



African Journal of Urology

Official journal of the Pan African Urological Surgeon's Association
web page of the journal

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BPH and Prostate Diseases

Original article

Knowledge and prevalence of use of saw palmetto and other herbal products among men with prostate disease in Trinidad and Tobago



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Received 1st August 2016; received in revised form 9 January 2017; accepted 12 February 2017

Available online 12 June 2017

KEYWORDS

Herbal supplements;
Saw palmetto;
Trinidad and Tobago;
Caribbean

Abstract

Objective: To investigate the knowledge and prevalence of use of saw palmetto and other herbal products among men attending the urology outpatient clinic at San Fernando General Hospital.

Subjects and methods: This was a prospective, cross-sectional study carried out between February and May 2015. A structured, interviewer administered questionnaire was used to collect data from randomly selected men with prostate cancer or benign prostatic hyperplasia (BPH) and who were part of our outpatient clinics. This questionnaire contained sections on sociodemographic details as well as knowledge and attitudes towards herbal supplements with emphasis on saw palmetto. Data were compiled in Microsoft Excel and analysed using SPSS version 20.

Results: Two hundred (200) men were interviewed. The mean age of the population was 69 years (Std. Dev. = 8.06) and most were from the south (56.5%) or central (19%) regions of Trinidad. 52% had BPH and 34.5% had prostate cancer. Overall, 85 men (42.5%) indicated use of herbal supplements of whom 53 (62.3%) used saw palmetto either alone or in combination with other products. Among men who had heard of saw palmetto or used it, 25% believed it may be used to reduce the risk of or treat prostate cancer. Thirty-six percent (36%) were of the opinion that saw palmetto is effective in treating the symptoms of an enlarged prostate.

Conclusion: This study demonstrates that the use of herbal products is common among men with prostate disease in Trinidad and Tobago and that saw palmetto is the most common product used. It also highlights the prevalence of unsubstantiated beliefs as well as the uncertainty about the efficacy of saw palmetto.

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Peer review under responsibility of Pan African Urological Surgeons' Association.

<http://dx.doi.org/10.1016/j.afju.2017.02.002>

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Introduction

The use of herbal supplements and complementary medicines is widespread [1–3] and a number of factors may account for this including perceptions about the safety and efficacy of herbal products as well as the side effects associated with more conventional treatment options [4].

A myriad of herbal supplements are used for benign prostatic hyperplasia (BPH) and prostate cancer, of which saw palmetto (*Serenoa repens*) may be the most popular. This herb is thought to modulate genito-urinary tract function through a number of different and potentially synergistic mechanisms including 5 alpha reductase inhibition, androgen receptor blockade and alpha adrenergic antagonism [5,6]. Although a number of smaller studies have demonstrated efficacy of saw palmetto in managing BPH [7], a large multi-centre, randomized placebo controlled trial found no improvement in lower urinary tract symptoms among men assigned to saw palmetto compared to those in the placebo arm—even at escalating doses of the saw palmetto extract [8].

The Department of Urology at San Fernando Hospital is the major urological referral centre in Trinidad and Tobago and is a Societe Internationale d'Urologie training centre. We have noted, albeit anecdotally, the widespread use of herbal supplements among our patient population, and particularly among those with prostate disease. We have also noted a variety of largely erroneous beliefs about the efficacy of herbal supplements, often perpetuated by patients and herbal practitioners alike. This paper, to the best of the authors' knowledge marks the first time that the use of herbal supplements among urology patients has been objectively assessed in Trinidad and Tobago.

Subjects and methods

A prospective, cross-sectional study was carried out between February and May 2015 at the San Fernando General Hospital among men in our Uro-oncology and BPH clinics who were identified as having BPH or prostate cancer. Following an initial pilot phase, a structured, interviewer administered questionnaire was used to collect data. This questionnaire consisted of sections on sociodemographic details as well as beliefs and attitudes towards herbal supplements with particular emphasis on saw palmetto. Data were compiled in Microsoft Excel and analysed using SPSS version 20.

Results

Patient demographics

Two hundred men were interviewed. The mean age of the study population was 69 years (Std. Dev.=8.06). Most men (56.5%) were from the southern region of Trinidad and Tobago. However, 43.5% were from regions outside of our designated catchment area reflecting our role as a national referral centre. 52% self-identified as having BPH and 34.5 as having prostate cancer—13.5% were unclear as to their diagnosis.

Use of herbs

Overall eighty-five men (42.5%) reported use of some herbal product, among whom saw palmetto was the most common, reported in

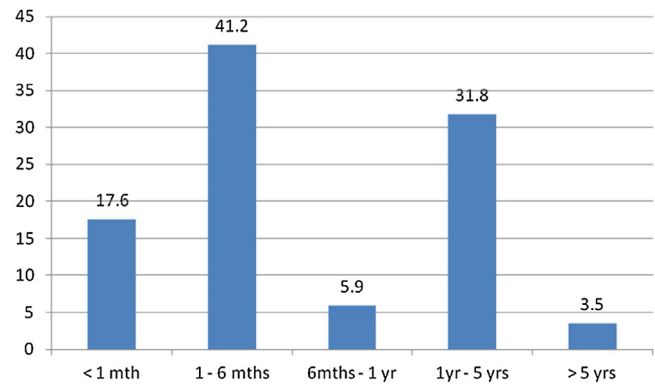


Figure 1 Duration of use of herbal supplementation (%).

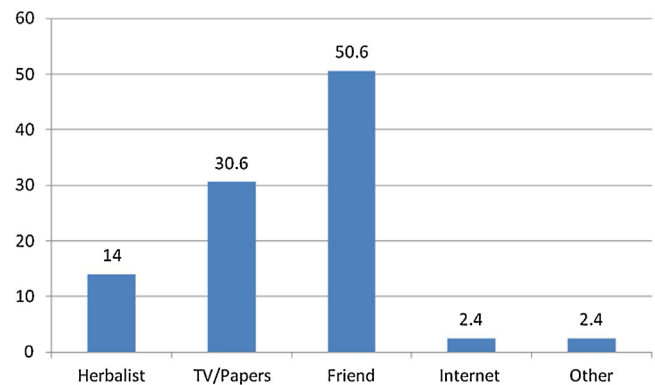


Figure 2 Respondents' primary source of information on herbal supplements (%).

62.3%. Only 3.5% of men reported using herbal products for more than 5 years (Fig. 1). Most (50.6%) men indicated that they learnt of herbal supplements via a friend or family member (Fig. 2). Among all men surveyed, 18% had at some point discussed the use of some form of herbal supplementation with their urologist and among men who used herbal supplements, only 33% informed their urologist.

Efficacy

Among men with prostate cancer, 16% were using herbal supplements to treat their disease (Fig. 3). A further 56% of those already afflicted with prostate cancer, indicated that they were utilizing sup-

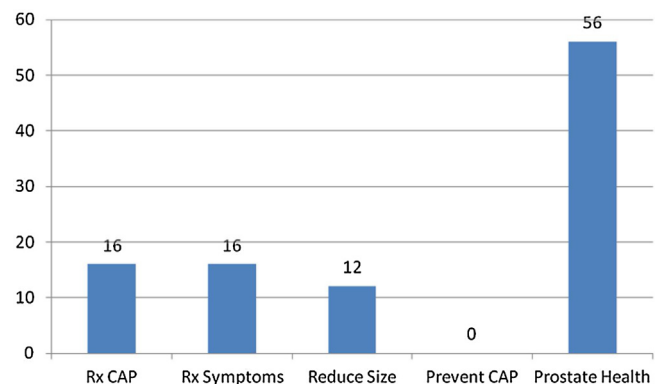


Figure 3 Primary reason for using herbal supplements among patients with prostate cancer (%).

Table 1 Perceived beliefs about the efficacy of saw palmetto.

	Yes	No	Unsure	Total
Can shrink the prostate	24 (27.3)	6 (6.8)	58 (65.9)	88
Effective at treating BPH symptoms	32 (36.4)	7 (8.0)	49 (55.6)	88
Can reduce prostate cancer risk	22 (25.0)	7 (8.0)	59 (67.0)	88
Effective at treating prostate cancer	22 (25.0)	13 (14.8)	53 (60.2)	88

plements to “maintain prostate health”—term often used during marketing of herbal supplements to consumers.

54.1% indicated that they perceived some improvement while using herbal medication. Among these men, 85% believed that these supplements contributed in some way to their improvement, bearing in mind that all patients were on some form of conventional treatment for their primary disease at the time of being surveyed.

Beliefs specific to saw palmetto

88 men (44%) indicated they had either heard of, or used saw palmetto. Table 1 illustrates specific perceptions about saw palmetto. While most men were unsure about its efficacy, 25% believed that saw palmetto is effective at reducing the risk of, as well as treating prostate cancer (Table 1). Of note, among men who had heard of or used saw palmetto, 53.4% indicated that they would readily recommend it to a friend.

Discussion

Among our population, 42.5% of men surveyed reported the use of some form of herbal supplement. In a 2003 Canadian study, 26.5% of men being treated for prostate cancer reported the use of some form of complementary and alternative medicine (CAM), most commonly Vitamin E, selenium or saw palmetto. In a different region of Canada, Eng and colleagues noted the use of complementary medicine among 39% of men being treated for prostate cancer [2] whereas in a survey of prostate cancer patients in Jamaica, the authors found that 56.3% utilized some form of natural product, the most common of which was the Guinea hen weed, used by 89.5% [3]. That saw palmetto was the most common herbal supplement is not surprising given that this is the most aggressively marketed male herbal product in Trinidad and Tobago. A number of factors may motivate a patient to seek out complementary medicine including the perceptions about the safety of CAM as well as the potential side effects sometimes noted with more conventional options [4]. While we did not specifically explore the motivating factors among our patients, this may be a worthwhile objective in future research.

There has been the anecdotal observation that many of our patients subscribe to a number of unsubstantiated beliefs about the efficacy of herbal supplements and in particular saw palmetto; at best they are uncertain about its efficacy but are using it anyway. Among our patients 25% of those who had heard of saw palmetto believed that it could be used to reduce the risk of, or treat prostate cancer, with a further 60% indicating that they were uncertain. Comparably, in a small cohort comprising African-American men with prostate cancer, Jones found that 36% believed that herbal supplements could be used to treat prostate cancer [9]. Of note, while several small studies of saw palmetto and other herbal derivatives have shown promise in prostate cancer, often in a pre-clinical setting, there are no large scale studies confirming clinical efficacy [10–12].

Although most men were unsure, 27.3% and 36.4% believed that saw palmetto may be used to reduce the size of the prostate or treat BPH symptoms respectively. There are no large scale data to support this; the CAMUS study was designed to investigate whether phytotherapy was superior to placebo and found no improvement in LUTS even at escalating doses of phytochemicals. It was interesting to note that overall the most common reason given for using herbal supplements was to “maintain prostate health”—we have noted that is a term frequently used in the marketing of herbal supplements.

Among our patients, the most common source of material on herbal supplements was the respondents’ family or friends. This is similar to findings by Eng et al. who reported that family or friends were the most likely sources of information on complementary medicines—this was noted in 39% of their patients [2]. Further highlighting the influence of patient contacts in perpetuating information, was the finding that 54% of men who had heard of saw palmetto indicated that they would recommend it to a friend or family member.

In Eng’s study, 58% of those using complementary medicines informed their urologist, considerably more than the 33% noted among our patients. While, we did not specifically explore a reason for this, the paternalistic approach to patient care sometimes noted within the region, as well as high patient to provider ratios seen in our clinic may prove potential barriers to effective communication.

Our study was limited to a single institution. However, as we are a tertiary referral centre we commonly see patients from throughout Trinidad and Tobago and this was reflected in our patient demographic data. That patients were self-assigned as having either prostate cancer or BPH was perhaps another imitation as 13.5% were unable to assign themselves to either category and the veracity of these assignments were not confirmed by cross referencing patient notes. However, it should be noted that the patients were selected from specialist (Uro-oncology and BPH) clinics and this would have minimised the chances of men incorrectly labelling themselves as their diagnoses would have been vetted and discussed with them.

Conclusion

This study demonstrates that the use of herbal products is common among men with prostate disease in Trinidad and Tobago and that saw palmetto is the most common product used. It also highlights the prevalence of misconceptions as well as the uncertainty about the efficacy of saw palmetto.

Author contributions

All authors contributed equally to the conceptualization of the study, data collection and preparation of the manuscript.

Ethical approval and consent

All patients gave consent and ethical approval was obtained from the Clinical Governance and Ethics Committee of the San Fernando general Hospital.

Conflicts of interest

The authors have no competing interests to disclose.

Source of funding

This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

Acknowledgements

The authors wish to thank Ms Kimberley Carrera and George Huggins, our research assistants who helped with data collection.

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