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Research paper

Journal on the knowledge of prevalence of Benign Prostatic Hyperplasia and it's prevention, among Males of 50 years and above in Bayelsa State

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Benign Prostatic Hyperplasia (BPH) is a worldwide disorder among men. Studies have shown that high proportion of adult males have symptoms of benign prostatic hyperplasia. The aim of this work is to assess the knowledge of the prevalence of Benign Prostatic Hyperplasia and its prevention among males of 50 years and above in Bayelsa State. Across sectional study was conducted among males of 50 years and above in Bayelsa State, using a self structured questionnaire. Informed consent was obtained from participants in the study and acceptance to participate was considered as consent. The questionnaire had two sections; A and B. Section A, assessed their demographic data and section B, assessed their knowledge of the prevalence of benign prostatic hyperplasia and its prevention.

Two research questions and three hypotheses were structure and the responses revealed that:

- **Knowledge of BPH impacts positively in the management of it by individuals in Bayelsa State.**
- **Awareness of preventive measures of BPH is low in Bayelsa State.**
- **There is significant difference between the knowledge of men of 50 years and above in the various local government areas and the Prevalence of Benign Prostatic Hyperplasia in Bayelsa State.**

Based on the above findings the following recommendations were made:

- **Get regular check – ups to detect prostate concerns early. Public education should be organized for the prevention of BPH in Bayelsa State. Avoid stress, and partake in; Regular exercise, Healthy weight, Healthy eating habit (vegetables and fruits, keeping eye on dietary fat), and avoiding alcohol, among others.**

Key words: Prevalence, Benign, Prostatic Hyperplasia

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INTRODUCTION

Benign Prostatic hyperplasia is a histological diagnosis associated with unregulated proliferation of connective tissue, smooth muscle and glandular epithelium within the prostatic transition zone. Prostate tissue is composed of two basic elements: A glandular element composed of secretary ducts and acini; and a stoma element composed primarily of collagen and smooth muscle. Hence there is, cellular proliferation which leads to increased prostate volume and increased stoma smooth muscle tone.

Benign prostatic hyperplasia is a common condition encountered in aging men and a common cause of lower urinary

tract symptoms. Histological prevalence is common, and disease progression is associated with bladder outflow obstruction This activity reviews the natural history of benign prostatic hyperplasia and highlights, the knowledge of prevalence of benign prostatic hyperplasia and it's prevention, among males of 50 years and above in Bayelsa State.

In the works of Chokalingam, Yeboah etal (2012) the burden of BPH/BPE and lower urinary tract infections in (LUTS)1038 subjects aged between 50 – 74 years who were screened for PC + BPH/BPE revealed 73 cases with PC and cases with PSA ≥20ng/ml were 15. These were excluded leaving 950 men screened for BPH/BPE. The prevalence of BPH was 20 to 62% depending on the parameter used. The prevalence of BPH rises to 35 – 60% in individuals aged over 70 years. The estimated prevalence of BPH /BPE in Greater Accra 2000 census with 2,905,736 population in men aged 50 – 74 being 125,443. The prevalence of BPH cases was 77,775(62%) BPH on DRE and 20% symptomatic BPH with IPSS 8 – 35 making 20% of 125,443 that is, 25,089. This makes BPH of public health concern

ETIOLOGY

BPH arises due to the loss of homeostasis between prostatic cellular proliferation and apoptosis or cell death. This imbalance favors cellular proliferation without intervention. The result is increased numbers of prostatic periurethral epithelial and stoma cells, which can be seen histopathologically. The etiology of BPH is influenced by a wide variety of risk factors, in addition to the direct hormonal effects of testosterone on prostate tissue. Men who are castrated before puberty or who have an androgen-related disorder do not develop BPH .(Roehrborn CG, 2008).

Area of study:

Bayelsa State is one of the 36 states of Nigeria. It occupies the extreme south of the country and is approximately mid-way between the eastern and western boundaries of the country with the Republic of Cameroon and Benin respectively.

The state is bounded in the north by Delta State, east by Rivers State and the west and south by the Gulf of Guinea. Bayelsa State is a picturesque (visually charming or having pleasing or interesting qualities) tropical rain forest, with an area of about 21,110 square kilometres. More than three quarters of this area is covered by water, with a moderately low land stretching from Ekeremor to Nembe. The network of many creeks and rivers in the south, all flow into the Atlantic Ocean via the major rivers such as San Bartholomew, Brass, Nun, Sangana among others. The people of Bayelsa State were originally traditionalists. Nevertheless, the concept and acceptance of God as the creator had never been in doubt in any of the sub-religions. This is why every Izon dialect has a specific name for God. The major occupation of Bayelsans (Izon-man) is farming, fishing, canoe- carving and collection of palm products (Yanga, 2006). Bayelsa State is made up of three senatorial districts, comprising of eight Local Government Areas as follows (1) Central Senatorial District, (Yenagoa, Kolokuma/Opokuma and Southern Ijaw Local Government Areas,), (2) East Senatorial District; (Ogbia, Nembe and Brass LGAs,) and (3) West Senatorial District; (Ekeremor and Sagbama LGAs). Its capital is at Yenagoa, (Corporate Nigeria, 2007). It has a population of around 2 million people, (National Population Commission, 2020).

Statement of Problem

Health is wealth and having a good knowledge on the prevalence of BPH and, its prevention serves as the key to attaining good health. Benign Prostatic Hyperplasia caused so many deaths in the whole world and Bayelsa State is not an exception. Could this high mortality rate be due to lack of knowledge of the prevalence and its prevention? To guaranty the final success, which is largely affected by their knowledge of the prevalence and the prevention of the contributing factors? There is however a paucity of studies on this area in Bayelsa State. Hence the need for the present study which is on knowledge of the prevalence of BPH and prevention among males of 50 years and above in Bayelsa State.

Aim of the Study

To investigate the Knowledge of the Prevalence of Benign Prostatic Hyperplasia and it's Prevention among males of 50 years and above in Bayelsa State

Objectives of the Study

In specific terms, the study is to determine:

1.The knowledge of the prevalence of Benign Prostatic Hyperplasia in Bayelsa State.
2.The knowledge about the prevention of BPH among males of 50 years and above in Bayelsa State

The following Questions Guided the Study:

1. What is the impact of knowledge on the prevalence of Benign Prostatic Hyperplasia among males of 50 years and above in Bayelsa State?

2. What is the impact of preventive measures against the prevalence of Benign Prostatic Hyperplasia among males of 50 years and above in Bayelsa State?

Hypotheses

1.There is no significant difference between the knowledge of men and the prevalence of Benign Prostatic Hyperplasia in Bayelsa State,
2.The prevalence of Benign Prostatic Hyperplasia in Bayelsa State has no significant difference on its preventive measures.
3.There is no significant difference between men of age 50years and above and the prevalence of prostate enlargement in Bayelsa State.

Delimitation of the Study

The work is to ascertain the prevalence of prostate hyperplasia and its prevention among men of 50 years and above in Bayelsa state

Significance of the study:

1. The results of this study will make residents of Bayelsa State to have the knowledge of the possible causes and also the preventive measures of Benign Prostatic Hyperplasia.
2.This study is to make available information on the prevalence of prostate hyperplsia among men of 60 years and above in Bayelsa state
3.The information from this study is to serve as an indicator and a pointer for best line of action to be taken to reduce the prevalence rate by both the government and non-governmental organization.
4.Findings from the study may serve as a baseline data for the Bayelsa State government and non-governmental organizations, to encourage and create awareness programmes/campaigns about the possible causes and the preventive measures of Benign Prostatic Hyperplasia
5.The mortality rate of Benign Prostatic Hyperplasia can be reasonably reduced by being knowledgeable of the prevalence and preventive measures.
6.These findings will be of particular interest to public health agencies, health care providers, policy makers, and other stakeholders involved in efforts to lower the disease burden on Benign Prostatic Hyperplasia in Bayelsa State.
7. This study will also form baseline information for further research.

Review of Related Literature

Conceptual Frame work

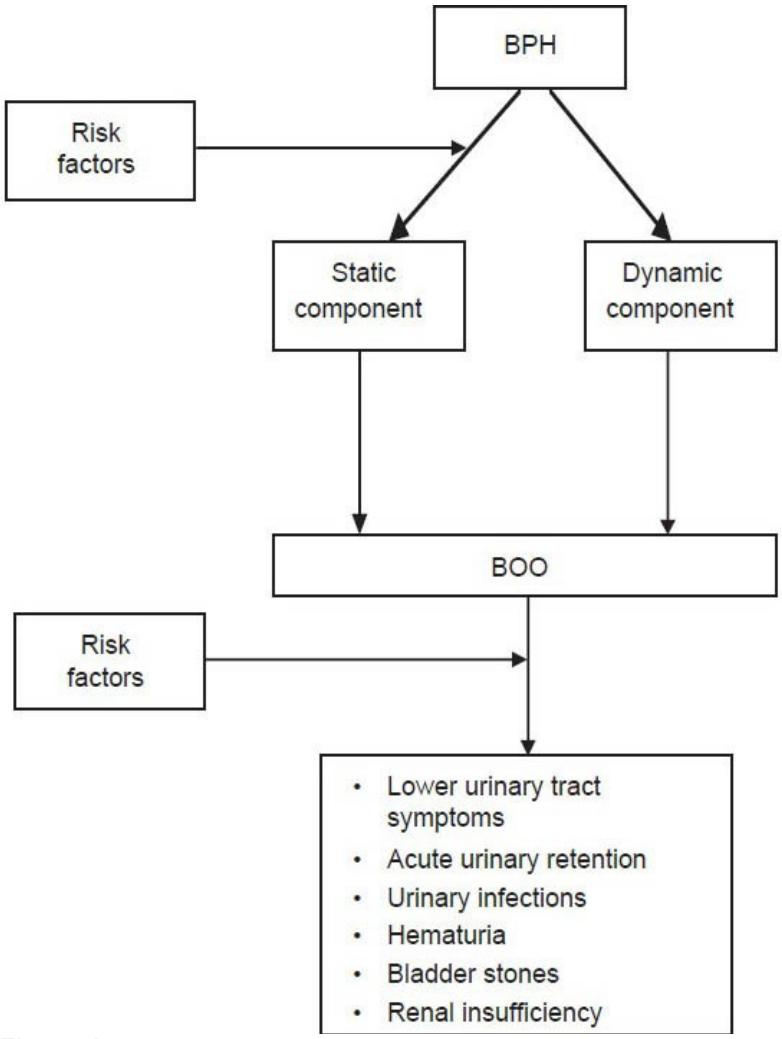

Figure 1

Natural history of benign prostatic hypertrophy
Concept:

The prostate is a gland that produces some of the fluid that carries sperm during ejaculation.
An enlarged prostate means the gland has grown bigger. Prostate enlargement happens to almost all men as they get older.
Prostatic enlargement, also known as benign prostatic hyperplasia (BPH), is a non-cancerous condition in which the prostate gland becomes larger than normal. The prostate is a gland that surrounds the urethra, the tube that carries urine out of the body. As the prostate enlarges, it can press on the urethra and bladder, causing a variety of urinary symptoms.
BPH is common in men over 50, and it's not usually a serious health threat. The risk of prostate cancer is no greater for men with BPH than for men without it. (MedlinePlus.(gov) 7th Jan 2023).
The current study reported a prevalence of 16.67% for BPH. In different retrospective studies, as many as 25% and 12% of adult male Nigerians were reported to have BPH. Approximately 26.2% of the population is estimated to suffer from BPH. https://afju.springeropen.com › articles 24 Dec 2024

Some treatments for BPH include:

- **Antibiotics**

Can improve symptoms of BPH if the prostate is chronically inflamed from bacterial prostatitis

- **5-alpha reductase inhibitors**

Can shrink an enlarged prostate gland

- **Uro Lift system**

A permanently placed device that lifts the enlarged prostate tissue out of the way

- **Surgery**

A doctor may suggest open surgery or a robotic procedure to remove the prostate
(Enlarged prostate: MedlinePlus Medical Encyclopedia
7 Jan 2023)

Symptoms

Less than half of all men with BPH have symptoms of the disease. Symptoms may include:

- Dribbling at the end of urinating, Inability to urinate (urinary retention), Incomplete emptying of your bladder, Incontinence, Needing to urinate 2 or more times per night, Pain with urination or bloody urine (these may indicate infection), Slowed or delayed start of the urinary stream, Straining to urinate, Strong and sudden urge to urinate, Weak urine stream, Frequent or immediate need to urinate, waking up many times at night to urinate, Difficulty urinating, leaking urine, Pain after ejaculation.

Possible Complications

Men who have had BPH for long time with slowly worsening symptoms may develop:

Sudden inability to urinate (urinary retention), Urinary tract infections, Urinary stones, Damage to the kidneys, Blood in the urine.

Prostatic Enlargement may come back over time, even after having surgery. (MedlinePlus.(gov) 7th Jan 2023).

Causes / Risk Factors:

The exact cause of prostate enlargement, also known as benign prostatic hyperplasia (BPH), is unknown, but it's thought to be linked to hormonal changes that occur as men age:

- **Hormone levels**

As men age, the amount of testosterone in the blood decreases, while estrogen levels remain the same. This change in hormone balance may trigger prostate cell growth.

A notable and relatively recent development in the epidemiology of BPH is the recognition that modifiable life-style factors influence the natural history of these conditions. Accumulating data suggest that many of the same metabolic disturbances associated with cardiovascular disease – and the life-style factors that alter these disturbances – influence the risk of BPH. These observations are important because they suggest novel targets for prevention and treatment.

The metabolic syndrome is a collection of metabolic abnormalities – obesity, glucose intolerance, dyslipidemia and hypertension – that increases the risk of cardiovascular disease and results primarily from dietary and other life-style practices endemic to Westernized societies.(Haffner, S. etal, 2003).

Although age and genetics play important roles in the etiology of Benign Prostrate Hyperplasia, recent data have revealed novel, modifiable risk factors that present new opportunities for treatment and prevention. These risk factors appear to potentially influence the natural history of Prostatic hyperplasia, throughout the different stages of clinical progression. Herein, (Figure 1) I review current concepts in the epidemiology and etiology of Prostate Hyperplasia, as seen on the next page.

On a population level, there are 2 broad categories of risk factors associated with BPH: Non-modifiable (age, geography and genetics) and modifiable (sex steroid hormones, the metabolic syndrome, obesity, diabetes, physical activity, diet, and inflammation)

Table 1
Risk factors for BPH

Non-modifiable	Modifiable
Age	Hormones
Genetics	Testosterone
Geography	Dihydrotestosterone
	Estrogen
	Metabolic syndrome
	Obesity
	Diabetes
	Diet
	Physical activity
	Inflammation

LUTS=Lower urinary tract symptoms, BPH=Benign prostatic hyperplasia, DHT=Dihydrotestosterone

Age

The prevalence of BPH rises markedly with age. Autopsy studies have observed a histological prevalence of 8%, 50% and 80% in the 4th, 6th and 9th decades of life, respectively. Barry MJ, Fowler FJ, Jr, Bin L, Pitts JC, 3rd, Harris CJ, Mulley AG., Jr The natural history of patients with benign prostatic hyperplasia as diagnosed by North American urologists. (*J Urol.* 1997;157:10–4. [PubMed] [Google Scholar)

Prostate volume also increases with age, with data from the Krimpen and Baltimore Longitudinal Study of Aging (BLSA) cohorts suggesting a prostate growth rate of 2.0% to 2.5% per year in older men.(Bosch, J.L. et al (2007) ., Loeb, S. etal(2009), Williams, A.M. etal (1999).Although prostate volume does not directly correlate with symptom severity, larger volume prostates are associated with increased risks of BPH clinical progression, urinary retention and need for prostate surgery.(Bosch. J.L etal.(2008), Roehrborn, C.G. (2008).

Types:

The most common types of prostate enlargement are:

- **Benign prostatic hyperplasia (BPH)**

A non-cancerous enlargement of the prostate that occurs as men age. BPH is caused by the growth of stromal prostate cells. Symptoms include frequent urination, difficulty urinating, and dribbling at the end of urination.

- **Prostatitis**

An inflammation of the prostate that is usually nonbacterial in origin. Symptoms include chronic pain and discomfort in the pelvic region.

- **Prostate cancer**

A progressive disease that is characterized by uncontrolled cell proliferation. Prostate cancer is a common cause of cancer death in men. (Medline Plus 8th May 2024)

❖ **Preventive Measures:**

While there is no way to completely prevent prostate enlargement, there are some lifestyle changes that may help reduce the risk and severity of symptoms: (Marks L.S, 2006).

- **Diet**: Eat a variety of vegetables and fruits, including citrus fruits, and limit red meat and fatty foods.
- **Exercise**: Get at least 30 minutes of moderate to vigorous physical activity most days of the week.
- **Hydration**: Avoid drinking liquids a few hours before bed or going out.
- **Alcohol and caffeine**: Limit caffeine and alcohol, which can stimulate the urge to urinate.
- **Weight**: Maintain a healthy weight.
- **Blood pressure, blood sugar, and cholesterol**: Keep these levels normal.
- **Herbal supplements**: Consider taking supplements like beta-sitosterol, pygeum africanum, flaxseed, or pumpkin seed oil.
- **Check-ups**: Get regular check-ups to detect prostate concerns early.
- **Stress**: Avoid stress.
- **Medications**: Avoid over-the-counter cold and allergy medications that can worsen symptoms.

Although age and genetics play important roles in the etiology of Prostratic hyperplasia the following ways can also help to prevent Prostatic hyperplasia in men for example:

Healthy habits such as regular exercise as mentioned earlier, watching your waistline, eating vegetables and fruits, and keeping an eye on dietary fat may help with BPH as well as lower your risk of erectile dysfunction, diabetes and heart disease.

Theoretical Frame Work

❖ **Hormonal Imbalance Theory**

The hormonal imbalance theory posits that changes in sex hormones play a significant role in the growth of the prostate gland. This includes:

- **Testosterone and Dihydrotestosterone (DHT)**: The prostate's growth is largely influenced by DHT, a more potent form of testosterone. As men age, the conversion of testosterone to DHT increases in prostate tissue, stimulating cell growth.
- **Aromatization**: In older men, there is a shift in the metabolism of testosterone, with a higher tendency for testosterone to convert into estrogen. This hormonal shift may contribute to the development of BPH.

❖ **Psychosocial and Behavioral Theory**

This framework looks at how psychological and social factors influence health outcomes:

- **Health Belief Model (HBM)**: According to HBM, individuals' perceptions of their risk for prostate enlargement, the severity of symptoms, and the benefits of seeking treatment will influence their decision to seek medical attention. Older men who don't perceive the symptoms as severe or who do not understand the long-term consequences may be less likely to address the issue early.

- **Social Support**: The level of social support and family influence can also play a role in health behaviors. Family members may encourage or discourage seeking medical care, which affects whether older men receive timely treatment for BPH.

- **Psychological Impact of Aging**: The experience of aging and associated health problems, including sexual health concerns, can affect mental health. Anxiety and depression about prostate issues may also influence the way men approach treatment or ignore symptoms.

❖ **Health Transition Theory**

Health Transition Theory explores how aging and the shift in health status in older adults can affect the experience and management of chronic conditions like BPH:

- **Chronic Disease Management**: Older adults often face multiple chronic conditions that can affect the presentation and management of BPH. Managing comorbidities such as diabetes, cardiovascular disease, and obesity alongside prostate enlargement can complicate treatment.

Aging and Functional Decline: As men age, functional decline (e.g., difficulty in urination, incontinence, or sexual dysfunction) becomes more common, and BPH may further impact their quality of life. Health transitions also include shifts in treatment preferences, with some older adults preferring more conservative management options or foregoing invasive treatments altogether.

Methodology A descriptive cross - sectional survey design was adopted for this study. The population for the study comprised of 450 residents, aged 50 years and above in Bayelsa State. Multi- stage stratified random sampling technique was used; Proportionate stratified random sampling technique was used to get the 10% (45) of respondents representing each stratum. The statistical tools used for analysis of the data include; inferential statistics of Chi-Square, Analysis of Variance ANOVA and Kruskal-Wallis test (using the statistical package for social sciences – SPSS). The research instrument is a 12 item self -structure questionnaire known as Knowledge of Prevalence of Benign Prostatic Hyperplasia and It's Prevention; Questionnaire **(KPBPHAIPQ).** It consists of section A and B. Section A contains the demographic data, while Section B comprises of; A Norminal scale of True or False was used to generate data for the Knowledge of BPH,also for the Prevention of BPH. While a four point modified Likert-scale was used to generate data for the Prevalence of BPH.

In order to ensure face and content validity of the instrument, the questionnaire was presented to few experts in the field, and whose expert opinions, comments, criticisms and observations were used in preparing the final draft of the questionnaire. One hundred and fifty (450) copies of questionnaire administered to the respondents with the aid of eight trained research assistants being used to ensure proper distribution of questionnaire to the respondents on their various locations (towns) within the eight local government areas of Bayelsa State, for purposes of proper distribution and retrieval took about two weeks to round up all the selected towns. The return rate of the instrument was calculated or established, and the percentage return rate was 100% for the study. The completed copies of questionnaire were collated, coded and analyzed using the Statistical Package for Social Sciences (SPSS) batch version 25. Descriptive statistics of mean was used to answer the research questions. The criterion mean of 2.50 was used in taking decision for research questions. The criterion mean was calculated as follows:

4 + 2+ 2+ 1 = 2.5

For the research questions on knowledge of the prevalence of Benign Prostatic Hypertrophy and its Preventive measures; an item mean or grand mean that equal to or greater than the criterion mean of 2.50 was adjudged as consistent practice" according to the variable in question, but any item mean or ground mean that was less than 2.50 was considered as not having the knowledge of prevalence of BPH and inconsistent practice of the preventive measures'' Inferential statistics of, one-way ANOVA for (hypothesis 1) and t-test was used to test hypotheses 2 and 3,at 0.5 alpha level using the statistical package for social sciences {SPSS}.

RESULTS

Research Question One

Table 1: What is the impact of knowledge on the prevalence of Benign Prostate Hyperplasia among males of 50 years and above in Bayelsa State?

S/NO	Knowledge of Benign Prostate Hyperplasia	T	%	F	%
1.	Painful urination is a common symptom of Benign Prostatic Hyperplasia.	270	85.7	45	14.3
2.	Reduction of caffeine intake might help in managing Benign prostatic hyperplasia.	238	75.6	77	24.4
3.	Benign prostatic hyperplasia is a type of cancer	218	69.2	97	30.8
4.	Benign prostatic hyperplasia can cause kidney failure.	246	78.1	69	21.9
5.	Benign Prostatic Hyperplasia can be treated with medication alone	101	32.1	214	67.9
6.	Surgery is a treatment option in cases of severe symptomatic Benign Prostatic Hyperplasia.	262	83.2	53	16.8

Table 1; presents the responses of respondents on the impact of knowledge on the prevalence of Benign Prostate Hyperplasia among males of 50 years and above in Bayelsa state. 85.7% of the respondents agree that painful urination is a common symptom of Benign Prostate Hyperplasia, 75.6% agrees that reduction of caffeine intake might help in managing benign prostate hyperplasia, 69.2% responded that benign prostate hyperplasia is a type of cancer. 78.1% agrees that Benign prostate hyperplasia can cause kidney failure while 32.1% feels Benign prostate hyperplasia can be treated with medication alone and 83.2% agrees that surgery is a treatment option in cases of severe symptomatic benign prostate hyperplasia.

Research Question Two

Table 2: What is the impact of preventive measures against the prevalence of Benign Prostatic Hyperplasia among males of 50 years and above in Bayelsa State?

S/NO	Awareness of Preventive Measures of BPH	T	%	F	%
1.	Being aware that maintaining a healthy weight, regular exercise and limiting alcohol consumption are ways of preventing BPH	246	79.1	65	20.9
2.	Have you ever discussed prostate health with a health care provider?	99	31.8	212	68.2
3.	Do you perform regular check-ups for prostate health?	59	19.0	252	81.0
4.	Do you feel that more public education should be organised for the prevention of BPH?	302	97.1	9	2.9

Table 2; presents the responses of respondents on the impact of preventive measures against the prevalence of benign prostate hyperplasia among males of 50 years and above in Bayelsa State. 79.1% of the respondents agree that being aware that maintaining a healthy weight, regular exercise and limiting alcohol consumption are ways of preventing BPH. 68.25% agrees that they have never discussed prostate health with any health care provider. 81.0% do not go for regular check-ups for prostate health issues, while 97.1% feels that more public education should be organized for the prevention of PBH.

Hypothesis One

There is no significant difference between the knowledge of men and the Prevalence of Benign Prostatic Hyperplasia in Bayelsa State.

Table 3: Chi-Square test on the knowledge of men and the Prevalence of Benign Prostate Hyperplasia in Bayelsa State.

	Value	df	Asymp. (2-sided)
Pearson Chi-Square	23.555[a]	7	.001
Likely Ratio	24.583	7	.000
Linear-by-Linear Association	22.678	1	.000
N of Valid Cases	315		

Table 3; presents the Chi-Square test on the knowledge of men and the prevalence of benign prostate hyperplasia in Bayelsa State. The Pearson Chi-Square from the table is 23.555 with df of 7 and P=0.001. Since P (0.001) < 0.05 alpha level. We reject the null hypothesis and uphold the alternative. That is, there is significant difference between the knowledge of men and the Prevalence of Benign Prostatic Hyperplasia in Bayelsa State.

Hypothesis Two

The prevalence of Benign Prostatic Hyperplasia in Bayelsa State has no significant difference on its preventive measures.

Table 4: One way ANOVA of The prevalence of Benign Prostatic Hyperplasia in Bayelsa State.

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	153.430	2	76.715	7.241	.001
Within Groups	4735.495	447	10.594		
Total	4888.924	449			

The between groups sum of squares is 153.430, degree of freedom, 2 and mean square is 76.715. The within groups sum of square is 4735.495, degree of freedom, 447 and mean sum of square is 10.594. Total sum of square and degree of freedom are 4888.924 and 449. The F-value of the ANOVA is 7.241 at P=0.001. Since P (0.001) < 0.05 alpha level, we reject the null hypothesis. That is, the prevalence of Benign Prostatic Hyperplasia in Bayelsa State has significant difference on its preventive measures.

Table 5: Kruskal-Wallis test of knowledge of men of age 50 years and above with the prevalence of prostate hyperplasia in Bayelsa State.

	VAR00001
Chi-Square	.533
Df	7
Assump. Sig.	.911

Table 5; presents the Kruskal-Wallis test of knowledge of men of age 50 years and above with the prevalence of prostate hyperplasia in Bayelsa State. The Kruskal-Wallis Chi-Square is .533 for 7 degrees of freedom. The P value (0.911) is greater than 0.05 chosen alpha level. Therefore the null hypothesis is upheld. That is, men of age 50 years and above does not have any significant difference with the prevalence of prostate hyperplasia in Bayelsa State.

Summary of Findings

1. Knowledge of BPH impacts positively in the management of it by individuals in Bayelsa State.
2. Awareness of preventive measures of BPH is low in Bayelsa State.
3. There is significant difference between the knowledge of men of 50 years and above in the various local government areas and the Prevalence of Benign Prostatic Hyperplasia in Bayelsa State.
4. The prevalence of Benign Prostatic Hyperplasia in Bayelsa State has significant difference on its preventive measures.
5. Men of age 50 years and above does not have any significant difference with the prevalence of prostate hyperplasia in Bayelsa State.

Discussion of Findings

Knowledge of men and the prevalence of BPH in Bayelsa State

Hypothesis one reveals that, there is significant difference between the knowledge of men and the prevalence of benign prostatic hyperplasia in Bayelsa State.

Also, research question on the impact of knowledge on the prevalence of BPH among males of 50 years and above in Bayelsa State reveals a high percentage of respondents having a the knowledge that; Painful urination is a common symptom of BPH , reduction of caffeine intake might help in managing BPH, and that BPH can cause kidney failure, among other facts

Prevalence of Benign Prostatic Hyperplasia and its Preventive Measures

Hypothesis two reveals that, the prevalence of Benign Prostatic Hyperplasia in Bayelsa State has significant difference on its preventive measures.

This is in line with the WORKS of Marks L.S (2006), on prevention of benign Prostatic Hyperplasia with emphasis on diet, exercise, maintaining healthy weight, regular check –ups, avoidance of stress etc.

Knowledge of males of 50 years and above and the prevalence of BPH in Bayelsa State

Hypothesis three reveals that;The knowledge of men of age 50 years and above does not have any significant relationship with the prevalence of prostate enlargement in Bayelsa State.

This is in line with the findings of Springer, (2024) on the reported prevalence of 16.67% for BPH. In different retrospective studies, as many as 25% and 12% of adult male Nigerians were reported to have BPH. Approximately 26.2% of the population is estimated to suffer from BPH.

CONCLUSION

This study was undertaken in Bayelsa State in Nigeria to assess the prevalence of BPH an its prevention among males of 50 years and above. The findings indicated that; Awareness of preventive measures of BPH is low in Bayelsa State.

There is significant difference between the knowledge of men of 50 years and above in the various local government areas and the Prevalence of benign prostatic hyperplasia in Bayelsa State, which is consistent with the Worldwide pattern of BPH becoming more common with age.

Recent evidence , although sparse indicate there is high prevalence of Benign Prostatic Hyperplasia in Nigeria, Bayelsa State inclusive, which require the need for enhance public health strategies, including regular screening programmes, early diagnosis, and education of lifestyle modification etc.

These majors are crucial for making males in general to be knowledgeable of the prevalence of benign prostatic hyperplasia as well as its prevention.

RECOMMENDATIONS

- Get regular check – ups to detect prostate concerns early.
- Public education should be organized for the prevention of BPH in Bayelsa State.
- Avoid stress
- Regular exercise , Healthy weight, Healthy eating habit (vegetables and fruits, keeping eye on dietary fat), and avoiding alcohol
- A 24-hour voiding diary can be helpful if the patient has significant frequency or nocturia..
- Bladder scanners are extremely useful in evaluating BPH, abdominal pain, suprapubic fullness, incontinence, and various voiding disorders, even in primary care clinics.
- A bladder scan is recommended for all primary care offices to allow for noninvasive testing of post void residual urine volumes in all males older than 50 years with urinary symptoms.
- A renal ultrasound is strongly recommended in patients with BPH and unexplained renal failure or urinary retention.
- Pharmacists are particularly important due to the increasing incidence of BPH with age and the high rate of polypharmacy associated with geriatric patients. It is critically important that any drug interactions are promptly and properly identified. The use of concomitant anticoagulants should be recognized to ensure that they may be appropriately held before surgery or other invasive procedures offered to the patient.

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