

## Commentary

# An overview of the diagnosis and management of prostate cancer in Nigeria: Experience from a north-central state of Nigeria

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Prostate cancer was previously perceived to be low in Africa. Recent studies have shown that Africa has a high prevalence up to 300 per 100,000. This is close to that found among African Americans who have the highest incidence of prostate cancer in the world. In many African countries, prostate cancer is the leading cause of cancer among men. In many cases, it is closely following or even leading HIV related cancers such as cancer of the eye and Kaposi Sarcoma. The current article highlights this high incidence and several other elements related to its prevention, diagnosis and management which are peculiar to Africa, to such an extent that it is almost a different disease than that seen in developed countries.

## Epidemiology Review

The World Health Organization has estimated that the prevalence of prostate cancer in developing countries is 4%.<sup>[1]</sup> It is not among the top five causes of cancer in the developing countries according to WHO.<sup>[2]</sup> However, there is a feeling that the incidence has been underestimated particularly in Africa. Only few reports have dealt with the incidence of prostate cancer in Africa. In South Africa, the age adjusted incidence is 90 cases per 100,000. In Zimbabwe, the figure is 35 per 100,000 cases.<sup>[3]</sup>

In Nigeria, it has been shown that the age adjusted incidence approaches that of African Americans and Jamaica, at 300 per 100,000.<sup>[4]</sup> In Kampala in 1954 the incidence was 4.56% close to that in London of 5.46%. In Nairobi in a series of prostatectomy specimens, 8% were found to have cancer. In Tanzania at KCMC (Killmanjaro Christian Medical

Centre (KCMC), the figure was 8.9%. In Zimbabwe, 6% of all urology patients present with cancer of the prostate. In Uganda according to the cancer registry, prostate cancer is the second most common cancer after kaposi sarcoma; it makes up 9.6% of all cancers. In Zambia a review of urology patients over 10 years in the department of surgery, University Teaching Hospital Lusaka, prostate cancer made up 8% of all urology patients seen over the period. It is the most common cancer in the urogenital system and the third most common cancers among men.<sup>[5]</sup>

## Clinical Review

Prostate cancer presents in a younger age group in Africa, approximately a decade earlier, than it does in western countries, and the patients also present with advanced disease in over 70% of cases. There are generally no screening programs in Africa because of the perceived low prevalence, and in addition PSA testing is expensive and not widely available. There are less than 50 urologists outside South Africa and Egypt, according to the Pan African Urological Surgeons' Association (PAUSA). The World Health Organisation (WHO) recommends 1 urologist per 100,000 people. The diagnosis of prostate cancer is limited both by the non availability of ultrasound guided biopsy techniques and inadequate pathology services. Prostate cancer tends to progress more rapidly and Gleason score tends to be higher.<sup>[5,6]</sup>

## Management Review

The standard management protocols used in developed countries are expensive and not

commonly available. There are few centers where radiotherapy services are available outside Egypt and South Africa. The less expensive treatment of surgical orchidectomy is more widely used. Whereas medical orchidectomy (androgen deprivation therapy), which is more expensive, is more commonly used in developed countries. Stilbestrol, which is no longer used in developed countries due to cardiovascular complications, is much more frequently used in Africa because of its low cost and the lower incidences of cardiovascular diseases. Owing to constraints related to costs in hormonal therapy, the use of second line drugs such as ketaconazole is common.<sup>[7,8]</sup>

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## Conclusion

Prostate cancer requires to be addressed as it is a common and serious disease in Africa. Its diagnosis and management are greatly hampered by resource limitations and managed in quite a different manner than in developed countries.

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