

The Impact of Prostate Cancer Education in African American Men

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Introduction

- Prostate cancer is a prevalent malignancy among males in the United States, with an approximate 11% probability of diagnosis and a 2.5% risk of mortality (US Preventive Services Task Force, 2018).
- Mortality among African American males (AAM) diagnosed with prostate cancer is about two to four times higher than any other race or ethnic group (Siegel et al., 2023).
- African American men are at higher risk than any other race of developing aggressive prostate cancer at a younger age (Coughlin et., 2021).
- Despite the higher risk of prostate cancer, AAM have the lowest propensity for undergoing screening for this malignancy(Woods-Burnham et al., 2018).
- Current USPSTF guidelines recommend that PSA screening should occur only after provider and patient discussed prostate cancer and screening risks (USPSTF, 2018).
- Studies have shown that one of the barriers to PSA cancer screening among African American men is the lack of knowledge about the disease and screening (Coughlin et al., 2021).

What is Prostate Cancer?

(SYNLAB Nigeria, 2023)

Purpose & Conceptual Framework

- The purpose of this project is to perform a comprehensive literature review and synthesis in order to assess the current state of research pertaining to the effects of prostate cancer screening education specifically in African American men.
- The Stetler Model was beneficial in evaluating research and effectively translating the results into clinical use.

PICO

- In African American men, how does prostate cancer education by advance practice providers, impact PSA-screening?

Methods

- A comprehensive study of the literature was completed from July to November 2023.
- The literature search for this project incorporated the utilization of CINAHL Complete, Medline Complete and PsycInfo databases.
- Search terms used were ('Prostate cancer screening', and 'African American men', or 'black men' and 'education').
- Inclusion Criteria: Peer-reviewed studies published in English within the last seven years; African American men over 18 years of age; Performed in the United States.
- Exclusion Criteria: Did not involve provider education; involved treatment; and involved non-PSA screening methods.
- The initial search produced 528 results. (Revised)For the initial search criteria, a total of 7 articles were identified. The articles include one randomized control study (Carlson et al., 2021), four quantitative pre/post survey cohort studies (Adams et al., 2020; Choi et al., 2018; K Dhillon et al., 2019; Troy et al., 2022), a qualitative prospective cohort study (Shungu & Sterba, 2021) , and a mixed methods instrumental case study design (Henderson et al., 2022).

Results

- All studies found that the participants improved their knowledge of prostate cancer when education given by a provider (Adams et al., 2020; Carlson et al., 2021; Choi et al., 2018; Henderson et al., 2022; K Dhillon et al., 2019; Shungu & Sterba, 2021; Troy et al., 2022).
- Posttests from studies demonstrated increased knowledge after education sessions, with an average of 79% throughout the studies (Adams et al., 2020; Carlson et al., 2021; Choi et al., 2018; Henderson et al., 2022).
- Five studies showed that when providers educate AAM about prostate cancer, the chance of them getting a PSA screen increases, in an average among studies, approximately 80% of AAM made the decision to have PSA screening after an education session (Adams et al., 2020; Carlson et al., 2021; Choi et al., 2018; K Dhillon et al., 2019; Troy et al., 2022).
- The major concern among all studies was the increase of prostate cancer among AAM; and the low rates of PSA screening among this group due to lack of knowledge (Adams et al., 2020; Carlson et al., 2021; Choi et al., 2018; Henderson et al., 2022; K Dhillon et al., 2019; Shungu & Sterba, 2021; Troy et al., 2022).

INCREASE IN KNOWLEDGE RESULTS

Adam, 2020	Carlson, 2021	Choi, 2018	K Dhillon 2019	Henderson, 2022	Shungu, 2021	Troy, 2022
Improved	80% improvement in scores	71.8% improvement in scores	81% improvement in scores	100% believed education was beneficial	AAM state knowledge was increased	Increase in accuracy of responses +3

DECISION TO SCREEN AFTER PROSTATE CANCER EDUCATION

Adam, 2020	Carlson, 2021	Choi, 2018	K Dhillon 2019	Henderson, 2022	Shungu, 2021	Troy, 2022
81%	86%	88.6%	n/a	80%	n/a	70% after speaking to PCP

Implications for practice

- With the incidence rate of prostate cancer among AAM, it is imperative that providers identify ways to educate about prostate cancer and PSA screening.
- Providers can improve the education and impact prostate cancer by being proactive and staying up to date with most current education and guidelines regarding prostate cancer and PSA screening.
- Within their practice, providers can create reminders in the file of patients considered high-risk so that an appointment can be made to discuss the topic, rather than trying to get the information during other visits, which would be beneficial in addressing the problem.
- As providers, educating all patients regarding screenings is imperative. Prostate cancer is among the most common cancers in males (Carthon et al., 2021), and the screening for patients should be an informed decision. Providers have the responsibility to educate the patients on any potential problems they may be at risk.

Recommendations

- Most of the studies were conducted in small rural areas in Georgia, Ohio, or South Carolina (Carlson et al., 2021; Henderson et al., 2022; K Dhillon et al., 2019; Troy et al., 2022). Attitudes and knowledge of AAM in other urban areas may be different.
- The sample sizes were very small, with the smallest being 10 participants and the largest being 149 (Carlson et al., Henderson et al., 2022;), which may indicate that AAM are reluctant to participate in studies; and the applicability of rural areas may not apply to a group in urban areas.
- To create more reliable systematic reviews more provider focused randomized control studies are needed, and it would be of great advantage to have more studies in areas that are urban and rural to make a better assessment of the situation.

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