BPH: Social Impact and Patient’s Perspective

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Abstract

Benign prostatic hyperplasia (BPH) is a common condition in ageing men and although not a life-threatening disease, it can affect quality of life (QOL) to differing degrees. BPH progressively decreases patient self-esteem and lower urinary tract symptoms have also been shown to affect a patient’s perceived sexuality. It has been shown that the impact of BPH on QOL is comparable to other disease conditions such as epilepsy requiring surgery and asthma, but worse, in certain aspects, than chronic obstructive pulmonary disease. With regard to the effect that BPH has on the patient’s partner, the morbidity reported was due to sleep disturbance, disruption of social life, psychological burden, inadequate sex life, and fear of surgery or prostate cancer. Factors that influence a patient’s desire to seek treatment have been identified and include bother, interference with daily activities, symptom frequency, worry, and embarrassment; patients also have a major concern about acute urinary retention (AUR) and BPH-related surgery. The reasons patients with BPH chose one therapy over another have been studied and it appears that patients prefer rapid symptom improvement, reduction in prostate size, no side-effects, and a decrease in the risk of AUR and surgery. The strongest influence was side-effects and the most important benefit was reduction in prostate size. Physicians clearly influence the final treatment decision, but they should be aware of patient preferences and consider them when they discuss treatment options with the patient.

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1. Prevalence of BPH

Benign prostatic hyperplasia (BPH) is a common condition in ageing men and has been reported to occur in 19–30\% of men older than 50 yr [1,2]. Bosch et al. suggest that the incidence of the disease depends very much on the parameters used to define the condition [1]. The prevalence of 19\% was based on a definition that combines prostate volume $>30$ ml and International Prostate Symptom Score (IPSS) $>7$, whereas a lower limit of 4.3\% was derived from the definition of prostate volume $>30$ ml, IPSS $>7$, maximum flow rate ($Q_{\text{max}}$) $<10$ ml/s, and postvoid residual urine $>50$ ml. A more recent epidemiologic
study by Boyle and associates examined incidence of lower urinary tract symptoms (LUTS) across four countries and found that moderate to severe symptoms (IPSS 8–35) were present in 16.2–20.7% of men [2]. They also demonstrated that the incidence of moderate to severe LUTS increased with age, rising from 10.6% in men aged 40–49 yr to 40.4% in men aged 70–79 yr. Clinical BPH is now defined as at least two of the following: moderate to severe LUTS (IPSS ≥8), an enlarged prostate (≥30 ml), and a decreased Q max (<15 ml/s) [3].

2. Impact of BPH on quality of life

Although not a life-threatening condition, BPH can affect quality of life (QOL) to differing degrees as demonstrated in several population-based studies using generic QOL questionnaires, such as the EuroQol and the Short-Form 36 (SF-36). An Italian multicentre observational study involving 802 patients, aged 50–80 yr, with LUTS/BPH found a strong association between total IPSS and the IPSS-QOL Index [4]. All patients who were mildly (IPSS < 10) or moderately (IPSS 10–15) symptomatic according to their IPSS were reported as having a good or satisfactory QOL compared with 98.3% of patients with moderate or severe LUTS (IPSS >15) who stated that their QOL was “bad” or even “very bad.” Another study showed that increasing symptom severity was associated with worsening physical role, social functioning, vitality, and mental health [5]. In addition, the increasing bothersome aspect of LUTS associated with BPH was linked to worsening of all dimensions of general health status and QOL. The SF-36 questionnaire has been used in a study of 178 men aged from 45 yr waiting to undergo a transurethral resection of the prostate (TURP), with a control group consisting of the general population [6]. Results indicated that men in the group aged 45–64 yr waiting for surgery had significantly lower health-related QOL (HRQOL) in the domains of role physical, bodily pain, general health perception, social functioning, and role- emotional and mental health (Fig. 1) [3,6]. Men aged ≥65 yr also had significantly lower vitality (reduced social functioning and decreased mental health).

Evidence exists that BPH progressively decreases patient self-esteem. A study of 16 men with LUTS or an enlarged prostate (or both) recruited from an outpatient urology clinic in the United Kingdom were assessed using an individualised repertory grid, a Hospital Anxiety and Depression Scale as well as the IPSS [7]. Findings from the study indicated that men were bothered by a combination of symptom severity, psychological distress, negative evaluations of BPH, and beliefs about the reaction of others. BPH was also considered a progressive disease that was associated with old age.

LUTS have been shown to affect a patient’s perceived sexuality. One study investigated the relative importance of sexuality and QOL in 114 patients with LUTS (IPSS >7) [8]. All patients had moderate or severe symptoms and answered an 89-item questionnaire to assess the interference of symptoms with different aspects of QOL. The scores of importance attributed to sexual activity demonstrated that many patients believed that interference of symptoms with sexuality was “important,” “very important,” or “extremely important.”

Fig. 1 – Short Form 36 mean scores: benign prostatic hyperplasia patients and the general population by age group [3,6]. Reproduced with permission from Hong et al. BJU Int 2005;95:15–9. Blackwell Publishing.
The impact of BPH on QOL is comparable to other disease conditions such as epilepsy requiring surgery and asthma [9], but worse in certain aspects than chronic obstructive pulmonary disease (COPD) [10]. A comparison between the impact of BPH and epilepsy requiring surgery can be made in two studies using the EuroQol (EQ-50), which consists of a health status index instrument and a visual analogue scale (VAS) [11]. The VAS scale is calibrated from 0 to 100 with the end point of 100 equalling best imaginable health state and 0 the worst possible health state. The BPH study was a population-based, self-administered survey of 15,000 men in the United Kingdom [12] and the epilepsy study involved 145 patients, of whom 22 could be assessed before and after surgery [13]. The mean (standard deviation [SD]) EQ-50 VAS scores in the patients with BPH ranged from 63 (75.6) in patients with mild LUTS (IPSS >8 and < 19) to 54 (67.4) in patients with severe symptoms (IPSS ≥19). This compares with a mean EQ-50 VAS score of 61.6 (20.3) in the patients with epilepsy. In comparisons between the impact of BPH and COPD on QOL, with the exception of physical functioning, patients with BPH had a worse QOL than the patients with COPD [10,14].

Another aspect of BPH is the risk of acute urinary retention (AUR) and the effect it has on QOL. One study examined the impact of admission for AUR on patient’s HRQOL (n = 43) compared with admission for elective surgery for BPH (n = 35) and emergency admission for renal colic (n = 17) [15]. Patients were assessed using a self-administered HRQOL questionnaire given at five visits: 72 h from admission, and at 1, 2, 3, and 6 mo of follow-up. Results indicated that at the screening visit interference of pain with enjoyment of life during the past 24 h was greatest in patients with AUR; however, all patient groups had a dramatic decrease in the level of interference after 1 mo. In addition, the study revealed that there was substantial economic burden on patients after an episode of AUR, with 15% of patients having to pay for extra assistance at home. There was also the burden of multiple visits to hospital accident and emergency departments and extra admissions to the hospital due to AUR.

3. Effect on the partner

Any chronic disease will have an impact on the family of the person with that condition because it is the partner or family who usually cares for the individual. A number of studies have looked at the burden, psychological or otherwise, of living with someone with BPH/LUTS. Numerous methodologies have been used and it is not surprising that the findings differ among the studies. A summary of the evidence is given below. It is likely that the magnitude of burden felt and or expressed by caregivers will depend on the culture, country, socioeconomic grouping, and the health care system in which these studies were conducted.

Attention has been moving towards the impact of BPH on the QOL of a patient’s partner and his family. The multinational UrEpik study examined data on the impact of LUTS on QOL from 3473 couples in the United Kingdom, The Netherlands, South Korea, and France [2]. The survey revealed that the presence of LUTS in a patient had an adverse effect on the QOL of the partner. Among women who thought that their partner had urinary problems, 28.7% reported that they would not be satisfied if the partner’s urinary condition remained as it was; 4.5% of women who awoke indicated that this was due to their partner’s nocturia. Of those women who only awoke at night for this reason, 11.8% were quite bothered by this.

A study by Mitropoulos et al. [16] looked at 50 couples where the man had symptomatic BPH. The IPSS was completed by patients and the partners responded to a structured questionnaire that examined the following seven items: sleep disturbance, social disruption, performance of essential tasks, psychological impact, sex life, fear of cancer, and fear of surgery. The partner’s morbidity due to the husband’s condition was due to sleep disturbance (28%) caused by an increase in nocturia; disruption of social life (30%); inability to take care of essential tasks outside and inside their house (8%); psychological burden (66%), which was positively related to the wife’s age; the couple’s age difference and the duration of the marriage; inadequate sex life (48%); fear of surgery (82%); and fear of prostate cancer (62%).

Sells et al. have developed a disease-specific questionnaire to assess the morbidity in the partners of patients with BPH who required treatment [17]. The nine-item instrument included questions related to being awakened at night by the patient and being tired as a result, the effect on the partner’s social life and doing essential tasks, the distress caused by the patient’s symptoms, the effect on sex life, the fear of cancer, and the need for surgery. Of 90 partners tested in phase 2 of the study, only one had no morbidity due to the patient’s symptoms. The degree of morbidity in the remaining partners was related to the severity of the patient’s symptoms. The authors of the study suggest that the questionnaire could be used during doctor consultations with the patient and partner.
4. Patients and treatment

Factors that influence a patient’s desire to seek treatment have been identified and include bother, interference with daily activities, symptom frequency, worry, and embarrassment [3]. Patients also have a major concern about AUR and BPH-related surgery. A Canadian study compared concern and opinion regarding the perceived impact of AUR or surgery on a patient’s personal QOL [18]. Of the 62 patients with BPH who participated in the study, 57% were significantly concerned about the prospect of AUR and 67% were significantly concerned about the prospect of surgery. The reasons men seek treatment has also been studied in a European study (The Prostate Research on Behaviour and Education [PROBE] survey) in five countries (France, Germany, Italy, Spain, United Kingdom) [19]. A total of 502 men with BPH were surveyed; two thirds of the patients were aware of their prostate problems and one third realised they had BPH. Almost one third of patients were afraid that their symptoms might be due to prostate cancer. Regardless of their current medication type, three quarters of patients said that they would prefer a drug treatment that provided a 50% reduction in the risk of requiring surgery rather than a drug that provided more rapid symptom relief. A French survey of patients examined their expectations and perceptions of treatment with a 5α-reductase inhibitor [20]. Results showed that the main preoccupation of patients with BPH is that pharmacologic treatment would reduce the risk of major urologic complications and the need for surgery: 88% and 93% of patients, respectively. Decreasing symptoms and improving QOL were next in importance [21].

The reasons men choose one therapy over another have been examined in a recent study by Watson et al. [21]. The study investigated the relative importance of attributes of the 5α-reductase inhibitor dutasteride and α1-blockers in community-dwelling men. Results showed that when considering medical treatment for BPH, the participants in the study preferred rapid symptom improvement, reduction in prostate size, no side-effects, and a decrease in the risk of AUR and surgery. When considering medical therapy, the strongest influence on respondent choice was the drug’s side-effects. Impotence and dizziness were the least preferred side-effects. The most important benefit was considered to be reduction in prostate size. Overall, given the known attribute levels of BPH medical treatment, that is, efficacy and side-effects, community-dwelling men preferred the 5α-reductase inhibitor over α1-blockers. Physicians should be aware of these findings and consider them when they discuss treatment options with the patient. Ultimately, it is the patient who makes the treatment choice based on the information relayed to him by the physician.

5. Physicians’ attitudes

Patients and physicians both clearly play a role in treatment decision-making, but studies show that the treatment choices of the urologist have an impact on the patient’s choice, independent of baseline characteristics [22]. Determinants of treatment choice for BPH among urologists have been quantified focusing on urologist treatment preferences. The study group involved 670 consecutive patients 50 yr and older with BPH and recently referred to one of 39 urologists in 13 hospitals in The Netherlands. Among the patient characteristics, Qmax, residual urine, and prostate volume were strongly associated with the probability of surgery and watchful waiting. However, the influence of urologist preferences on actual decisions was also significant. The preference of the urologist for a certain treatment was positively associated with the actual chance of that option being chosen. An additional independent effect was seen for the extent of the urologist’s experience. Younger urologists were more likely to administer some form of active treatment, particularly medication.

The proportion of patients with BPH who are not treated has been identified in studies such as the Olmsted County Study, where approximately 50%...
had watchful waiting [23]. This US study also examined the trends in treatment of BPH, which showed an increase in the rate of pharmacologic therapy since 1987 to the present day and a decline in surgical intervention over the same time period (Fig. 2). A recent study in the United Kingdom indicated not only a decline in the number of TURPs being performed but also that more surgery was currently being conducted due to AUR rather than LUTS [24]. This retrospective analysis examined the files on 200 patients who underwent TURP in 1990 and the same number from the year 2000. A 31.6% decline in the number of TURPs was noted over this 10-yr period. In terms of actual procedures conducted due to AUR, the number in 1990 was 33 and in 2000 this had increased to 58. The respective numbers for LUTS were 65 and 42, respectively.

6. Conclusions

BPH clearly has an impact on QOL and symptoms are crucial in causing bother. However, a patient’s self-perception, his perception of the disease, and his subjective ranking of therapeutic priorities depend also on additional factors. These include embarrassment caused by the urinary symptoms and fear of AUR and surgery. In selecting the best treatment option, symptom relief, although essential, should not be considered the most important or most urgent goal and treating the underlying cause of the disease is equally if not more important. The patient’s subjective expectancies should be considered and the therapeutic approach varied as a consequence.

References


