

PEEPING INTO THE RETENTION WORLD: SOCIO-CULTURAL FACTORS LEADING TO ACUTE URINARY RETENTION IN AGING MEN DUE TO BENIGN PROSTATIC ENLARGEMENT

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ABSTRACT

Objective: To study the sociocultural factors responsible for acute urinary retention due to clinically benign enlarge prostate in elderly male.

Methods: It is a descriptive study conducted in at Institute of Kidney Disease, Hayatabad Peshawar from January 2019 till December 2019. 104 patients with acute urinary retention were selected by non-probability consecutive sampling. We included all patients with spontaneous acute urinary retention presenting to Urology outpatient department of Institute of Kidney Diseases Peshawar. We excluded patients with bladder stone, chronic retention due to causes other than benign prostatic enlargement (BPE), urethral stricture. Structured proforma was used for data collection and statistical package for social sciences (SPSS) version 17 was used for analysis

Results: The mean age of the patients was 71.5 ± 5.7 years. 88 (84%) patients had no formal education. 88 (84 %) patients were having no knowledge of prostate gland. 76 (73.3%) respondents considered the urinary symptoms as aging process. 56 (53 %) patients admitted the financial constraints in seeking medical help. 86 (82%) patients denied to be neglected by family members and 94 (90%) patients admitted the social embarrassment with lower urinary symptoms. 76 (73 %) were having symptoms for 1 or more than 1 year before seeking medical attention. Only 36 (34%) patients were initially seen by doctors before referring to tertiary care facility.

Conclusion: Acute urinary retention due to clinically benign enlarge prostate is a social problem. Lack of health education, illiteracy and poor referral system are the leading sociocultural risk factors of acute urinary retention.

Keywords: Prostate, Benign Prostatic Hyperplasia, Acute urinary retention, Bladder outflow obstruction

INTRODUCTION

Benign prostatic hyperplasia (BPH) is a common and prevalent condition in aging men¹. It is the hyperplasia of the components of prostate gland involving the transition zone around urethra. Most common presentation is difficulty in voiding.

These problems mostly affect men aged 50 or above and become more common in older age and up to 90 percent of men older than 80². Prolonged obstruction may result in complications which include acute urinary retention, hematuria, recurrent urinary tract infections, renal insufficiency, diverticula and bladder calculi. The exact cause of BPH is yet to be established fully, but the hyperplasia of epithelium of prostate owing to causes such as advancing age, abnormal late cell growth activation, genetic factors and hormonal imbalance are considered³.

Acute urinary retention (AUR) is one of the most uncomfortable complication of BPH that accounts 8-14% internationally.^{4,5,6} In Pakistan the frequency of acute urinary retention is about 60%⁶ that makes it a common medical dilemma both nationally and internationally. Urinary retention can be acute or chronic. It can also present as urological emergency mostly in men, the most common cause being benign prostatic hyperplasia. There is high mortality rate during first year of AUR due to urosepsis. The morbidity is also very high due to prolong

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catheterization leading to bacteriuria, fever & urosepsis

The refractory acute urinary retention or chronic retention with overflow incontinence is one of the definitive indication for surgical management of enlarge prostate, but unfortunately the postoperative results of these patients are never satisfactory when compared with non-retention patients. Moreover 40% of the patients in postoperative period will permanently experience the symptoms of detrusor instability.

The rationale of the present study is based upon a research question that do socio-cultural factors really have an impact on this common urological condition.

MATERIALS AND METHODS

The study design selected was Descriptive (KAP) study carried out in the Department of Urology at Institute of Kidney Disease, Hayatabad Peshawar from January 2019 till December 2019 after approval from the hospital ethical committee

Sample size was 104 patients and sampling technique was non probability sampling .Inclusion criteria for the study was that patients

Table 1: Showing 5 Sociocultural factors in patients with AUR due to Enlarge Prostate

S No	Question	Yes	No	Don't Know
1	Have you got any knowledge about prostate gland and its complication before ending in Acute urinary retention	2	88	14
2	Did you consider the change in voiding habits as <i>aging process</i> before ending in Acute urinary retention	76	18	10
3	Were you facing financial problems in seeking medical advice before ending in Acute urinary retention	56	32	16
4	Have you been neglected by your family members in seeking medical advice before ending in Acute urinary retention	10	86	8
5	Were you feeling social embarrassment about urinary symptoms before ending in Acute urinary retention	94	6	4

Time lapse between start of urinary symptoms and occurrence of urinary retention the result is shown in Figure 1

included had spontaneous acute urinary retention presenting to Urology OPD of Institute of Kidney Diseases Peshawar. We excluded patients with bladder stone, chronic retention due to causes other than BPE, urethral stricture based on history, examination and investigations including urine r/e, x-ray KUB, ultrasound abdomen and pelvis and uroflowmetry.

All the patients who fulfilled the inclusion criteria were included in the study. Complete history, physical examination and relevant mandatory investigations were performed in all patients. Questionnaire was designed .The socio-cultural data for acute urinary retention was collected on structured proforma and was analyzed on SPSS Version 17.

RESULTS

The mean age of the patients was 71.5± 5.7 years. The educational status of the patient was that 88(84.61%) patients had no formal education, 10 (9.61%)had education below matric while 6(5.76%) had done matric

The results of 5 sociocultural factors that can lead to acute urinary retention is shown in Table 1

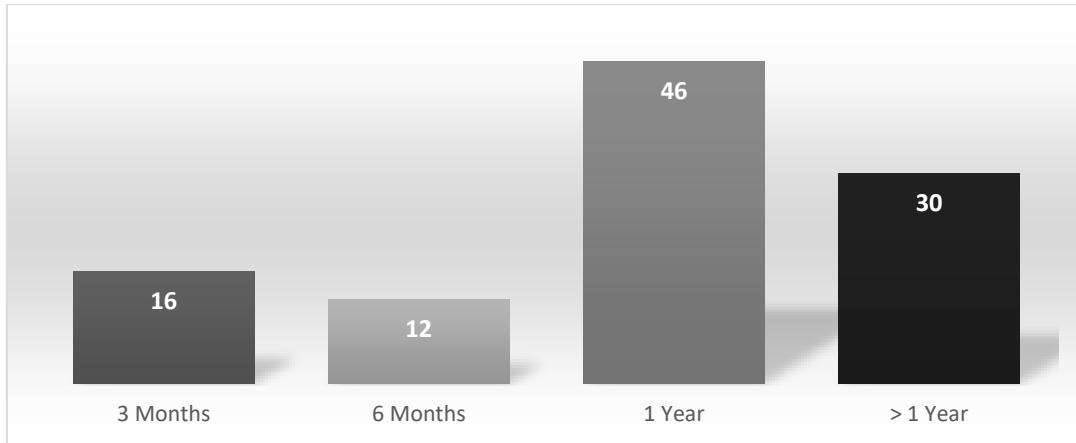


Figure 1. Duration of urinary symptoms before ending in Acute Urinary Retention

Mode of referral of health care provider. Figure 2

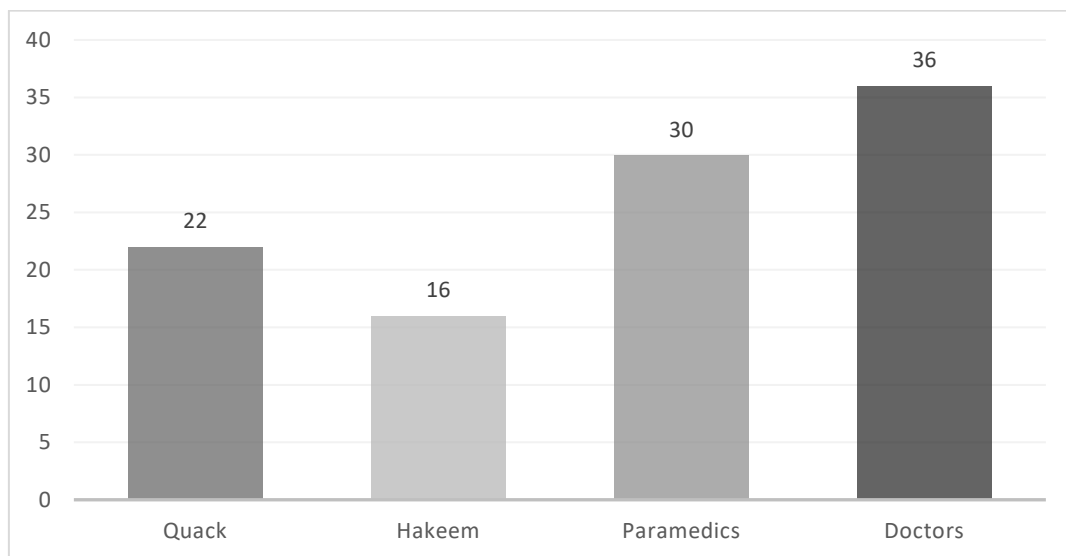


Figure 2: Showing mode of referral by different health care provider

DISCUSSION

Refractory acute urinary retention is a common indication for BPH-related surgery.⁵ This descriptive study evaluates different sociocultural factors that result in acute urinary retention related to clinically benign enlarge prostate. Symptomatic enlarged prostate is a common urological illness. The frequency of acute urinary retention in western world is 7-14% while in Pakistan it is about 60% which makes it the commonest presentation of enlarge prostate^{7,8,9}. The study focus on the evaluation and determination of sociocultural factors that result in acute urinary retention due to enlarge prostate.

The main factors that leads to acute urinary retention include lack of education, literacy, social taboos and unavailability of proper health system. A study conducted in Islamic Republic of Iran found different socio culture factors that leads to acute urinary retention refractory to enlarge prostate.¹⁰

As it is evident from the study that most of the patients who presented with acute urinary retention had no formal education (84%) with little or no knowledge about prostate gland and its complications. Education level was found to be an important element that influenced behavior of people to seek health¹⁰.

The study also described that a large number of patients (73%) believed that a change in their

voiding behavior is related to their aging process and considered them unimportant ¹¹. Introduction of awareness regarding prostate disease will certainly reduce the complications and will decrease of prevalence of acute urinary retention due to enlarge prostate.

Financial difficulties in seeking medical advice were a risk factor in the development of acute urinary retention ¹². Pakistan is a poor country and coverage of cost of treatment for BPH by different Health Schemes would surely help in promoting health care seeking behavior.

In our study, the feeling of social embarrassment among 90% patients about their urinary symptoms seems to be a factor that lead to the development of acute urinary retention. Delaying treatment only allows the condition to get worse. Urinary retention is treatable. By launching health awareness program through electronic and print media about prostate and its complication like Acute urinary retention and Mobilization of Government and NGOS in the prevention of Acute urinary retention due to enlarge prostate will help in the reduction of serious complications of enlarged prostate ¹³.

This study showed that most of the patients denied neglect from their family members while a small proportion agreed that they were neglected by their families. This is subject to biases as most of the patients were accompanied by their relatives. Most of people sought medical advice late and there was an average delay of 1 year before patients report to the health care providers. Increasing awareness in the society regarding prostate disease and its complications would certainly have a positive impact on reducing this duration and thus minimizing complications due to late presentation.

Finally, a large of number of patients were treated by non-doctor for their voiding symptoms before they ultimately end into urinary retention. It is not surprisingly to our environment that a large number of people seek non doctor help for their voiding symptoms. This can be minimized by taking serious steps towards increasing public awareness using different forms of media, educating the population and by providing adequate healthcare facilities.

At this time a lot of literature is not available regarding sociocultural factors that can result in acute urinary retention secondary to enlarge prostate and more research should be carried out that will certainly help to minimize this serious prostatic complication ¹⁴. The

limitations of this study are self-reporting bias and non-probability sampling which is not generalizable to the larger population. This research adds value to the existing literature because it relates to the population of Pakistan of which available data is scarce and where incidence of acute retention is considerably higher than the western world. Secondly we have discussed sociocultural factors responsible which are modifiable and thus can have significant impact on outcome if properly addressed

CONCLUSIONS

Acute retention is one of the most significant events in the natural history of BPH. Symptomatic enlarged prostate is a common urological illness. Lack of health education, illiteracy, social taboos and unavailability of proper health system are the main etiological factors for delay in seeking prompt medical advice.

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