



Uptake of Prostate Cancer Screening and Associated Intra-Personal Factors among Men Aged 40-69 Years: *A cross-sectional study in a rural community in Kenya*

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Summary

INTRODUCTION

Prostate Cancer (PC) is mostly asymptomatic despite mortality rate highly dependent on early diagnosis and treatment which might have been hindered by existing barriers. By the year 2018, PC ranked second globally among the most diagnosed cancers in males attributing to 13.5% of deaths. Disparities existed regarding the mortality rates of PC with a slight predominance in blacks compared to other races. The level of PC screening in Kenya like any other Sub-Sahara African country was terribly low [2-,10]. A community-based study carried out in a rural area reported only 2.4% of the participants had been screened, while in the capital city of Kenya (Nairobi City County), only 4.1% of the respondents had ever been screened.

OBJECTIVE

The aim of the study was to determine the intra- personal factors influencing uptake of prostate cancer screening among men aged 40-69 years in Kiambu County, Kenya.

METHODOLOGY

In April 2019, the study adopted a descriptive cross-sectional survey design in Kiambu County. A total of 576 men aged between 40-69 years except those already diagnosed with prostate cancer from the Community units within Gatundu North and Kiambu Sub- counties were recruited. Data was collected through an interviewer-administered questionnaire. It was coded, cleaned and analyzed using Statistical Package of Social Sciences (SPSS) version 22. Bivariate analysis with Pearson's chi -square test was used to compare the proportions. A P-value of <0.05 was considered statistically significant at 95% Confidence Interval. The significant variables were then subjected to Multi-variate logistics regression for further analysis of the association with uptake of screening of Prostate Cancer. Participant's autonomy and anonymity was maintained, and any information shared by them was confidential.

RESULTS

The level of screening was low. Only 5% of the respondents had ever been screened for prostate cancer. Socio-demographic factors were not associated with prostate cancer screening but Socio-economic factors made an impact. Owning 1-3 acres of land was significantly associated with screening. Respondents who owned 1-3 acres were 15 times more likely to take up screening in comparison with those having less than 1 acre of land. [OR =15.672 CI 95% (1.256- 195.47) P=0.033]



CONCLUSION

The level of prostate cancer screening was low. Socio-economic factors were found to influence uptake of prostate cancer screening. Socio-economic factors when designing prostate cancer prevention programs need to be emphasized. Prostate Cancer screening remained a controversial issue due to the documented risk of over diagnosis and harm associated with biopsy and treatment in developed countries.

RECOMMENATIONS

An early diagnosis of Prostate cancer will give an opportunity for treatment. Preventive Services Task Force report recommends the screening of men for PC among those considered at risk within the age of 40-69 years through shared a decision-making process.

Key words: Prostate cancer, Prostate-Specific Antigen, Screening, Kenya

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Introduction

Prostate Cancer (PC) ranks second globally, among the most diagnosed cancers in males and that attributed to 13.5% of deaths by the year 2018. Disparities existed regarding the mortality rates of PC with a slight predominance in blacks in comparison with men from other races. Prostate Cancer is the leading cause of death among men particularly in Sub-Saharan Africa and the Caribbean [1].

In Kenya, prostate cancer was ranked as the most common cancer in males at 17.3% with majority of men presenting for treatment in advanced stages of the disease [2]. This could be attributed to existence of barriers on seeking early diagnosis and treatment. Prostate cancer is mostly asymptomatic; hence the reduction in mortality is highly dependent on early diagnosis and treatment of the disease before its *metastasis*. Early detection through screening remains an important strategy to reduce mortality from PC among men.

Internationally, Prostate Cancer screening remained a controversial issue due to the documented risk of over diagnosis and harm associated with biopsy and treatment in developed countries [3]. Notwithstanding the controversy, black men who were at a higher risk would benefit from PC screening [4]. Nonetheless, the predominant agreement worldwide has been on the need to adopt informed shared decision-making during PC screening. The current guidelines in Kenya in line with the U.S.. Preventive Services Task Force report recommends the screening of men for PC among those considered at risk within the age of 40 -69 years through shared a decision-making process [2].

Mortality from prostate cancer has been on the decline in developing countries resulting from early diagnosis by screening and treatment. Hence, limited access to timely diagnosis was greatly associated with higher mortality rates among African men. Studies conducted in Sub-African countries reported low levels of screening among men. For instance, from a population-based study done in Nigeria, only 10.2% of Nigerian men had ever taken up screening [5]. Ghana reported only 10% of the respondents had undergone PC screening [6]. Similarly, Ugandan men, only 2.6% respondents had ever taken up PC screening [7].

The level of Prostate Cancer screening in Kenya like any other African country was terribly low [2,8,9,10]. A community-based study carried out in a rural community in Kenya reported only 2.4% of the respondents had been screened for PC [11]. Likewise, a study conducted in the capital city of Kenya (Nairobi City County), reported that, only 4.1% of the respondents confirmed having ever undergone PC screening [12].

Despite the current guidelines in Kenya recommending screening of men aged 40-69 years through informed shared decision -making process, the level of uptake remains low [2]. A population-based survey in Kenya concluded that 65% of Kenyan men were aware of prostate cancer. Despite the increase in awareness regarding prostate cancer, the level of uptake of screening remains incredibly low in Kenya like other developing countries [8].

Aim

The study sought to investigate salient factors that could be hindering the uptake of Prostate Cancer