

## Review Article

## Review of Prostate Cancer in Ghana

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**Abstract: Background:** Everyman has a prostate; but every prostate doesn't have to make a man's life miserable. The prostate gland is the 'powerhouse' of every man. Data from the Ghana Health Service shows that 3052 cases of cervical cancer were recorded in 2015 out of which 1556 died, representing 51 percent, breast cancer also recorded 2260 cases with 1021 deaths, representing 45 percent, prostate cancer has 912 cases being recorded with 680 deaths, representing 75 percent. This paper discusses the prostate cancer situation in Ghana compared to top gynecological cancers such as Breast and Cervical Cancer. **Method:** A review of the cancer mortality and incidence rate were conducted using search engines such as Google, PubMed with keywords such as prostate cancer, Breast and Cervical cancer. **Result:** The fatality rate result appears outrageous for prostate cancer in Ghanaian men toppling Breast and Cervical cancer with only 25% of men diagnosed with the disease survived in Ghana annually. **Conclusion:** Urgent National attention should be paid to the fatality rate in Ghana on prostate cancer. Awareness and national screening programs should be initiated early as possible with government support towards men's Health.

**Keywords:** Prostate cancer, Ghana, incidence, Mortality, National Intervention.

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## INTRODUCTION

Prostate cancer affects about 60% of black men. The Ghana Cancer Control Strategy plan document revealed the following incidences of prostate cancer in Africa: Ghana >200/100,000, Nigeria 127/100,000 and Cameroun 130/100,000. Data for prostate cancer in Ghana is ill-defined with late stage diagnosis with over 80% death. No project exists to reduce the high mortality rate in Ghana (Men's Health Foundation Ghana 2014).

Hsing *et al.*, 2014 performed a population based screening study with biopsy confirmation in Ghana. The research aims to estimate the prostate cancer burden in West African men. The study authors randomly selected 1,037 healthy men 50 to 74 years old from Accra, Ghana for prostate cancer screening with prostate specific antigen testing and digital rectal examination. Men with a positive screen result (positive digital rectal examination or prostate specific antigen greater than 2.5 ng/ml) underwent trans rectal ultrasound guided biopsies.

Their result revealed that of the 1,037 men 154 (14.9%) had a positive digital rectal examination and 272 (26.2%) had prostate specific antigen greater than 2.5 ng/ml, including 166 with prostate specific antigen greater than 4.0 ng/ml. A total of 352 men (33.9%) had a positive screen by prostate specific antigen or digital rectal examination and 307 (87%) underwent biopsy. Of

these men 73 were confirmed to have prostate cancer, yielding a 7.0% screen detected prostate cancer prevalence (65 patients), including 5.8% with prostate specific antigen greater than 4.0 ng/ml.

They concluded that in this relatively unscreened population in Africa the screen detected prostate cancer prevalence is high, suggesting a possible role of genetics in prostate cancer etiology and the disparity in prostate cancer risk between black and white American men.

After hepatocellular cancer, prostate cancer is the second leading cause of male cancer deaths in Korle Bu Teaching Hospital (Wiredu 2005). In 2009, 185 new cases of prostate cancer were diagnosed at Korle bu teaching hospital with 37 deaths. The number of prostate cancers reported has generally risen annually possibly due to earlier detection using the prostate-specific antigen (PSA) blood test, increased patient awareness, increased lifespan, and possible environmental factors.

The burden of prostate cancer is likely to increase with the ageing of the Ghanaian population, and this has major public health and economic implications. Evidence of early prostate cancer can be found at any adult age (WA *et al.*, 1996) but it is more common in men over 60 years of age (Yarney *et al.*,

2011). When it progresses and becomes more advanced, prostate cancer can kill men of any age.

Angela Culhane of Prostate Cancer UK 2016 article “Ignoring Prostate Cancer Won’t Beat It, Joining the Fight Will” drew my attention to the prostate cancer situation in Ghana. According to Angela, “Size definitely isn’t everything where the prostate is concerned. This little gland, hidden from sight just below the bladder, is only about the size of a walnut. But when it goes rogue, a man’s life can be over.”

Further, she said, “Surely men wouldn’t ignore the prostate if they knew what it could do to them. So why do they? Is it because the gland is invisible and out of sight is out of mind? Or that man doesn’t want to think about any problem below the belt? Or they don’t believe prostate cancer is a real problem because it doesn’t hit the headlines? Or perhaps the myth has taken hold that prostate cancer is a disease that men die with and not from.”

Ghanaians have ignored prostate cancer. Prostate cancer in Ghana appears as ‘no one care’ business! Interesting, a survey by the Korle-Bu Teaching Hospital has revealed in 2006 that Ghana has exceeded global prostate limits as the country records 200 cases out of every 100,000 men as against 170 worldwide.

This revelation was released by Dr Mathew Kyei, an Urologist, at a Ghana Health Service monthly

programme in Accra. According to the urologist, the situation called for immediate attention from the government and the public to reverse the trend (Modernghana 2007).

Speaking on the topic, "Cancer Disorders in Ghana", he said in 2006, 60 per cent of all cancers reported at the Korle-Bu Teaching Hospital were prostate cancers, adding that 27 people died from the disease in 2005 alone.

## DISCUSSION

In Ghana, though the statistics of cancers varies due to lack of well-defined national cancer registry to collate national figures. The few statistics available which is made public appears alarming with a high mortality rate. Though tremendous progress has been made with breast cancer, the mortality rate is not something to take away. The number of men dying from prostate cancer is outrageous based on figures available (fig 1).

Though advances in the diagnosis and treatment of breast cancer are paying off, increased funding could benefit prostate cancer. Recently, the Ghana News Agency reported that about 60,000 cancer cases are recorded annually. This was also attributed to report made known to the media by Dr Joel Yarney, the Head of the Medical Centre for Radiotherapy and Nuclear Medicine at the Korle-Bu Teaching Hospital

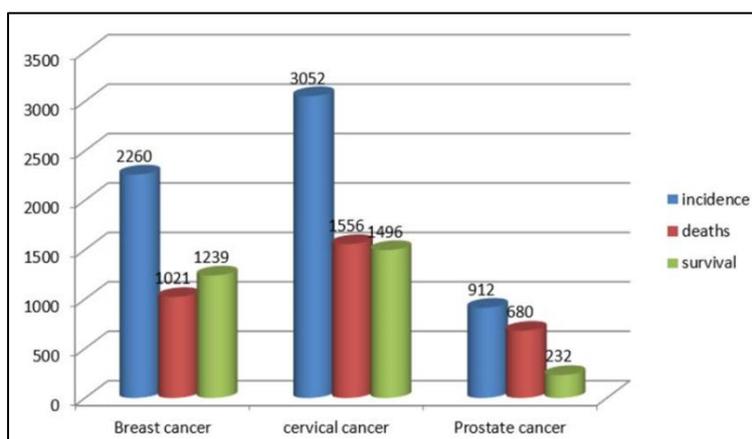


Fig. 1 more men die of prostate cancer annually than Breast and Cervical cancer according to data obtained from GHS 2015

A report from the Daily Guide newspaper also indicated that seventy percent of cancer deaths in Ghana could be prevented if healthy lifestyles are adopted and early detection is made, this was attributed to Dr Efua Commeh of the Non-Communicable Disease (NCD) Programme, Ghana Health Service (GHS). Dr Commeh indicated that of the 16,000 new cancer cases recorded yearly in the country, more than 44 percent results in deaths.

Data from the Ghana Health Service (Fig 1, fig 4) shows that 3052 cases of cervical cancer were recorded in 2015 out of which 1556 died, representing 51 percent, breast cancer also recorded 2260 cases with 1021 deaths, representing 45 percent, prostate cancer has 912 cases being recorded with 680 deaths, representing 75 percent.

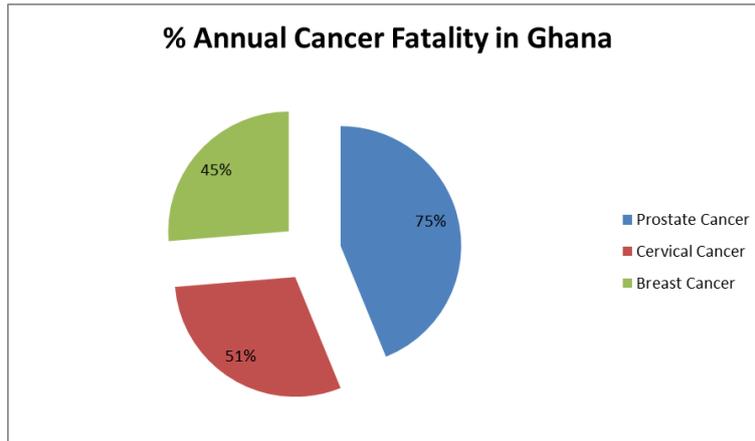
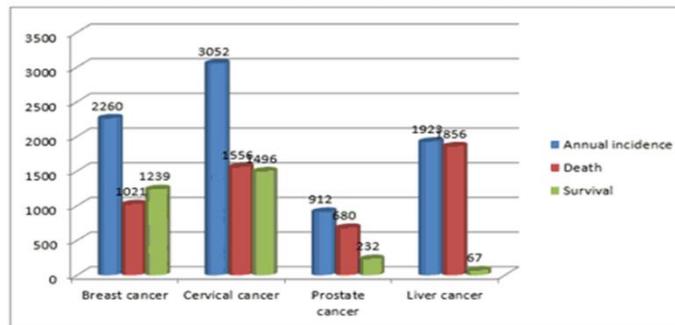


Fig 4. Comparing fatality: Prostate cancer topples Breast and Cervical Cancer

**Prostate cancer Mortality compared to Liver Cancer**  
 Liver cancer had the highest fatality (Fig 2, Fig 3) rate of 97 percent, claiming 1,856 lives out of

1923 cases recorded with 1,000 childhood cancers being recorded.

Liver cancer has poor survival rate in Ghana according data from GHS 2015.



Source: Raphael Nyarkotey Obu

Fig 2. More people now die from Liver cancer than any other cancer in Ghana. Ghana cancer deaths situation in 2015 according to statistics from Ghana Health Service

With liver cancer only 3% are able to survive it, 49% survive cervical cancer, 55% survive breast cancer and only 25% also do survive prostate cancer. This is very worrying as the country itself has no well-

defined national cancer register to be able to collate all the figures. This assessment is based on the Ghana Health Service data in 2015 published in the Daily Guide newspaper.

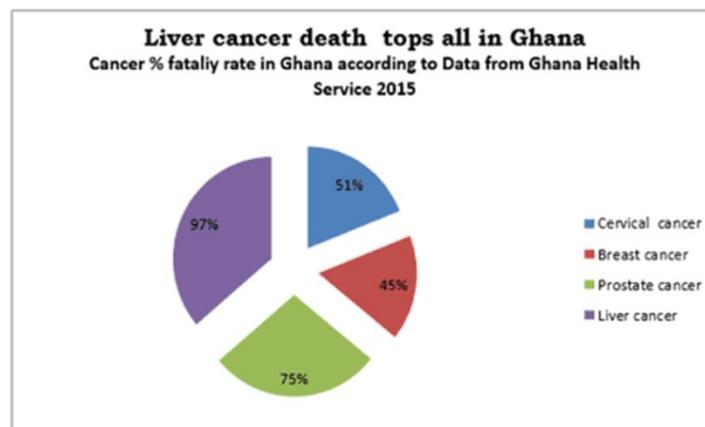


Fig 3. Source: Raphael Nyarkotey Obu

There is currently no effort to tackle the high mortality rates in the country. Prostate cancer is a major

problem in Ghana, yet fewer men receive regular screening. Incidence and mortality rates are among the

highest in the world, with the age standardized mortality rate from prostate cancer reported as being more than three times the global rate.

The reasons for these high rates include a lack of investment and weak governance in the recent past. Interestingly enough, there is only one active prostate cancer charity fighting the disease; Men's Health Foundation Ghana. The charity has become the national peak body of prostate cancer pushing for national policies. The problem with the charity has to do with funding and government support. The charity in 2016 pushed for the declaration of fathers' Day to become a national prostate cancer awareness day which is still at the implementation stage.

### **Challenges**

The country Ghana is limited with cancer centers and the treatment cost also being expensive. A lack of coverage for cancer treatment under the NHIS in Ghana makes it difficult for the less privileged to access and sustain cancer care at any stage of the disease. Counselling centers or quality of life care (QOL) support systems are virtually non-existent in all regions of the country and our cancer treatment centers. Post treatment support is a huge challenge to men diagnosed with prostate cancer dealing with managing side effects.

A lack of affordability for the treatment then results in high rates of treatment abandonment, which in turn leads to patients seeking traditional and other means of treatment from unqualified traditional and alternative practitioners. Records at the nation's cancer centers indicate that majority of cancer cases are presented late when the disease has reached terminal stages.

Many of these late presentations are attributed to factors such as inadequate or lack of cancer awareness and inability of most patients to finance their cancer care. As many advanced cancer cases are presented for treatment, palliative care and pain relief becomes very critical. At those stages, effective treatment of the condition eludes the hardworking cancer care professionals.

Ghana falls in the category of countries with less than 25 per cent of cancer patients able to access radiation treatment and with a population of over twenty nine million, out of these cases, more than half would require radiation therapy for treatment. However, not more than 5,000 new cancer cases are treated per year in the country's three radiotherapy centres. This leaves the country with an average shortfall of about 30,000 new cancer cases that would require radiation treatment yearly.

### **Cancer Treatment Centres**

In Ghana, The Ghana Atomic Energy Commission (GAEC), in partnership with the Ministry of Health, in order to address the national cancer

challenges established two national radiotherapy centres at the Korle Bu and Komfo Anokye Teaching hospitals, in assistance from the International Atomic Energy Agency (IAEA).

There is also one privately-owned Sweden Ghana Medical Centre (SGMC) Cancer Centre. The pathology units in the nation's major hospitals with these cancer treatment centers have contributed immensely to cancer care in the country over the years.

Data from International Atomic Energy Agency (IAEA) suggests that developed countries averagely have one radiation therapy machine per 250,000 populations. According to the 2017 IAEA publication, in high income countries, one radiotherapy machine is available for every 120 000 people. In middle income countries, one machine serves over 1 million people. In low income countries, about 5 million people rely upon a single radiotherapy machine. Ghana with a population of over twenty nine million has only three radiation centers.

In the wake of increasing cancer incidences in the country, challenges such as improperly coordinated cancer awareness programme, lack of dedicated cancer prevention and screening centres, inadequate medical imaging and cancer treatment centres, and over-aged cancer management facilities and equipment should be well addressed.

## **RECOMMENDATION**

### **National Intervention Needed**

From the statistics, though there have been public awareness on cancers, it appears the nation has lost control on the Prostate cancer situation on the mortality rate, and urgent national attention is needed to address this.

Interestingly, the ruling New Patriotic Party (NPP) led by President Akufo-Addo, in their 2016 manifesto promised a special cancer policy, the nation is yet to see any green light. The government in their manifesto also promised to recognize the increasing incidence of cancers (childhood cancers, breast cancer, cervical cancer, prostate and other cancers) as a national problem, establish centers at all levels of our healthcare delivery system for screening, diagnosis, early detection and prevention of these cancers, paid for under the restructured and revitalized NHIS. It is time for the government to take action on this campaign promise. Ghana needs a national cancer foundation to start addressing this cancer situation.

Among other measures, the country should embark on concerted effort to develop a better strategy for cancer control and invest in the setting up of well-equipped cancer centres for early detection, diagnosis, treatment and research to fully achieve the SDG 3 target by 2030.

The government has a big role to play in this and so are relevant stakeholders and the public at large. We can make it as a country if we set our priorities right and put our shoulders to the wheel.

The government in their one District One Factory project should incorporate free prostate cancer screening and awareness facilities in the regions to help educate men of the disease. Prostate cancer treatment should be incorporated into the National Health Scheme. There is urgent need for training of prostate cancer specialist nurses and other health workers to help address the challenges also.

## CONCLUSION

The author of this article is urgently calling on the government to us a matter of urgency constituents a committee to start addressing the Prostate cancer situation in the country.

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