Challenges in the Management of Benign Prostatic Enlargement in Nigeria

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ABSTRACT

The burden of benign prostatic enlargement (BPE) caused by benign prostatic hyperplasia (BPH) is very high in Nigeria and management of patients with this benign urologic condition constitutes the bulk of work done by urologists. This article aims to highlight some of the challenges facing the specialist urologists in the management of patients with BPE in Nigeria. The challenges are many and varied. They include factors relating to the patients themselves, infrastructural problems, and healthcare financing issues as well as problems with the healthcare givers. Factors related to the system include heath facilities, inadequate manpower, unchecked proliferation and popularity of alternative medicine as well as limited availability of minimally invasive surgical treatments. Patients' related factors contribute significantly to these challenges and include the prevailing poverty, poor health-seeking attitude, low literacy level and ignorance on the prostatic diseases amongst the Nigerian patients. The problems with healthcare givers include lack of local guidelines for the management of BPH and lack of professional development by the General Practitioners who manage most of the patients in Nigeria. Recommendations include embarking on mass literacy campaign and health education about prostatic diseases, development and standardization of laboratory practice in the nation, improvement in the coverage of and inclusion of BPH in the National Health Insurance Scheme (NHIS) in Nigeria. It was also recommended that the Nigerian Association of Urological Surgeons (NAUS) develop a guideline on the management of BPE/BPH.

Keywords: Challenges, management, BPE, BPH, Nigeria

INTRODUCTION

Benign prostatic hyperplasia (BPH) is a pathologic process that contributes to, but not the sole cause of lower urinary tract symptoms (LUTS). BPH causes benign prostatic enlargement (BPE), which is evident both clinically during a digital rectal examination (DRE) and radiologically by ultrasound scan. The term BPH and BPE are often used interchangeably[1]. Benign prostatic obstruction (BPO) is a term used to describe bladder outlet obstruction (BOO) secondary to BPE and, therefore, usually due to BPH[2]. It is a common disease that affects men from the middle age and results from proliferation of both glandular and stromal components of the transitional and peri-urethral zone of the prostate, which directly surround the urethra leading to impairment of urinary outflow from the bladder[3].

The burden of clinical BPH is very high and constitutes a lot of health burden worldwide[4]. A community-based study in Nigeria estimated that a quarter of Nigerians above the age of forty years has BPH [5]. Individuals, families and government commit a lot of resources to the treatment of this condition globally. The economic burden of BPH on our health care system is great and significant due to peculiarities of our set-up and it is likely to continue to grow given the burgeoning elderly population[6].

The challenges faced by the physicians in the management of BPH in Nigeria are many and varied. They include factors relating to the patients themselves, infrastructural problems, and healthcare financing issues as well as problems with the caregivers. This article aims to highlight some of the challenges facing the specialist urologists in the management of patients with BPH in Nigeria and makes some recommendations.

Challenges

Many of the challenges faced in the management of patients with BPH are somewhat related but shall be discussed in three sections for the purpose of clarity viz: factors related to system, those related to patients and those related to physician caregivers.

Factors related to the System

Healthcare Facilities

One of the greatest challenges affecting effective healthcare delivery in Nigeria is infrastructural problem7. It is a common phenomenon in public health facilities where there is dearth of modern equipment for the effective management of the patients. Many of the available facilities are either old or non-functioning while the functioning ones are poorly maintained raising the questions of accuracy of the results[7]. There is also problem of laboratory support and standardization especially with the most important blood investigation in managing patients with BPH- prostate specific antigen (PSA). With the proliferation of private laboratories, it is not uncommon having patients being evaluated for prostatic diseases having a widely varied PSA results. The consequences of this include unjustified prostate biopsy and missed prostate cancer. Finally, urodynamic studies are also not readily available as there are just few of this facility in the country. As a result, accurate differentiation of BPH from other non-BPH causes of LUTS is sometimes difficult. The implication may be that

patients with neurogenic bladder may be unjustly placed on medical treatment for BPH or worse still offered surgical treatment with no improvement in the symptoms afterwards[8].

Inadequate manpower

The manpower required to meet up with the challenge of this disease is grossly inadequate. Sub-Saharan Africa has the lowest availability of qualified medical resources in the world[9]. According to World Health Organization (WHO) in 2012, the doctor population ratio in Nigeria is 1/2500 as opposed to the recommended ratio of 1:600 [10]. World Health Statistics of 2012 is 4/10,000 persons as opposed to 24.2/10,000 in the US and 27.2/10,000 in the United Kingdom. These figures are for all doctors, the number of trained urologists in Nigeria is much more limited. Nigerian Association of Urological Surgeons (NAUS) report in December 2014 put the ratio as 1,500,000 persons per urologist as there were about 120 registered urologists in the country. This is further compounded by the fact that almost all urologists in Nigeria live in Urban and sub-urban communities making it difficult for the teeming rural population of the country to have access to the expertise of qualified urologists. The implications of this are provision of treatment by non-specialist medical officers and non-doctors as well as patronage of alternative traditional healers for BPH symptoms7.

Wide acceptability of alternative medicine

In Nigeria, majority of patients presenting to urologists with LUTS would have used one drug or the other before coming to the physicians. Presently, there are many phytotherapy drugs in the Nigerian market. These drugs appear attractive to Nigerian patients because of aggressive marketing with no market control as well as untrue claims by the marketers regarding the efficacy of such drugs[11]. Other reasons for patronizing phytotherapy include safety assumption, accessibility, avoidance of surgery and claims that it prevents prostate cancer. For patients who indulge in alcohol, they also find gin-based medications attractive. Costs and control are currently bastardized with over-the-counter (OTC) purchases without clear indications, prescriptions, dosage and appropriate administration[11].

Limited availability of minimally invasive surgical options

The gold standard in the treatment of BPH especially those with indications for surgical treatment is transurethral resection of the prostate (TURP). This treatment technique, which is regarded as the gold standard in the surgical management of BPH and other minimally invasive methods are not widely available in Nigeria presently. This makes open prostate surgery a common procedure in most institutions. In addition, open prostatic surgeries are commonly performed by non-urologists with attendant high morbidity and mortality rates resulting from haemorrhage, vesico-cutaneous fistula, incontinence and others.

Poor data management

Accurate data on the burden of BPE are generally unavailable in Nigeria. Only hospital-based statistics are published and are just the tip of iceberg as majority of patients with symptoms related to BPE do not present to the physicians. Even the data in our hospitals are under-reported as many of our facilities are not research-oriented. Lack of accurate data militates against effective healthcare system and action plan naturally.

Factors related to patients

Poverty

Currently, Nigeria is plagued with lack of adequate basic infrastructure like portable water and uninterrupted power supply and listed by the World Bank as one of the poorest countries in the world. The latest report is that the poverty headcount ratio at $1.90 a day (2009 PPP) is 53.5%(% of population) in 2010 [12]. The cost of the consultation, investigations, treatment and repeated hospital visits are significant burdens to most Nigerians because of poverty. The need to gather a relatively high amount of fund together at a time for surgical treatment is often a problem. On the other hand, the effective use of oral medications for BPH is available but the need to buy these drugs regularly often pose challenges. At the moment unfortunately, the National Health Insurance Scheme (NHIS) coverage is abysmally low in Nigeria making most of the expenses incurred from treating BPH out-of-pocket spending. Nigeria has one of the highest out of pocket spending worldwide[13].

Poor healthcare-seeking attitude

On the average, the attitude of Nigerians to heath-care seeking is very poor [14]. This is partly related to their knowledge; availability, affordability and accessibility of medical facilities as well as attitude of healthcare professionals. We have seen times without numbers reluctance of these elderly men to seek medical assistance or discuss symptoms with family members. Other factors include dislike for digital rectal examination, fear of diagnosis of prostate cancer, fear of surgery and lack of financial means for proper management. Misinformation from friends and relations regarding aetiology and treatment of LUTS are other factors responsible for poor health-seeking behaviour of patients.

Literacy rate and level of ignorance

The literacy rate amongst Nigerians is low and the bulk of the populations are ignorant about diseases and where to seek help. This is particularly true in the elderly population where the literacy rate is proportionately low. In the minds of many of these men, the causes of BPE include some strange beliefs as weird as curses from gods, spiritual attack, poverty etc. With this poor knowledge on the aetiology of a disease that obviously has nothing to do with the above, the health-seeking attitude of these patients will definitely be negative and these beliefs also have implication on the sources of where they seek help. Some also see this entity as an inevitable part of ageing and do not know that there is effective treatment for it. The cumulative effects of this are late presentation and high complication rates at presentation, which will impact negatively on the overall morbidity and mortality from this benign condition. According to United Nations Educational, Scientific and Cultural Organization (UNESCO), the overall literacy level in Nigeria is 59.6%[15]. A study in Jos, Nigeria quoted that 74.3% of patients in their study could not read English to self-admister IPSS questionnaire. This will preclude adequate assessment of symptom as well as follow-up care of the patients[16].

High prostate size/volume

A comparative analysis of studies on prostatic diseases in the Western world and in Africans reveals a relatively higher mean prostatic volumes in African men compared with the Caucasians and Asians. [17] Though not absolute, bigger prostate size is a relative contra-indication for TURP. The import of this is that some of these patients may not benefit maximally from medical therapy and minimally

invasive procedures making open prostatectomy the commonly performed surgery for treating these patients.

Late presentation

Another major problem common amongst patients with BPE in African continent is late presentation,[18-19]. It deserves special mention because it is a peculiar problem that is highly prevalent in Nigeria. The low awareness of this disease amongst the general population results in late presentation of cases. With late presentation, patients present with severe symptoms or with complications like acute or chronic urinary retentions, renal failure, uro-sepsis and bladder stones. This has a significant burden on the patients, healthcare system and the society at large. The reasons for this might be multifactorial. Factors such as poor attitude of people to healthcare, unavailability and unaffordability of urologic healthcare as well as financial difficulties are some of the factors responsible. Another reason may be perception of LUTS secondary to BPE as part of ageing process. It is not uncommon therefore to see Nigerian patients present with complications of this disease. Some studies have demonstrated that higher proportion of men with BPH/BPE in Sub-Saharan African countries present with renal failure, acute urinary retention, herniae, urosepsis and other complications compared to men in other parts of the world [18]. As a result of this, resuscitation is a major task in many of these patients.

Poor drug compliance

Another major problem we face in managing patients with age-related problems in Nigeria is poor drug compliance,[20,21]. Quite a number of patients on treatment for BPE stopped their medication after getting symptomatic relief from the alpha-receptor blockers only to represent later with worsening of symptoms and even complications. This might not be unconnected with poverty as the overall cost of medical treatment is not little considering the fact that patients will be on these drugs for a long time or even through out life just like treatment of other chronic diseases like hypertension and diabetes. In addition, few patients abandon their drugs because of sexual dysfunction side effects of these drugs.

Associated co-morbidities

BPE is a disease of ageing men and therefore there is increasing risk factors or co-morbidities of advancing age like cardiovascular metabolic diseases such as hypertension, diabetic mellitus, obesity, ischaemic heart disease etc. in most of these patients requiring attention. Often times, they present with complications of these conditions, which delay intervention, particularly those requiring surgical intervention.

Factors related to Health Caregivers

No Guideline on management of BPH

Unlike America and Europe, where their urological associations have developed guidelines for the treatment of various urological diseases or entities including BPH, there are yet to be developed guidelines for the treatment of BPH in Nigeria ,[22,23]. Because of this, treatment of BPH widely varies amongst urologists and general practitioners (GPs) as each tries to use different guidelines in evaluation and treatment of these patients. More importantly, adoption of American Urological Association (AUA) [22] or European Urological Association (EUA) [23] guidelines in our environment is impracticable as there are marked differences in clinical and economic characteristics of Nigerian patients compared with patients in those regions. There are still wide opinions in the performance of cystoscopy, intravenous urography, number of attempts at catheter removal, monotherapy versus combination therapy and what constitute failed medical treatment.

Ignorance on BPH by General Practitioners (GPs)

The knowledge and skills involved in successful management of these patients are also not adequate amongst the doctors as there is high incidence of inadequate treatment of these patients. The low specialist to male population density in our health system leads to substantial number of patients being managed by GPs who are not adequately trained to manage complicated cases of this benign condition with the attendant high morbidity and mortality rates from their interventions. For example, decisions on performance of biopsy before surgery for BPH is often under-emphasized by GPs in our practice which has led to performance of simple prostatectomy for prostate cancer on several occasions. Another major problem in our practice is a poor referral system. It is not uncommon to see GPs continue to manage these patients until complications set in before patients are eventually referred for specialist care. By this time, it is often too late to make much difference. In addition, most health professionals in developing countries do not have adequate access to continuing professional development resources to improve their knowledge on various diseases and keep them abreast standard and new international practices.

Recommendations

Based on the identified challenges in managing patients with BPH in Nigeria, there is urgent need for mass literacy campaign and health education about prostate diseases in order to correct some erroneous impressions about prostatic diseases and encourage early presentation. This will lead to reduction in the number of patients presenting with complications, which ultimately will cause a dramatic reduction in the morbidity and mortality associated with BPH in Nigeria.

There is need for urgent manpower development to combat the shortage of medical personnel particularly specialists and steps should also be taken by the government to ensure fair distribution of available medical personnel to cover the rural places. This can be achieved through additional incentives as well as provision of a conducive work environment for health workers in the rural communities. We also suggest the establishment of centres of excellence in urology in the different parts of the countries where medical graduates can be trained further in urology to meet up with the challenge of unavailability of urologists in the rural communities.

Since poverty is prevalent and constitute a major contributing factor to poor compliance, the improvement in the coverage of NHIS as well inclusion of BPH in the coverage of NHIS will go a long way to help overcome the problem of poor drug compliance. Improving outcomes and preserving the quality of life in BPH patient is possible through increased access to primary care.

We also recommend that the Nigerian Association of Urological Surgeon (NAUS) like urological associations of other countries should develop a guideline on the treatment of BPH that should be followed by the physicians treating patients with BPH based on our peculiarities and available resources. A development of up and down stream referral of patients (shared care concept) between specialists and GPs will also reduce delay in adequate care of patients. Similarly, continued professional development (CPD) for

GPs to broaden their knowledge base of early detection and referral of patients with prostatic diseases and improve their specific skills like safe male urethral catheterization is desirable.

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