

# **Quality of Life among Clients with Benign Prostatic Hyperplasia**

Master Thesis in Nursing Sciences  
(Community Health Nursing)

**By**

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## **List of Abbreviations**

<b>BPH</b>	: Benign Prostatic Hyperplasia
<b>BEP</b>	: Benign Enlargement of Prostate
<b>BPE</b>	: Benign Prostatic Enlargement
<b>LUTS</b>	: Lower Urinary Tract Symptoms
<b>DRE</b>	: Digital Rectal Exam
<b>PSA</b>	: Prostate Specific Antigen
<b>5-ARIs</b>	: 5 Alpha Reductase Inhibitors
<b>MTOPS</b>	: Medical Therapy of Prostatic Symptoms
<b>UTIs</b>	: Urinary Tract Infections
<b>TURP</b>	: Transurethral Resection of the Prostate
<b>TUIP</b>	: Transurethral Incision of the Prostate
<b>QOL</b>	: Quality Of Life
<b>HRQOL</b>	: Health Related Quality Of Life
<b>I&amp;O</b>	: Intake & Out Put
<b>BUN</b>	: Blood Urea Nitrogen
<b>CR</b>	: Creatinine
<b>IV</b>	: Intra Venous
<b>IPSS</b>	: International Prostate Symptom Score
<b>DHT</b>	: Dihydrotestosterone
<b>AUR</b>	: Acute Urinary Retention
<b>BMI</b>	: Body Mass Index

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### Abstract

Benign prostatic hyperplasia is non-cancerous enlargement or growth of the prostate gland. Benign prostatic hyperplasia is not usually life-threatening but symptoms can have a major effect on quality of life. **The aim** of this study was to assess quality of life among clients with benign prostatic hyperplasia. **Research design:** A descriptive analytical study was utilized. **Setting:** This study was conducted at three urological outpatients' clinics at El Nil hospital for health insurance at shubra elkheima city. **Sample:** A purposeful sample of 240 clients with benign prostatic hyperplasia. **Tools: Interviewing questionnaire for clients was used which included five parts :( I)** Socio-demographic characteristics about clients. **Part (II)** past history about clients, **part (III)** knowledge assessment for client related to benign prostatic hyperplasia. **Part (IV)** Assess quality of life among clients. **Part (V)** Assess health needs and health problems of clients. **Results:** 78.3% of clients had unsatisfactory total knowledge regarding benign prostatic hyperplasia. 78.3% of clients were moderately affected related to their quality of life. 61.2% of clients were not achieved their total needs and 100% of clients had sleeping difficulties, dysuria and hesitancy. **Conclusion:** The study concluded that a highly statistical significance difference between knowledge of clients with benign prostatic hyperplasia and their socio demographic characteristics and a highly statistical significance difference between knowledge of clients with benign prostatic hyperplasia and their quality of life. **Recommendations:** the study recommended that; increase public and clients awareness throughout educational sessions, educational programs and campaigns about benign prostatic hyperplasia and further researches to study the different factors that increase the partners' burden and their complaints to find out the suitable solutions.

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**Keywords:** Quality of Life, Benign Prostatic Hyperplasia.

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## INTRODUCTION

Benign prostatic hyperplasia (BPH) is non-cancerous histological diagnosis characterized by proliferation of the cellular elements of the prostate, in which the prostate gland enlarges beyond the normal volume of 20-30 mL as part of the aging process (*Qian, 2017*).

The prevalence of BPH increases significantly with age greater than 50 % of men will have BPH at 60 years of age, whereas approximately 90 % of men will have BPH by age 85years and the incidence is approximately 25% in men at 50 years old and more (*Xue, et al., 2016*).

Lower urinary tract symptoms (LUTS) represent one of the most common and bothersome conditions seen in daily urologic practice, affecting at least one in every four men older than 40 years having a negative impact on health-related quality of life and are associated with high personal and societal costs, although structural anomalies, neurological disease and infections can play roles, benign prostate enlargement is still by far the most influential factor leading to male LUTS(*Jung, et al., 2017*).

Benign prostatic hyperplasia may also have a detrimental effect on mental health and social economy, in men with severe symptoms, the annual risk of having at least one fall increased by 33%, falls in the elderly are a major concern and can result in pain, fracture, disability and sometimes mortality, the severity of LUTS is also strongly correlated with anxiety, depression, insomnia and sexual dysfunction, so BPH has a great effect on quality of life (*Speak man, et al., 2015*).

Risk factors for the development of BPH include age, genetics, hormones, growth factors, inflammation, and lifestyle factors, when the prostate enlarges it may constrict the flow of urine, nerves within the prostate and bladder may also play a role in causing urinary frequency, urinary urgency, incomplete bladder emptying, straining and dribbling (*Nelson and Good, 2015*).

Benign prostatic hyperplasia may lead to serious complications such as urinary retention, renal insufficiency, recurrent urinary tract infections, gross hematuria and bladder calculi, the treatment options include lifestyle intervention and behavioral modification at first degree,

pharmacotherapy, minimally invasive procedure and surgery (*Calogero, et al., 2018*).

The community health nurse seeks to initiate changes that positively affect health of clients with benign prostatic hyperplasia through life style and behavior modifications, engages in collection, analysis of data and systematic investigation for solving problems, preventing complications of BPH and enhancing community health practice especially at primary health care settings (*Chin, et al., 2017*).

### **Significance of the Study**

Globally, BPH affects about 210 million males as of 2010(6% of population), the prostate gets larger in most men as they get older, the risk of developing BPH over the next 30 years is 45%, incidence rates increase from 3 cases per 1000 man-year at age 45-49 years, to 38 cases per 1000 man-year by the age of 75-79 years, while the prevalence rate is 2.7% for men aged 45-49, it increases to 24% by the age of 80 years (*Anderson, et al., 2016*).

The prevalence and the severity of BPH in the aging male can be progressive and is an important diagnosis in the healthcare of our patients and the welfare of society,

although lower urinary tract infection secondary to BPH (LUTS/BPH) is not often a life-threatening condition, the impact of lower urinary tract infection on BPH on quality of life can be significant and should not be underestimated (*Urology Care Foundation, 2014*).

Benign prostatic hyperplasia is a common problem that affects the quality of life in approximately one third of men older than 50 years, BPH is histologically evident in up to 90% of men by age 85 years, worldwide approximately 30 million men have symptoms related to BPH and in Egypt approximately 121,232 clients have BPH (*U.S Census Bureau ,2004*).

## **Aim of the Study**

### **Aim of the study:**

This study aimed to assessing quality of life among clients with benign prostatic hyperplasia through:

1. Assessing clients' knowledge regarding benign prostatic hyperplasia.
2. Assessing quality of life dimensions (physical, social psychological and medications interference) for clients with benign prostatic hyperplasia.
3. Assessing health needs and problems for clients with benign prostatic hyperplasia.

### **Research Questions**

1. Is there relationship between clients' knowledge and their socio- demographic characteristics?
2. Is there relationship between clients' knowledge and their quality of life regarding benign prostatic hyperplasia?
3. Does benign prostatic hyperplasia affect clients' quality of life?

## **Part I: Benign Prostatic Hyperplasia**

Hyperplasia is a general medical term referring to an abnormal increase in cells, benign prostatic hyperplasia (BPH) is noncancerous cell growth of the prostate gland, it is the most common noncancerous form of cell growth in men and usually begins with microscopic nodules in younger men, BPH is not a precancerous condition and does not lead to prostate cancer, BPH is a progressive disease; it can lead to serious, although rare health problems such as kidney or bladder damage (*Roehrborn, 2014*).

Benign prostatic hyperplasia (BPH), also called benign enlargement of the prostate (BEP or BPE), is increasing in size of the prostate, involves hyperplasia of prostatic stromal and epithelial cells, resulting in the formation of large fairly discrete nodules in the transition zone of the prostate (*Kim, et al., 2016*).

Benign prostatic hyperplasia (BPH) is a histological diagnosis that refers to the proliferation of smooth muscle and epithelial cells within the prostatic transition zone (*Cunningham, 2013*).

## **Anatomy of the prostate gland**

The prostate is part of the male reproductive system, it is about the size of a walnut and weighs about an ounce, the prostate is below the bladder and in front of the rectum, the prostate goes all the way around a tube called the urethra, the urethra carries urine from the bladder out through the penis (*Aaron, et al., 2016*).

The prostate goes through two main growth periods as a man ages, the first occurs early in puberty when the prostate doubles in size, the second phase of growth begins around age 25 and continues during most of a man's life, benign prostatic hyperplasia often occurs with the second growth phase (*Andrology Australia, 2016*).