# QUALITY OF LIFE AMONG PATIENTS OF BENIGN PROSTATIC HYPERPLASIA

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#### **ABSTRACT**

**Background:** Benign prostatic hyperplasia is one of the most prevalent disorders in elderly men, often resulting in lower urinary tract symptoms, which can have an undesirable influence on patient's quality of life. **Objective:** To evaluate the impact of benign prostatic hyperplasia and its related symptoms on quality of life of patients. **Methodology:** This cross sectional study was carried out at Sheikh Zayed Medical College/Hospital Rahim Yar Khan from 27<sup>th</sup> January to 25<sup>th</sup> March 2018. Random sampling technique was used in this study and 120 patients of benign prostatic hyperplasia who came for consultation were included in this study. The detailed history was asked to fill specially designed form. Data was entered in SPSS version 22 and analyzed. **Results:** A total of 120 patients with benign prostatic hyperplasia were included in this study. Mean age of the study subjects was 61±6 years and mean weight of prostate was 57±11 grams. In this study, 89% of the patients were Illiterate, 12% had done matriculation and 19% were intermediate and above where as 68% were farmers, 22% were businessmen/Landlords and 30% were govt/private servants. In this study, 46% of the patients were having moderate while 74 % of the patients were having severe symptoms of benign prostatic hyperplasia. In this study, 38.3% of patients were advised medical treatment while 61.7% of patients were offered surgical treatment. **Conclusion:** Benign Prostatic Hyperplasia can be regarded as an important factor to have negative influence on patient's quality of life. It often results in lower urinary tract infections which play a vital role in determining quality of life. **Key words:** Benign prostatic hyperplasia, Lower Urinary Tract, Quality of life.

## INTRODUCTION

Benign prostatic hyperplasia (BPH) is a disorder in older males often resulting in lower urinary tract symptoms (LUT). LUTS include the irritative (Frequency, nocturia, urgency) and obstructive (weak stream, dribbling, intermittency and hesitancy) symptoms. These symptoms associated with benign prostatic hyperplasia can have an undesirable effect on quality of life (QoL) of older males suffering from this disorder and have remarkable influence as these symptoms can also intervene in routine works.<sup>2-5</sup> Frequency of these symptoms increases with age. Disease advancement can result in aggravation of these associated symptoms and can increase the possibility of several complications such as acute urinary retention (AUR) which may finally necessitate surgical intervention to treat benign prostatic hyperplasia. Influence of this disorder and its related symptoms on patient's Quality of Life has been recognized as a remarkable element that can affect patient's wish to go for the treatment. BPH is notably recognized as an influential factor to precipitate a decline in quality of life and increase patient nervousness,8 and keeping in view the seriousness of patient's concern and contentment, Benign prostatic hyperplasia guidelines now recommend that patients are included in suggestions on the choice of curative perspective. 9-11

Although benign prostatic hyperplasia is not a fatal disease, but still it can have a remarkable influence on quality of patient's life, The deterioration in quality of life of patients suffering from benign prostatic hyperplasia is mainly due to disturbance of sleep pattern, nocturnal polyuria, interruption of communal life because of frequent urination, emotional discomfort and apprehensiveness of developing further complications such as urinary tract infection and prostate cancer. Researches revealed that a greater International Prostate Symptom Score (IPSS) is strongly associated with reduced quality of life. This study was conducted to assess the quality of life among patients of benign prostatic hyperplasia.

# **METHODOLOGY**

This was a cross sectional study conducted in the Urology of Sheikh Zayed Medical College/Hospital, Rahim Yar Khan, from 27<sup>th</sup> January to 25<sup>th</sup> March 2018. Ethical approval was sought from Institutional Review Board of the institute. A total of 120 randomly selected patients were included in this study. The cases with age range of 50 to 70 years with Benign Prostatic Hyperplasia symptoms were included. The cases with prostate cancer, prostatitis, urethral strictures and those who were taking medicines for benign prostatic hyperplasia in the last 6 months before the study were excluded from the study. The cases were diagnosed on the basis of

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history and clinical examination and informed verbal consent was taken from each patient who was included in the study. A form was designed to collect the data regarding, symptoms of the disease, Quality of life by using international prostate symptom score (IPSS) for assessment of the disease severity, prior history of medication and treatment offered to the patients. The data was entered in and analyzed by using SPSS version 22.

#### RESULTS

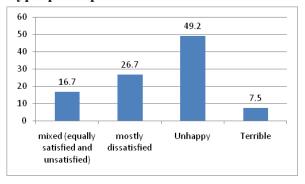
Mean age of study subjects was  $61\pm6$  years and size of prostate among patients was  $57\pm11$  grams. Our study showed that 89 (74.2%) patients were illiterate, 12 (10%) were matric and 19 (15.8%) were Intermediate and above. Results showed that 68 (56.7%) patients were laborer, 30 (25%) were public or private job holders, and 22 (18.3%) were business men or land lords.

Table I: Study variables versus quality of life.

	Quality of Life					
Variable	Mixed (equally satisfied and unsatisfied)	Mostly dissatisfied	Unhappy	Terrible	Total	P value
Education						0.9
Illiterate	14 (15.7%)	25 (28.1%)	43 (48.3%)	7 (7.9%)	89 (100%)	0.9
Metric	3 (25%)	3 (25%)	5 (41.7%)	1 (8.3%)	12 (100%)	
Intermediate	3 (15.8%)	4 (21.1%)	11 (57.9%)	1 (5.3%)	19 (100%)	
& above						
Total	20 (16.67%)	32 (26.66%)	59 (49.2%)	9 (7.5%)	120 (100%)	
Occupation						
Farmer/	14 (20.6%)	18 (26.5%)	30 (44.1%)	6 (8.8%)	68 (100%)	
Laborer						
Businessman/	2 (9.9%)	8 (36.36%)	11 (50%)	1 (4.54%)	22 (100%)	0.8
Landlord						0.8
Govt./Private	4 (13.33%)	6 (20%)	18 (60%)	2 (6.65%)	30 (100%)	
Servant						
Total	20 (16.67%)	32 (26.66%)	59 (49.2%)	9 (7.5%)	120 (100%)	
Symptom severity						
Moderate	20 (43.5%)	23 (50%)	3 (6.5%)	0 (0%)	46 (100%)	0.000
Severe	0 (0%)	9 (12.2%)	56 (75.7%)	9 (12.2%)	74 (100%)	0.000
Total	20 (16.67%)	32 (26.66%)	59 (49.2%)	9 (7.5%)	120 (100%)	

Table I shows the association of education (p=0.9), occupation (p=0.8) and symptom severity (p=0.000) with quality of life among BPH patients.

Figure I: Quality of life among Benign Prostatic Hyperplasia patients.



Our study revealed that 46 (38.3%) patients were having moderate symptoms of benign prostatic hyperplasia and 74 (61%) were having severe symptoms. According to our study, 20 (16.7%) patients were mixed (equally satisfied and unsatisfied), 32 (26.7%) were mostly dissatisfied, 59 (49.2%) were unhappy and 9 (7.5%) were having terrible impact of benign prostatic hyperplasia on quality of life. In our study, among the patients 46 (38.3%) of patients were having medical treatment while 74 (61.7%) were offered surgical treatment.

#### DISCUSSION

Benign Prostatic Hyperplasia is important disorder in older males causing worrisome Lower urinary tract symptoms (LUTS). Several studies have revealed that these presenting complaints have a remarkable influence on healthfulness and quality of life in patients suffering from this disorder. 16-20 Quality of life is one of the most significant measures to determine the management options in many chronic diseases.<sup>24</sup> Only few studies are available regarding the impact of benign prostatic hyperplasia on Quality of life. 21-26 In our study, we mainly used International Prostate Symptom Score (IPSS) to assess the disease severity in patients suffering from Benign Prostatic Hyperplasia. This is in accordance with the study conducted by Snjezana et al<sup>16</sup> in which question of IPSS was used to evaluate the influence of BPH and its related lower urinary tract symptoms on Quality of Life of elderly males suffering from this disorder. In 1992, the American Urologists Association (AUA) issued symptoms scoring index published by the world health organization in 1993 as the International Prostate Symptom score (I-PSS). It was mainly comprised of seven same questions regarding Lower urinary tract symptoms as in AUA Symptom Index with a supplemental question No 8 regarding quality of life. The form was simply composed so that patients may be able to fill it in by themselves. However, some patients were unable to fill it in by themselves. But many studies have revealed that there was not so much difference in the answers i.e. there was a little bit deviation to evaluate the symptoms regardless of the way the form was filled. 27-28 Although BPH is not a fatal disease, but it has a remarkable influence on quality of life. So we cannot ignore its importance. 19-20 The results of our study really support the perception of correlation between symptoms severity of BPH and quality of life. Remarkably, Total IPSS, storage and voiding symptoms have a greater impact on quality of life.

This is compatible with the study conducted by Babie et al<sup>21</sup> in which he came to conclusion that voiding and storage symptoms have a significant impact on quality of life even after treatment of co morbid conditions. So it is also compatible with different studies conducted before, 22-23 Sountoulides et al,24 who supplemented that symptoms related to storage play a significant role. So it was noted that some symptoms of BPH play a major role to affect the quality of life. Incomplete emptying of bladder, weak stream and nocturia showed negative association with quality of life.<sup>25</sup> Mean age of our study subjects was 61±6 years and size of prostate among patients was 57±11 grams in contrast with the study made by Lee c et al<sup>26</sup> in which mean age was 66±8 years and size among patients was 61±5. Our study showed that 89 (74.2%) patients were illiterate, 12 (10%) were matric and 19 (15.8%) were Intermediate and above. These results are in contrast with the study conducted by S.Kaplan et al<sup>27</sup> while in a research which was conducted in US, regarding the BPH, to see the attitude of general public, patients and other professionals regarding the diagnostic approach and treatment offered, 29% of the population suffering from BPH did not consult any doctor just because they did not know that BPH is the cause of all those obstructive or irritative symptoms. If BPH is diagnosed earlier then all those symptoms can be prevented and disease progression and complications can be minimized. Results showed that 68 (56.7%) patients were laborer, 30 (25%) were public or private job holders, and 22 (18.3%) were business men or land lords. Our study showed that our 46 (38.3%) patients were having moderate symptoms of BPH and 74 (61%) were having severe symptoms in contrast with the study done by Irwin DE et al<sup>28</sup> in which 74.5%% of the patients were having moderate symptoms of BPH and 25.5% of the patients were having severe symptoms of BPH. Our study showed that our 20 (16.7%) of our patients were mixed (equally satisfied and unsatisfied), 32 (26.7%) were mostly dissatisfied, 59 (49.2%) were unhappy and 9 (7.5%) were having terrible impact of BPH on Quality of life. This is in contrast to the study done by Yoshimura K, et al, <sup>29</sup> in which 42% of the patients were mostly dissatisfied, 28% were unhappy and 28% were having terrible impact of BPH on Quality of life. Our study showed that 46 (38.3%) of patients were

offered medical treatment and 74 (61.7%) were admitted for surgical treatment. This is contrast to the study done by JD Carballido Rodríguez J, et al,<sup>30</sup> in which 68.8% of patients were having medical treatment and 31.2% patients were having surgical treatment. Our study showed that there was no association of education (p=0.9), occupation (p=0.8) whereas strong association of symptom severity (p=0.000) with quality of life among BPH patients.

### **CONCLUSION**

It was concluded from this study that Benign Prostatic Hyperplasia is one of the most remarkable causes of lower urinary tract symptoms and has significantly negative impact on quality of life.

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