not experience the procedure are fearful about the procedure and about the consequences of screening. The major concern related to masculinity and manhood is another factor that leads to reluctance in screening. Where some men are not well acquainted with the adverse consequences of this dangerous disease. The absence of symptoms and perceptible health complexities often results in ignorance to have proper curative measures. Another taboo of cancer-related death is also a barrier to proper screening for the disease.

Theme 3: Healthcare behaviour determining routing screening of PSA screening

Although analysis of collected data it has been understood that healthcare behaviour and relationship with the healthcare providers is partially influencing in routine screening of PSA. (So et al., 2020) has examined that Asians are perceived health and wellness as their priorities. Factor such as good relationship with health professionals is positively associated with PSA testing. Recommendation from health professionals is influencing Asian men screening decisions (So et al., 2020).

It has been observed from the analysis that Asian Healthcare facilitates complementary health services, health insurance and policies that promote healthy behaviours to its population. Asian healthcare is concerned and established complementary therapies to promote and restore health. Therefore from the analysis the health value in Asian men is found to be higher than that of Black men and ethnic minorities. In contrast, African American are less engaged in routine screening and less accessible to healthcare. As per (Rogers et al., 2017) healthcare providers are not immensely engaged. Lack of established relationships might be a factor. It is observed that health providers' recommendation for screening age for African American men is different.

Theme 4: Dietary habits act as a catalyser of prostate cancer

In this analysis, dietary habits are considered to be a catalyser for prostate cancers. The rationale behind the identification of this theme is to identify the research objective of factors contributing to prostate cancer. Healthy diet and lifestyle are essential for health, quality of life and well-being. (So et al., 2020) observations also made light on the fact that maintaining a healthy diet and adequate physical exercise is helpful in managing prostate cancer. Behavioural factors also contribute to the dietary habits and lifestyle of individuals. It is obtained that morbidity and mortality disparities between the selected population can be determined based on dietary habits as well. It has been seen that an uncontrolled diet and less physical activity

increase the risk of development of prostate cancer. (Cheng et al., 2009) have evaluated socio-economic discrepancies influencing dietary habits in African Americans. However, the authors have clarified that the impact of socioeconomic burden can not be accounted for. However, the study finds out that despite low socio-economic disparities African Americans are mostly exposed to a high risk of prostate cancer compared to ethnic minority groups.

3.2 Implication of the Result

Analysing the theme it is understood that lower screening rates of aggressive diseases like prostate cancer among African American men categorise them into the highest risk group with increasing rates of morbidity and mortality. The reason behind this is estimated which directs several dimensions including personal, social and environmental attributes. Compared to Asian men, African American men are affected disproportionately by the negative consequences of prostate cancer. Observations from the thematic analysis help to determine socio-ecological factors that have a greater impact on screening behaviour among African American men specifically (James et al., 2017). The dominance of personal attributes in PSA screening decisions is highlighted throughout the analysis. Negative psychological emotions are one of the major factors that prevent men from routine testing. Findings show that African Americans and ethnic minorities are mostly exposed to behavioural risks of screening under the influence of personal attributes. While the socio-cultural barriers are prominent in preventing screening among minorities. The result identifies that social norms are acting as a major barrier to accessing proper screening for people. African American men mostly make decisions under the burden of social norms. When it comes to health-related concerns it is observed that Asian men are more concerned about the health-related complexities and its improvement. Empirical findings show that Asian men are more accessible to preventive healthcare facilities, higher trust level with clinical providers and have health awareness compared to African American

men. It has been obtained that men aged between 50-59 are more likely to uptake a prostate screening compared to that man with 60-79 age. Although it is a partial factor influencing screening uptake in different populations (Rogers et al., 2017), it still plays a major role in eradicating morbidity. The study analyses the behaviours of healthcare, health policies and insurance. It shows that health insurance has no positive impact on fostering screening decisions among African American men.

Analysing the barriers and potential factors that influence screening behaviours some solutions for this have also been analysed together. It has been analysed that eradication of potential barriers to the healthcare level will improve the screening method. Implementation of healthcare screening by establishing standards and metrics fosters good health and screening. The utilisation of complementary therapies in promoting and restoring health is beneficial. Increasing health awareness is another potential intervention to deal with the current challenges and social taboos. Throughout the analysis, the impact of social factors and their relation to changes in behavioural factors of people prevent them from taking advantage of the healthcare sectors to prevent aggressive diseases like prostate cancer. Concerning this an optimal solution is analysed. It is educating people about health along with promotion. Training healthcare providers to educate people during their check-ups, and promoting awareness about the benefits of early screening of disease and the risk associated with late diagnosis needs to be helpful (Kinsella et al., 2018). Increasing the level of health information sharing is also advantageous for ensuring integrity and more awareness towards health policies and complementary programs.

4.0 Discussion

Empirical findings of this research highlight several factors at a social, personal and external level that influences prostate cancer screening decision-making of selected populations such as

Asian men, African American men and ethnic minorities. Going through the findings it is understood that socio-cultural factors play a dominating role in determining the screening behaviour for all the population groups. Findings show that social support and social deprivation both contribute to decision-making. The study finds out motivations from family and friends certainly improve PSA screening decisions. (Kinsella et al., 2018) in their study also advocates the same. The study states it is often difficult to make non-invasive screening decisions alone but familial support is highlighted as one of the key facilitators that adhere to positive screening asiding fear of positives or negatives (Powell, 2011). However, this study also shows some similarities in the context of family support. It showed some times pressure from family and friends compelled the patients to perform a PSA screening, close to radiation. Throughout the study societal factors such as social discrimination, embarrassment and other orthodox social norms also prevent patients from screening. The study finds out that uptake of prostate cancer screening is comparatively low in African American men compared to Asian men, behind such socio-ecological factors have been identified. The study has obtained factors such as the influence of societal networks, and socio-economic disparities that play a major role in this. The study conducted by (Rogers et al., 2017), is showing relevance in this context specifically. The authors have evaluated the suboptimal influences of cancer patients' decision-making for preventive health behaviour with exposure to race and racism. The findings showed that African Americans are likely to face healthcare-related racism which considerably acts as a barrier to their routine preventive screening (Rogers et al., 2017). Not merely that the authors have identified perception of racism has become a centre point and also a particular social determinant in health disparities for the socio-economically disadvantaged Black population. This evidence is used as it supports the analysis of this imperative study justifying the results. The social factor also involves marital status in this study. The authors (So et al., 2020) have mentioned this factor as a common predictive factor for screening intentions among the Asian

populations but not emphasising its impacts. However, the authors (Lehto et al., 2010) show dissimilarities with (So et al., 2020) and identified that marital status affects prostate cancer screening decisions in African American people.

Besides sociocultural and socio-ecological factors this research broadly recognised the impacts of personal attributes in screening for prostate cancer. Reanalysing the results it has been observed that factors contributing to personal attributes are crucial in determining screening behaviour for Asian men, African American and Ethnic minority groups as well. From the concise findings of this research, it has been perceived that African American men have lower screening rates for PSA compared to Asian men due to differences in personal attributes, which is also supported by (Lehto et al., 2010). Behavioural risks in the Black and minority groups have been identified in this study which also indicates the factor of preserving masculinity, lack of education and health-related knowledge. This study broadly identified the factors that are contributing to personal attributes including decisional confidence, personal dignity, masculinity, psychological motivation and less knowledge of uncertainties or negative consequences at a later time. Evaluation (Young et al., 2018) has endorsed similar throughout their qualitative research work. The authors have revealed that behaviours and notions of screening for prostate cancer are poorly conceptualised in the Black population and ethnic minority groups. The authors also highlight that the lack of engagement with healthcare professionals is another key reason for it (Young et al., 2018).

Observations from this formative paper and its consolidated findings have evaluated a partial factor that also has acute influences on PSA screening motivations. However, it is considered because it helps to simplify the observation of health disparities between the populations. From the study, it is obtained that education and health policies are not impacting screening decision-making in African American men (Young et al., 2018). On the other hand, it is obtained that maintaining good relationships with health professionals and awareness of health-related

policies among Asian men influences their positive decision-making abilities for prostate cancer screening, in relevance to observations (So et al., 2020). Apart from that the study also advocates the essence of a healthy diet and physical activities in managing aggressive diseases like prostate cancer. The dietary intervention of the black population is less consumption of vegetables and more leisure without any physical activities increasing their risk of prostate cancer (Rogers et al., 2017).

5.0 Conclusion

It has been determined that the early identification of “prostate cancer” reduces the risk for acute disease and increases the chances of long-term survival. This systematic review has focussed to identify the influencing factors in “prostate cancer screening uptake” among Asian, Black, and ethnic minority men. From the findings of this study, it has been determined that socio-cultural factors and healthcare insurance play a crucial role in the decision-making of prostate cancer screening among the black population. On the other hand, health professionals, policymakers, and personal attributes have a significant impact on the decision-making process of prostate cancer screening.

Link to objective 1

In order to identify potential factors of uptaking prostate cancer screening, it was essential to identify the cause of prostate cancer. (Powell, 2011) has cleared that family background of prostate cancer is a high-risk factor as well as African American ethnicity also significantly increases the risk. A history of “positive germline mutation” like BRCA1 and BRCA2 recommends an enhanced risk of prostate cancer and other different malignancies. (Mandair et al., 2014) has also stated that the chance of prostate cancer is high in African American men in contrast to Asian men due to the consumption of green tea. (Mandair et al., 2014) has depicted

the significance of dietary supplements in the prevention of prostate cancer. Thus, the information from these studies has helped to achieve the first objective.

Link to objective 2

While identifying the factors influencing black and African American ethnicity men, the findings of this study have shown that support from healthcare professionals and self-awareness are highly related to the “prostate cancer screening” related factors. Similarly, (Lehto et al., 2010) have stated that screening behaviours are not influenced by marital status, health insurance, and education level. In terms of African American men, family support and good relationship with healthcare providers and self-awareness plays a crucial role in “prostate cancer screening uptake”.

Link to objective 3

While achieving the third objective, it has been found that the findings of this paper have shown that recommendation from healthcare professionals and health insurance plays a crucial role in “prostate cancer screening uptake” among Asian and Asian ethnic minority men. Similarly, the author (So et al., 2014) has stated that unemployed patients have shown more tendency in participating in the screening process. This study has also stated that daily visits to doctors and suggestions from healthcare providers are two major factors in the “uptake of PSA” testing (So et al., 2020).

Link to objective 4

The findings of this study have stated that increasing awareness through sufficient information, education, and training is essential to increase the rate of uptake. Similarly, (So et al., 2020) have stated that the benefits of PSA testing should be informed to patients. (Rogers et al., 2017) has stated that different programs should be organised to increase the behaviour of positive health promotion among African American men. Insufficient knowledge and misconceptions about prostate cancer become the main barrier among the ethnic minority. Therefore, it is

necessary for “health professionals and nurses” to illustrate efficient communication skills at the time of interventions.

The knowledge of this study may help to increase the “uptake” as well as improve the efficiency of cancer screening.

5.1 Recommendation

The findings of this study have helped to develop the following recommendation to increase the “prostate cancer screening uptake” among men.

- People who utilised complementary therapy need to do regular visits to the doctor
- The health professional should recommend the patient to uptake the PSA test because this is a major factor
- Healthcare providers should take the responsibility of educating people regarding the benefits of early detection and cancer prevention
- Dietary factors are also responsible to stop the disease and patients should consume green tea to prevent the growth of malignancy
- Doctors should not prescribed vitamin and selenium supplements
- With the awareness program, training, and education it is necessary to develop speciality centers for an acute condition
- Healthcare providers and policymakers should understand the need of both Asian and African-American ethnic minorities
- Healthcare professionals should develop culture-based interventions for ethnic minorities
- Public healthcare workers and training should improve the primary care system by increasing knowledge on prostate cancer among local ‘ethnic minorities’.

5.2 Limitation

This study has depicted the most possible factors but did not include the role of social media to know the benefits of screening and preventing cancer. It is a major limitation because most people used to communicate through social networks currently. Included studies were published over a broad time frame (200-2023), thus there is a chance of not reflecting the current state of the uptaking rate. Another limitation is the selection of a systematic review because it includes only limited literary sources and is not able to strengthen the evidence. Another limitation is that 90 % of studies were American and Asian and UK, thus the explained healthcare systems and conditions can not be generalizable to other nations. Another limitation is that this study did not analyse the significant role of the church environment in increasing “positive health values” and patient behaviours.

5.3 Future Direction

Future research needs to evaluate the effect of socio-cultural factors in influencing “prostate cancer screening uptake” among American African men. Future research should follow the quantitative method in order to identify specific barriers in specific population groups. This will help to solve the problem more efficiently. Therefore, this study suggests future work to achieve an understanding of the thinking of specific men groups about overdiagnosis. As the suggestion of a clinician is important, future research is required to promote “shared decision-making” regarding prostate cancer screening. Future research about shared decision making not only be limited to shared decision-making but also should focus on the process of generating decisions, providing information about the procedure and related benefits and drawbacks as well as attitudes and emotion of the patient towards the process of decision-making. This will help to identify the appropriate practices in order to disseminate the intervention of shared decision-making.

References

- Cheng, I., Witte, J. S., McClure, L. A., Shema, S. J., Cockburn, M. G., John, E. M., & Clarke, C. A. (2009). Socioeconomic status and prostate cancer incidence and mortality rates among the diverse population of California. *Cancer Causes & Control*, *20*, 1431-1440.
- James, L. J., Wong, G., Craig, J. C., Hanson, C. S., Ju, A., Howard, K., ... & Tong, A. (2017). Men's perspectives of prostate cancer screening: A systematic review of qualitative studies. *PloS one*, *12*(11), e0188258.
- Kinsella, N., Stattin, P., Cahill, D., Brown, C., Bill-Axelson, A., Bratt, O., ... & Van Hemelrijck, M. (2018). Factors influencing men's choice of and adherence to active surveillance for low-risk prostate cancer: a mixed-method systematic review. *European urology*, *74*(3), 261-280.
- Lehto, R. H., Song, L., Stein, K. F., & Coleman-Burns, P. (2010). Factors influencing prostate cancer screening in African American men. *Western Journal of nursing research*, *32*(6), 779-793.
- Mandair, D., Rossi, R. E., Pericleous, M., Whyand, T., & Caplin, M. E. (2014). Prostate cancer and the influence of dietary factors and supplements: a systematic review. *Nutrition & metabolism*, *11*(1), 1-11.
- Powell, I. J. (2011). The precise role of ethnicity and family history on aggressive prostate cancer: a review analysis. *Archivos espanoles de urologia*, *64*(8), 711.
- Rogers, C. R., Mitchell, J. A., Franta, G. J., Foster, M. J., & Shires, D. (2017). Masculinity, racism, social support, and colorectal cancer screening uptake among African American men: A systematic review. *American journal of men's health*, *11*(5), 1486-1500.
- So, W. K., Choi, K. C., Tang, W. P., Lee, P. C., Shiu, A. T., Ho, S. S., ... & Chan, C. W. (2014). Uptake of prostate cancer screening and associated factors among Chinese men aged 50 or more: a population-based survey. *Cancer biology & medicine*, *11*(1), 56.

So, W. K., Law, B. M., Choi, K. C., Chan, D. N., & Chan, C. W. (2020). A mixed-method study examining cancer screening uptake among South Asian ethnic minorities in Hong Kong. *Asia-Pacific Journal of Oncology Nursing*, 7(1), 12-17.

Young, B., Bedford, L., Kendrick, D., Vedhara, K., Robertson, J. F. R., & das Nair, R. (2018). Factors influencing the decision to attend screening for cancer in the UK: a meta-ethnography of qualitative research. *Journal of Public Health*, 40(2), 315-339.

Assignments Help Provider