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Patients' Concerns Regarding Symptoms Severity and Treatment of Benign Prostate Hypertrophy

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Abstract: *A descriptive study was conducted to describe the patients' concerns regarding symptoms severity and treatment of benign prostate hypertrophy. A convenience sample of 100 adult male patients diagnosed with benign prostate hypertrophy was surveyed using a questionnaire with items covering socio-demographic data, the International Prostate Symptom Score, and patients' concerns about symptoms severity and treatment of enlarged prostate. The findings indicated that 60% of all participants aged 55-64 years had mild or moderate lower urinary tract symptom severity (LUTS).Men with moderate LUTS had worse quality of life (QoL) score compared to men who had mild LUTS. The major concerns experienced by patients that motivated them to ask medical advice for symptoms of BPH were the impact of symptoms on social and professional life, fear of cancer, frustration and the embarrassment of symptoms. In addition, the major concerns of most patients taking medication were the ability of medication to decrease the risk of surgery and relieve symptoms within a few weeks or months. This study provides a valuable understanding of patients' concerns regarding BPH and its management, and emphasizes the need to discuss patient preferences during clinical decision-making.*

Keywords: *patients' concerns; benign prostate hypertrophy*

I. Introduction

Benign prostate hypertrophy (BPH) is a major condition affecting older men, and 30-50% of men over the age of 50 have moderate-to-severe lower urinary tract symptoms (LUTS), which increase with age (Naslund, Gilsenan,Midkiff, Bown, Wolford&Wang,2007).In the US alone 14 million men have symptoms of BPH, with worldwide prevalence of approximately 30 million men have symptoms caused by BPH (Levi, Leveillee, Patel, Costabile& Moore, 2011). In BPH the prostate enlarges and obstructs the urine flow, causing symptoms collectively known as prostatism hesitancy, intermittency, dribbling, impairment of the force of stream, and the sensation of incomplete bladder emptying. Symptoms often begin gradually, growing more severe as the bladder muscle loses its ability to overcome resistance to outflow (Lee, Xue &Lerner, 2012).

Patients diagnosed with BPH experience a major impairment in QoL because of their symptoms, including insomnia, anxiety and discomfiture, changes in daily living and sexual activities (Emberton, Marberger, & Rosette, 2008). BPH can cause complications such as a acute urinary retention, recurrent urinary tract infections and the need for surgical intervention(Naslundet al.,2007).However, many men with LUTS do not seek medical advice and thus they lack medical attention that could reduce their symptoms and fears, often going seeking medical assistance only when symptoms have become increasingly severe, when earlier treatment may have prevented further deterioration. The main barrier to older men seeking help for BPH is the common view that this chronic illness is an inevitable part of ageing, which may also be true for LUTS (Wolters, Wensing, &Van Weel2002).Moreover, men may experience stigma associated with specific urinary symptoms such as dribbling and urgency, which it is difficult for them to discuss with their doctor. Cunningham, Allbutt, Garraway Lee (1996)mentioned that fear of malignant tumor or invasive procedures such as surgery motivate patients to seek medical assistance; the male patient's perception of care providers' ability to give pertinent information or efficient therapy is substantial, as is his ability to cope with LUTS (Van de Kar, Knottnerus, Meertens, Dubois& Yok, 1992).

Several studies have indicated that men are worried about the progress of disease and the majority of them are concerned about potential surgery, and would prefer medication that can decrease complications and progression (Hong, Rayford, Valiquette& Emberton, 2005; Emberton, Marberger&Rosette,2008). An idea about the factors that determine consultation for LUTS is essential to devise advice and education focused on the needs and expectations of elderly men. In particular, this can help to induce those who will benefit the most from medical care into professional treatment, and to consult health teams in time (Wolters, Wensing, & Van Weel,2002). Nurses provide a significant role in biomedical care for patients, and they are the most important healthcare provider in addressing general personal issues of tailored care, such as culturally sensitive issues involving urology. Urology nurses must also be prepared to deal with a significant amount of human discomfort, since urinary issues are often accompanied by pain and embarrassment. Patients must be made to feel as

comfortable as possible. Urology nurses often working a variety of settings, such as hospitals, urology clinics, or alongside general practitioners who require the assistance of specialist nurses to treat patients affected by urinary system issues.This research therefore represents a nursing study to explore patients' concerns regarding symptoms severity and treatment of BPH.

II. Method

2.1 Study design

A descriptive study was conducted at the Urological Outpatient Department of the Health Insurance Hospital in Alexandria from the beginning of July to the end of October, 2012.

2.2 Participants

A convenience sample of 100 adult male patients diagnosed with benign prostate hyperplasia was surveyed using self-administered questionnaire. Men who were at least 45 years of age, with lower urinary tract symptoms (LUTS) due to BPH were eligible to participate in the study. Patients with a history of prostate or bladder cancer or any chronic renal disorders were excluded.

2.3 Questionnaire

Self-administered questionnaire was used in this study. It consists of five parts, the first of which concerned general socio-demographic data (patient age, marital status, education and co-morbidities). The second part contained questions related to urinary symptoms. The International Prostate Symptom Score (IPSS) was used to define the symptom level of LUTS. It is validated symptom scoring instrument developed by the American Urological Association (AUA, 1992). It comprises eight questions, seven of which are related to urinary symptoms while one concerns QoL.Questions related to urinary symptoms include incomplete emptying, frequency, intermittency, urgency, weak stream, straining and nocturia). A symptom index, ranging from 0 to 35,was calculated by summing the scores of seven urinary symptoms where each question related to urinary symptoms allows the patient to select one out of six answers indicating increasing severity of the particular symptom. The answers are awarded points using a Likert-type scale from 0 to 5: never=0,hardly ever=1, less than half the time = 2,about half the time=3,more than half the time = 4 and almost always= 5. The symptom index was categorized into four levels of severity: none (0), mild (1-7),moderate (8-19) and severe (20-35).

Participants were also asked about how they would feel if they had to spend the rest of their lives with their current level of symptoms. This question was recommended to assess QoL by the International Scientific Committee of the World Health Organization (WHO) and the International Union Against Cancer. The answers to this question range from 0 = delighted to 6 =terrible.

The third part of the questionnaire involves eight statements to assess patients' concerns about their initial BPH symptoms. Patients responses were checked on two choices (agree or disagree).The fourth part of questionnaire focuses on what patients with enlarged prostate were told by their doctors at the time of diagnosis, while the fifth is related to features of major importance to patients when taking drugs for enlarged prostate.

The content validity of the questionnaire was assessed by five urology experts, including a physician and four members of the faculty of nursing. A pilot study was conducted with 10 participants to determine the clarity of items. The Cronbach's alpha score for all items ranged from 0.78 to 0.85.

2.4 Ethical considerations

The Ethics Committee of Faculty of Nursing at Alexandria University gave permission to pursue this study, and permission was also granted by the director of the studied hospital to conduct the fieldwork.Participants' rights were protected by explaining to them the purpose and significance of the study and their role. They were reassured that their responses were kept anonymous and were informed that their participation in the study is voluntary and they can withdraw at any time without affecting the care they received.A written informed consent form was obtained from participants after explaining these particulars in full.

Data were collected by researchers through individualized face-to-face interview with patients in the Outpatient Urological Clinic of the hospital.

2.5 Data analysis

The data were entered into computer using SPSS version 21.Descriptive and inferential statistics were performed on socio-demographic data, the International Prostate Symptom Score, patients' concerns about symptoms severity and treatment of enlarged prostate. Chi square test was used to examine the relation between IPSS and patients' concerns when seeking medical advice for symptoms of BPH as well as the relation between symptoms' severity and attributes of greatest importance when considering medication for BPH.

P values of< 0.05 were considered as statistically significant.

III. Results

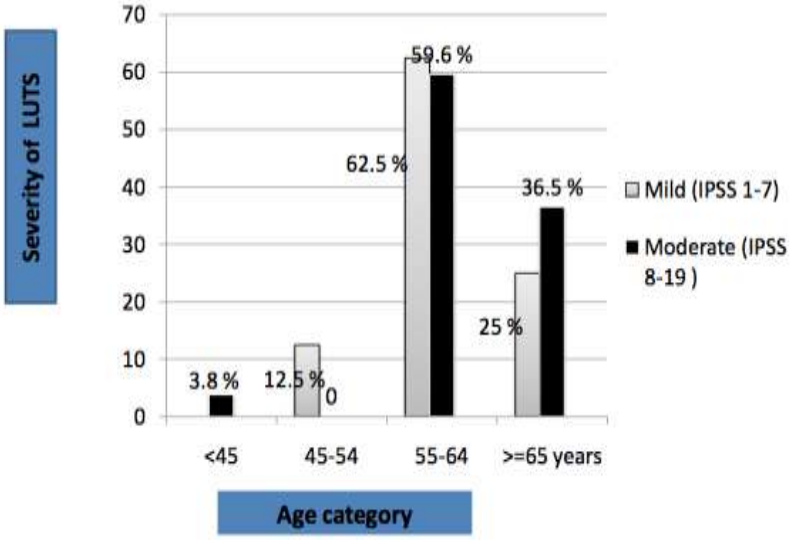
3.1 Socio-demographic characteristics

The mean age of the patients was 61.65 years (SD±4.61). Most of the patients were married (86%) whilst the highest percentage of patients obtained a secondary school certificate and higher education (48%). More than half of patients (52%) had an IPSS that ranged from 8-19, indicating moderate LUTS, while 48% of patients had an IPSS of ≤ 7, indicating mild LUTS. The mean IPSS was 8.03 scores (SD+ 3.07).

3.2 Distribution of patients according to lower urinary tract symptom severity.

Figure (1) shows the distribution of patients according to the severity of lower urinary tract symptom by age category. Almost 60% of all men aged 55-64 had mild or moderate LUTS, and 36% of men aged 65 and older reported moderate LUTS.

Fig 1: Distribution of patients according to lower urinary tract symptom severity



3.3 Specific statements told to the patients by physician at the time of diagnosis

Table (1) shows specific statements reported to patients by their physicians at the time of diagnosis. The findings revealed that 46% of patients mentioned that the physician told them that BPH is part of aging process and there are treatments available for symptoms relief. The majority of patients (61%) mentioned that the physician told them "it is better to wait and see than to treat the condition from the time of diagnosis", while 11% of patients mentioned that the physician told them there was nothing to worry about and there is management for EP.

Table 1: Specific statements told to the patients by physicians at the time of diagnosis

	No.	%
What did the doctor say regarding diagnosis at the first visit?		
It is a normal part of aging	46	46.0
Wait and see	61	61.0
Treatment for symptoms	46	46.0
Nothing to worry about	11	11.0
There is management for EP	11	11.0
Medication can shrink the prostate	8	8.0
There is treatment by surgical intervention4	18	18.0
Medication can decrease the hazard of surgery	7	7.0
It could get worse	27	27.0

3.4 Relation between IPSS and patients' concerns when asking medical advice for symptoms of BPH

The major concerns experienced by patients when asking medical advice about symptoms of BPH were the impact of symptoms on their social and professional life, fear of cancer, frustration and embarrassment from symptoms. The results also revealed that those with moderate symptoms were more exposed to underlying concerns than those with mild symptoms, and there were statistical significant differences, as shown in Table 2.

Table 2: Relation between IPSS and patients' concerns when seeking medical advice for symptoms of BPH

Patients' concerns	IPSS				Test of sig.
	Mild		Moderate		
	No.	%	No.	%	
Discomfort	13	25.0	13	27.1	= 0.812
Interrupted sleep	3	5.8	6	12.5	FEp = 0.305
Embarrassment of symptoms	19	36.5	42	87.5	$^{\times 2}$p <0.001*
Frustration from symptoms	24	46.2	43	89.6	$^{\times 2}$p < 0.001*
Fear that it may be cancer	21	40.4	43	89.6	$^{\times 2}$p = 0.016*
Impact of symptoms on work/ professional life	29	55.8	41	85.4	$^{\times 2}$p = 0.001*
Impact of symptoms on social life	38	73.1	43	89.6	$^{\times 2}$p = 0.036*
Affecting marital relationship	24	46.2	26	54.2	$^{\times 2}$p = 0.423

$^{\times 2}$p: p value for Chi square test
FEp: p value for Fisher Exact test
*: Statistically significant at $p \leq 0.05$

3.5 Relation between symptoms severity and features of greatest importance to patients when considering medication for BPH

The findings indicated that decreasing the risk of surgery, relieving symptoms within the first few weeks or months, and preventing further enlargement of prostate were of greatest importance to patients when taking medication for EP. The results also indicated that the key feature of medical treatment for BPH were not significantly influenced by the severity of patients' symptoms, as shown in Table 3.

Table3: Relation between symptoms severity and features ofmajor importance to patients when taking medication for BPH

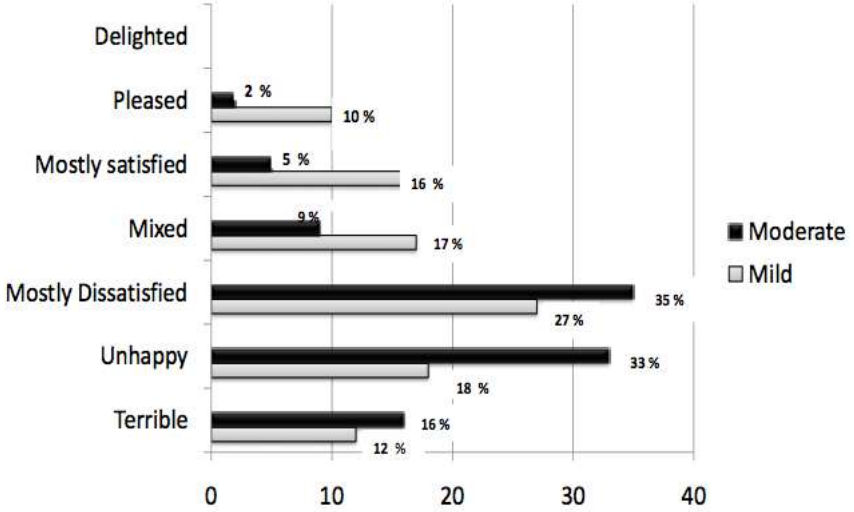
Features of medication	% rating as 'very important'				Test of sig.
	Mild symptoms		Moderate symptoms		
	No.	%	No.	%	
Decrease the risk of surgery by 50%	41	85.4	50	96.2	FEp=0.083
Relieve symptoms within the first few weeks	45	93.8	49	94.2	FEp=1.000
Relieve symptoms within the first few months	45	93.8	48	92.3	FEp=1.000
Decrease prostate size and maintain this reduction	35	72.9	45	86.5	$^{\times 2}$p = 0.089
Stop further enlargement of the prostate	40	83.3	39	75.0	$^{\times 2}$p = 0.307

$^{\times 2}$p: p value for Chi square test
FEp: p value for Fisher Exact test
*: Statistically significant at $p \leq 0.05$

3.6 Distribution of the patients according to their IPSS severity and QoL

The results indicated that patients with moderate LUTS had a worse QOL score and their symptoms were more annoying compared to men who had mild LUTS. More than one-third of patients with moderate LUTS were mostly dissatisfied and unhappy about their current urinary condition, compared with 27% and18%, of men with mild LUTS (Figure 2).

Figure 2: Distribution of patients according to their IPSS severity and QOL responses



IV. Discussion

Asking patients about how they view their illness gives physicians the chance to identify and correct any erroneous or negative health beliefs. Once a patient's illness perceptions are clear, a physician can try to direct those beliefs in a direction that is more conducive to positive outcomes, such as more positive outlook and increased compliance with treatment regimens (Nauert, 2012).

The majority of participants in this study (almost 60%) were aged55to 64 (the mean age was 61.6 years), and they had mild or moderate LUTS. In this context a previous study revealed that enlarged prostate is a common disease among older men, with a 70% of men over the age of 61 having EP and more than 90% of men over the age of 80 (Carbone & Hodges, 2003). The findings also revealed that 46% of patients mentioned that physicians told them an "enlarged prostate is a normal part of aging and there are treatments available for symptoms".

The findings of previous research studies (Barkin et al., 2009; Emberton, Marberger&Rosette,2008; Kaplan & Naslund,2006)revealed that the opinions, beliefs and treatment preferences of patients and physicians may not always be aligned, and communication between healthcare providers and patients is essential to select suitable treatment for patients with BPH, toimprove compliance and treatment success.

In terms of patients' concerns about the symptoms, the results reported that the majority of patients mentioned a fear of malignant tumor as the main cause for asking medical advice. The PROBE survey showed that BPH is a disease that concerns and worries patients, despite receiving treatment. In the early period, patients worry that their symptoms may be related to malignant tumor; after diagnosis, their concerns often shift to worries related to surgical intervention or disease complications. This highlights the importance of patient education about the disease and associated complications (Emberton, Marberger&Rosette,2008).

Other concerns mentioned by participants in terms of asking physicians with regard to suffering from BPH symptoms include the impact of symptoms on social and professional life, frustration and embarrassment. Hassan (2007)also reported that the severity of BPH symptoms interferes significantly with the social activities of the older adults, with lower urinary tract symptoms such as needing to urinate more often than usual, strong urge to urinate, and the loss of bladder control causing embarrassment, resulting in them preferring to stay at home and avoid interaction with other people (and thus being more prone to secondary impacts such as social withdrawal, reduced physical activity, increased sedentary behavior and thus increased risk of lifestyle-associated conditions such as diabetes and depression etc.). In addition, Hassan(2007)noted that in Egyptian culture people (particularly men) generally do not seek medical advice unless symptoms interfere with their daily lives, thus they are particularly inert in terms of seeking pre-emptive medical help such as screening purposes. The population-based Olmsted County Study found that the trouble and recurrence of urinary symptoms are the major significant predictor of healthcare-seeking behavior in terms of urinary health issues (Rosette, 2006).

Furthermore, Harkaway (2007) found that the majority of men believe that enlarged prostate symptoms remit spontaneously without the need for medical consultation, and they believe their symptoms are temporary, or they consider them an inevitable part of the 'aging' process for which there is no treatment.

Ramesh&Kartheek (2009) reported that patients could not consult their clinicians due to the fact that they did not know that their symptoms were due to an enlarged prostate, which emphasizes the importance of providing patient education to patients suffering from enlarged prostate. It has been noticed that the main concerns of large number of patients when taking treatment for enlarged prostate were reducing the risk of surgery and relieving symptoms within a few weeks or months, particularly for patients with mild or moderate severity of symptoms. This indicates that fear of surgery is one of the main factors driving patients to seek medical treatment, and this fear comprises fear of side effects such as urine leaking, impotence or other complications that may arise from invasive procedures, in addition to the surgery itself. The AUA guideline panel strongly believed that the patient should play a central role in determining his need for treatment (Rosenberg et al.,2007).

Kaplan (2007) reported that although acute urinary retention (AUR) is not life-threatening, it does have profound impacts on patients' QoL,and the main priority of men (especially with moderate or severe LUTS) is the prevention of AUR. . Emberton (2010)found that patients prefer therapies with long-term effects such as reducing symptoms severity. Patients 'expectations and satisfaction with BPH treatment must be included in their care journey. Kaplan & Naslund (2006)found that despite the avoidance of surgery is main objective among the majority of patients with EP seeking treatment, few of them actually believe that medication can reduce the risk of surgery and only 40% of them consistently take medication for their condition.When patients were asked to describe "if they had to live with their condition as it is now, how would they feel about it?" men with moderate LUTS cited that they would have a worse Q.o.L because of being bothered by EP symptoms. In this respect, a number of studies (Hassan, 2007; Kaplan,2012;Sagnier, MacFarlane&Teillac, 1995) using the IPSS tool revealed that LUTS interferes with patients' daily activities and has a significant effect on the QoL of

patients with BEP. The degree of bother and interference with daily activities increased four to six times for men with moderate to severe symptoms of EP compared to those with mild symptoms.

In essence, the findings of this study provide valuable insight on patients' concerns regarding BPH and its management, and emphasize the need for consideration of patients 'illness perceptions during clinical decision-making. There are two important aspects to note: firstly, patients' beliefs about their condition are often at variance from those who are treating them. In fact, medical staff members are usually unaware of patients 'concerns about their condition, and rarely ask patients about their own ideas in clinical consultations. Secondly, patients 'perceptions vary widely, and even those with the medical condition or injury can hold very disparate views of their illness (Hong, Rayford, Valiquette & Emberton, 2005; Petrie, Jago&Devcich,2007; Prosenjit, Poole, Nightingale&Robertson, 2009).

Therefore, selecting among the different therapy options to attain management goals of BPH is a challenge to urology care and should be based not only on the best available evidence but also on patients' circumstances and personal choices. In addition, the benefits of therapy should be balanced against the risk of adverse events associated with it (Harkaway&Issa,2006).

V. Conclusions

This study confirms that men have many concerns regarding the symptoms and management of BPH, and most of them are concerned that their symptoms may be related to malignant tumor prior to diagnosis. In addition, symptom severity and bother are serious critical factors encouraging men to visit a doctor to avoid problems interfering with daily life activities, and to avoid the likelihood of progression to surgery.The results also indicated that patients with moderate LUTS had a worse QoLscore compared to patients who had mild LUTS. Appropriate communication between the health team, including physicians, nurses and patients, helps in identifying patients' concerns and choosing the most suitable management of BPH; nurses are particularly suited for this role due to their superior interpersonal communication with patients to deliver such culturally-sensitive care.

VI. Recommendations

BPH is common among older men and its symptoms exert major detrimental impact on their QoL. Patients' worries about disease symptoms and their subjective expectancies of disease management should be respected. Nurses have a significant role to play in patient education, and the nurse should adequately inform the patient of the advantages and potential adverse effects of appropriate treatment management, clarifying information, offering realistic hope, and avoiding being over-reassuring, involving patients actively in their care journey when possible. Moreover, they must discern what patients know about the impact of the illness on their future and identify appropriate coping strategies.

Patients' preferences may affect treatment adherence and disease outcomes. Therefore, it is very important that health team identify patients' expectations and assess patients' satisfaction with BPH treatment.

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