HEALTH-RELATED QUALITY OF LIFE OF PROSTATE CANCER PATIENTS RECEIVING CARE IN TERTIARY HOSPITALS IN OGUN STATE

Olorunniyi Shola Blessing[1*], Olanrewaju Motunrayo Florence (Prof.)[1]

and Dr. Ogo Chidiebere Ndukwe[3]

[1]Department of Public Health, School of Public and Allied Health,
Babcock University, Ilishan-Remo, Ogun State, Nigeria.

[2]Department of Surgery, Division of Urology,
Babcock University Teaching Hospital, Ilishan-Remo, Ogun State, Nigeria.

*Corresponding Author's E-mail: olorunniyisb@gmail.com

ABSTRACT: *Prostate cancer is the commonest malignancy among males in Nigeria. Most prostate cancer cases in sub-Saharan Africa get diagnosed in its late stages – which is associated with poorer health-related quality of life (HRQoL). Meanwhile, HRQoL has been shown to be a strong predictor of survivorship; therefore, this study was conducted to examine the HRQoL among prostate cancer patients receiving care in tertiary hospitals in Ogun state. With the cross-sectional research design and sample size of 387 prostate cancer patients selected using purposive sampling technique, the FACT-P instrument was used in data collection. Descriptive statistics analysis was used to assess participants' HRQoL levels. Findings showed that prostate cancer patients in this region have an average health-related quality of life level; the physical wellbeing domain of participants health-related quality of life was most affected by prostate cancer, with physical wellbeing having the lowest mean score (M=14.66), followed by emotional wellbeing (M=15.57), functional wellbeing (M=17.7), and social wellbeing being the least affected (M=18.33). Tertiary hospitals should ensure the inclusion of psycho-oncology counselling and psychotherapy, into the treatment plan of all patients after a prostate cancer diagnosis to improve the emotional and psychological wellbeing of prostate cancer patients. Similarly, access to physical rehabilitation and physiotherapy should be made easily accessible to improve physical wellbeing among prostate cancer patients.*

KEYWORDS: Health-related quality of life, Quality of life, Prostate cancer, sub-Saharan Africa, FACT-P.

INTRODUCTION

Background to the Study

The prostate is a gland in the reproductive system of males that produces the prostatic fluid; this fluid serves the function of nourishing the spermatozoa that are produced and released by the male during ejaculation (Tuong et al., 2021). However, cancer of the prostate gland is the second most frequent cancer in males worldwide and the most common cause of cancer-related mortality among men (Testa et al., 2019), with an estimated 1,600,000 cases and 366,000 deaths each year (Ferlay et al., 2018). Meanwhile, sub-Saharan Africa was among the regions where the highest estimated death rates of prostate cancer occurred (MaryBeth et al., 2019). Similarly, cancer of the prostate is the commonest malignancy and also the number one cause of cancer-related deaths among males in Nigeria (Chidebe et al., 2019).

Although empirical evidence has shown that CaP can be cured or properly managed when diagnosed early (Carlsson & Vickers, 2020), it has also been found that most men with CaP in sub-Saharan Africa get diagnosed with the disease in its late stages – which is associated with poorer prognosis (Seraphin et al., 2021); this raises concern on the Health-Related Quality of Life (HRQoL) of men that are diagnosed with prostate cancer in this region. Meanwhile, Quality of Life (QoL) has been shown to be a strong predictor of survivorship (Fayers & Machin, 2016).

The World Health Organization (WHO) defines Quality of Life (QoL) as "an individual's perception of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards, and concerns" (WHOQOL, 1995, p. 1403). Furthermore, Health-Related Quality of Life (HRQoL) has been defined as "the way health is empirically estimated to affect QoL" (Karimi & Brazier, 2016, p.1). In addition, Health-Related Quality of Life (HRQoL) is quite discretionary and is determined by an individual's overall evaluation of the degree of their physiological and psychological wellbeing as an outcome of their health or medical care (Bellardita et al., 2013).

Urinary and bowel incontinence, as well as erectile dysfunction, are primarily the physiological characteristics linked to QoL of men with prostate cancer, whereas depression and anxiety are among the psychological characteristics (Ansmann et al., 2018). It was observed among black men that having a source of social support was a prominent factor in increasing their health-related quality of life (Sauer et al., 2022). Similarly, an observational, prospective, longitudinal study was conducted by De Carvalho et al. (2022) to examine the Quality of Life (QoL) among Acute Coronary Syndrome (ACS) patients who got professional medical care in either a public- or privately-owned health care facility; they found that the group of participants who received care from public/government health care facilities had lower quality of life scores for all the different domains of quality of life (functional capacity, physical aspects, pain, general health status, vitality, social condition, emotional profile, and health) than the group who receives care from private healthcare facilities.

Furthermore, financial hardship among Latinos residing in USA (United States of America) was found to be associated with poorer Health-Related Quality of Life (HRQoL) in that population (Nedjat-Haiem et al., 2021), Latinos in the United States struggle financially and it is quite difficult for them to gain employment where health insurance coverage is part of job benefits (Cheney et al., 2018); similarly, this study was conducted to assess the HRQoL of

Prostate cancer patients receiving care in both public and private tertiary hospitals in Nigeria – a region in sub-Saharan Africa, known for similar economic hardship and inadequate health insurance coverage within its population.

Statement of the Problem

The number of cancer survivors has increased due to advancements in therapeutic and diagnostic techniques (Weaver et al., 2012), which is associated with a rise in the five-years cancer survival rate (Maruvka et al., 2014). However, as more men with prostate cancer live longer, many of these patients will have to contend with the psychological effect of a cancer diagnosis along with the physical and socioeconomic effects of its treatment, which may result in functional limitations/disabilities and significant economic burdens.

Hence, the prognostic potential of patients' Quality of Life (QoL) recommends that regular QoL assessment is necessary (Fayers & Machin, 2016). Therefore, this study assessed the health-related quality of life (HRQoL) of prostate cancer patients receiving care in tertiary hospitals in Ogun state, Nigeria.

Aim of the Study

The aim of this study was to assess the health-related quality of life level of prostate cancer patients receiving care in tertiary hospitals in Ogun State, Nigeria. Consequently, providing accurate and reliable data that will guide informed decision making in the development of interventions needed to improve the quality of life of prostate cancer patients – in order for them to "attain their highest level of health."

The aim of the study was operationalized by two research questions:

1. What is the health-related quality of life level of prostate cancer patients receiving treatment in Ogun State, Nigeria?

2. What domain of health-related quality of life (physical wellbeing, emotional wellbeing, social functioning, and spiritual/existential wellbeing) is affected the most by prostate cancer among study participants?

Hypotheses

Using alternative hypothesis; based on the assessment of health-related quality of life of prostate cancer patients in public and private tertiary hospitals, this study hypothesised that:

H$_A$.   Significant difference exists between the health-related quality of life level of prostate cancer patients receiving care in a private tertiary hospital and those receiving care in a public tertiary hospital.

LITERATURE REVIEW

Active surveillance, radiation therapy, and radical prostatectomy are the main forms of treatment for prostate cancer diagnosed in its early stages, which over time may affect how some bodily functions and processes, such as urinary, sexual, or bowel functioning occur (Ansmann et al., 2018; Tucci et al., 2018). Although, advanced prostate cancer has traditionally been treated initially by androgen ablation, either surgically or by medication castration (i.e., androgen deprivation therapy) (Lowrance et al., 2021). The negative effects of hormone therapy, steroids, and other drugs used to treat advanced prostate cancer can be distressing (Selvi & Basar, 2020; Smith et al., 2018; Hussain et al., 2018).

A study by Gaither et al. (2022) assessed "general and prostate cancer-specific health-related quality of life in low-income, uninsured men with metastatic prostate cancer treated with surgical or medical castration" (Gaither et al. 2022, Discussion section, para. 1). In terms of both physical and mental component ratings, it was found that, participants who received medical castration did not have a higher quality of life than those who had orchiectomy (surgical castration). Meanwhile, their findings indicated that patients treated with orchiectomy reported better urinary function than those who underwent medical castration.

In a review of literatures on the influence of prostate cancer therapies on QoL conducted by Ryan et al. (2020), the researchers found that in clinical investigations, the second-generation androgen receptor (AR) inhibitors enzalutamide and apalutamide were linked to various adverse effects that affected the central nervous system (CNS), including fatigue (which may be detrimental to cognitive function). Furthermore, one of the research studies covered in this review discovered that CNS changes caused by systemic anticancer treatments may affect patients' capacity to make treatment decisions and engage in work or leisure activities, which may in turn lower quality of life (Wu et al., 2013).

Usually, availability of supports, psychiatric history, and other major life events, such as a divorce, a spouse's recent death, retirement, or the loss of a family member or loved ones to cancer in the past, will all affect the psychological reactions of men [in a generally older population] to a prostate cancer diagnosis (Baba et al., 2021). For men with prostate cancer, anxiety is typically the symptom they feel more commonly (Chien et al., 2019). Many males also could experience irritation or depression, with a history of depression reported to be among the top predictor of depressive symptoms (Fervaha et al., 2019).

Sauer et al. (2022) conducted a research study to "examine the psychological interdependencies between anxiety, fear of progression, depression, and health-related quality of life of patients with advanced prostate cancer and that of their spouses" (Sauer et al. 2022, Discussion section, para. 1). Their findings showed that the patients' health-related quality of life was negatively associated with spouses' anxiety and fear of progression, indicating that spouses' and patients' anxiety and fear of progression affected the health-related quality of life of the patients.

However, more information from empirical evidence investigating the dynamics between prostate cancer and the quality of life of prostate cancer patients in Nigeria is required, for providing precise cancer care and intervention to improve QoL among this population. Hence, this study was conducted to fill this important gap in our understanding of the dynamics of how

prostate cancer affects QoL, among prostate cancer patients, as a necessary first step to improving their experience of the illness.

In addressing this knowledge gap, this cross-sectional, questionnaire-based study was conducted among prostate cancer patients receiving treatment in the urological units of two tertiary hospitals (public and private) in Ogun state, Nigeria.

METHODOLOGY

Study Design

This study employed the descriptive cross-sectional study design in elucidating the problem phenomenon.

Study Area

The study was conducted in tertiary hospitals within Ogun State, Nigeria. Tertiary hospitals play a bigger role in comparison to primary hospitals and secondary hospitals, in medical education and scientific research, and act as medical centres, and provide multidisciplinary treatment (Yan et al., 2020). Consequently, two tertiary hospitals (public and private), located in two Local Government Areas (LGA) within Ogun State, were selected as study area for this study:

1. Federal Medical Centre, Abeokuta (FMCA): Federal Medical Centre Abeokuta, popularly known as FMC Abeokuta, is a specialist hospital, and a public facility owned by the federal government of Nigeria. The hospital was founded on 21st of April 1993 and is located in the Abeokuta-South local government area of Ogun state, Nigeria.

2. Babcock University Teaching Hospital (BUTH): Babcock University Teaching Hospital, a private facility, popularly known as BUTH is a teaching hospital, owned by the Seventh-day Adventist Church. Babcock University was founded in 1959 and located in Ilishan-Remo, Ikenne local government area, Ogun State, Nigeria.

Study Population

This study was conducted among the prostate cancer community in Ogun state, Southwestern Nigeria. The study population consisted of histologically diagnosed prostate cancer patients, above 40 years of age.

Sample Size and Sampling Technique

The non-probability, purposive sampling technique was employed in selecting participants that were eligible for this study. The computed sample size for this study was 384. 5% (19.2) of the sample size was added (384 + 19.2 = 403.2) to account for non-response, increasing the sample size to 403. At the end of data collection, 387 participants were recruited with questionnaire completed; 288 participants were recruited from Federal Medical Centre Abeokuta and 99 participants from Babcock University Teaching Hospital Ilishan-Remo, in Ogun State, Nigeria.

Instrument for Data Collection

The instruments for data collection for this study were adopted, purposely, to precisely measure each variable.

I.   Explanatory variables

Disease factor and treatment characteristics: Sample items here are date of diagnosis, disease stage, type of treatment and which health facility is used, among others.

Demographic and genetic characteristics: age, marital status, educational level, ethnic group, among others.

II.   Outcome variables

Health-related quality of life, the outcome variable was assessed using the Functional Assessment of Cancer Therapy-Prostate instrument (FACT-P) (Esper et al., 1997). The FACT-P consist of 5 subsections (functional wellbeing, social/family wellbeing, physical wellbeing, emotional wellbeing, and prostate cancer subscale), all rated on a Likert-type 5 response (0- Not at all, 1- A little bit, 2- Some-what, 3- Quite a bit and 4- Very much), with 0 being the lowest and 4 the highest point.

Validity of the Instrument

This study adopted standardised instruments that have been used and validated in several studies and has been found to be suitable for this study population. Therefore, for the purpose of this study, construct validity and face validity were conducted, to ensure the accuracy of the instruments in measuring the study variables.

Reliability of the Instrument

Reliability of the instrument for data collection was tested using Cronbach's alpha internal consistency analysis. Participants quality of life, comprising physical health, emotional wellbeing, social functioning, and spiritual/existential wellbeing was measured using the FACT-P instrument, and the result of the Cronbach's alpha analysis for test of reliability for this was a good score of .909.

Method of Data Collection

Therefore, study data was collected using a paper and pencil questionnaire (instrument). Interview method was used in administering the questionnaire to participants. Study data has been stored in a secure database located in Ogun State, Nigeria.

Data Analysis and Hypothesis Testing Procedures

Data was analysed on IBM SPSS 26 using descriptive statistics to assess participants health-related quality of levels. The hypotheses postulated for this research were tested thus: Independent T-Test was used to test if a significant difference exists between the health-related quality of life of prostate cancer patients receiving care in private tertiary hospitals and those receiving care in public tertiary hospitals.

Ethical Consideration

For the ethical basis of this study, ethical approval was obtained from the Institutional Review Board of the Babcock University Health Research Ethics Committee (BUHREC).

Confidentiality: The identity of the study participants was kept confidential.

Coercion: Informed consent was obtained from all eligible participants before they were recruited for the study. Participants were informed that they will not be penalised in any way if they choose not to participate and that they could decide to discontinue participating in the study at any point.

Privacy: All documents obtained containing participants' information were assigned a code number to ensure the privacy of all participants.

RESULTS

Data was collected from 387 participants: 288 (74.4% of the total) from FMCA and 99 from BUTH, accounting for 25.6% of the total study population (see table 1). Among the study participants, 4.4% were between the ages of 40-49 years, 18.3% were between 50-59 years, 34.6% were between 60-69 years, and 27.1% were between 70-79 years, 14.7 were between 80-89 and 0.8% were between 90-99 years of age. The major ethnic group was Yoruba (68.2%), while 9.6% of the population were Ibo's, followed by Hausa (8.8%) and 13.4% for other ethnicities. Relationship status showed that 92.8% were married, 4.9% were widowed and 2.3% were divorced/separated. Moreover, 58.4% of participants were retired, while 34.6% were employed and 7% were unemployed. The average monthly income of the study population was 76, 395.35 naira with 0 (zero) naira being the minimum and 500, 000 naira being the maximum. Meanwhile, over 70% of the study population was not on any form of health insurance, only 23.8% had some form of health insurance coverage. Although 88.9% were currently on hormone therapy, 21.2% had undergone cancer-related surgeries in the past.

Table 1: Demographic Characteristics of the Respondents

Demographic Variables	Respondents in this study N = 387	
	Frequency (n)	Percentage (%)
Facility		
FMCA	288	74.4
BUTH	99	25.6
Age in Years		
40-49	17	4.4
50-59	71	18.3
60-69	134	34.6
70-79	105	27.1
80-89	57	14.7
90-99	3	0.8
Relationship Status		
Married	359	92.8

Divorced/Separated	9	2.3
Widowed	19	4.9
Ethnicity		
Yoruba	264	68.2
Hausa	34	8.8
Ibo	37	9.6
Others	52	13.4
Educational Level		
None	4	1.0
Primary	103	26.6
Secondary	124	32.0
Tertiary	156	40.3
Employment Status		
Unemployed	27	7.0
Retired	226	58.4
Employed	134	34.6
Health Insurance		
No	295	76.2
Yes	92	23.8

Participants were asked to rate the quality of their health at the time of recruitment, indicating if it was very poor, poor, good or very good. From the responses, 9.8% indicated very poor, 30.7 indicated that their quality of health was poor; while 53.5% said it was good, and 5.9% said it was very good (see figure 1).
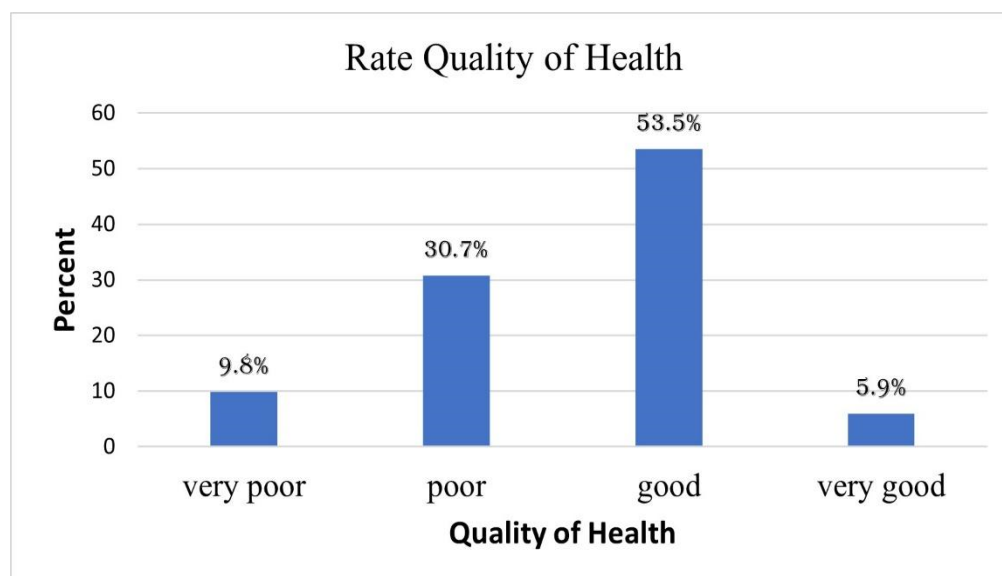

Figure 1: Participants' rating of their quality of health

Health-Related Quality of Life Level of Participants

The health-related quality of life (HRQoL) level of the study participants was assessed using the FACT-P instrument which is measured on a 156-point scale with the Likert-type 5-response options. A score between 0 - 31.2 indicates a very poor HRQoL; a score between 31.3 - 62.4 indicates a poor HRQoL; a score between 62.5 - 93.6 indicates an average HRQoL; a score between 93.7 - 124.8 indicates a good HRQoL; while a score between 124.9 - 156 indicates a very good HRQoL.

Descriptive statistics results of the study data showed that the overall mean score of the health-related quality of life of the study population was 87.9. Meanwhile, the minimum health-related quality of life score for the study population was 14 and the maximum score was 137 (see table 2).

Table 2: Participants Health-Related Quality of Life Level

	N	Minimum	Maximum	Mean (Std. Error)	Std. Dev
HRQoL Measured on a 156-point scale	387	14.00	137.00	87.9432 (1.32195)	26.00582

Prostate Cancer and The Domains of Health-Related Quality of Life of Participants

The four domains of health-related quality of life (physical wellbeing, social wellbeing, emotional wellbeing, and functional wellbeing) were assessed to determine the aspect of health-related quality of life most affected among prostate cancer patients. Physical wellbeing had a mean of 14.66; social wellbeing had a mean of 18.33; emotional wellbeing had a mean of 15.57; and functional wellbeing had a mean of 17.7 (see table 3).

Furthermore, the four domains of health-related quality of life (physical, social, emotional, and functional wellbeing), was assessed for patients receiving care in private and public tertiary hospitals. For participants in a private tertiary hospital, the result indicated that physical wellbeing had a mean of 15.5; social wellbeing had a mean of 19.2; emotional wellbeing had a mean of 19.7; and functional wellbeing had a mean of 21.6. For participants in a public tertiary hospital, results indicated that physical wellbeing had a mean of 12.2; social wellbeing had a mean of 18.03; emotional wellbeing had a mean of 14.1; and functional wellbeing had a mean of 16.3.

Table 3: The Four Domains of Health-Related Quality of Life of Participants

	Physical Wellbeing	Social Wellbeing	Emotional Wellbeing	Functional Wellbeing
N	387	387	387	387
Mean	14.6641	18.3333	15.5711	17.6951
Std. Dev.	7.73129	6.46794	7.06792	6.38611

Regarding physical wellbeing, when participants were asked if they lacked energy, 20.2% responded as very much, 25.1% quite a bit, 18.3% some-what, 8% a little bit and the majority (28.4%) responded as not at all. Participants were also asked if they had trouble meeting the needs of their family because of their physical condition and 20.7% responded as very much, 22% quite a bit, 9% some-what, 11.1% a little bit and the majority (37.2%) responded as not

at all. When asked if they were forced to spend longer time in bed as a result of their illness, 24.5% of the patients responded as very much, 12.7% quite a bit, 6.2% some-what, 14.7% a little bit and the majority (41.9%) responded as not at all.

Regarding their social wellbeing, a large majority of the participants (63.6%) indicated that they got very much emotional support from their family, only 6.5% got no emotional support from family members. When asked about their relationship with friends, the majority of the participants (31%) indicated that they got much support from friends, while 21.7% got no support from friends.

Regarding emotional wellbeing, when asked if they worry about dying, 18.9% responded as very much, 13.2% quite a bit, 3.1% some-what, 14.7% a little bit and the majority (50.1%) responded as not at all. When asked if they were losing hope in the fight against their illness, 11.1% responded as very much, 2.6% quite a bit, 13.2% some-what, 22.7% a little bit and majority of the participants (50.4%) responded as not at all.

Regarding functional wellbeing, the majority of the participants (30.2%) said they were still able to work, while 17.1 responded that they were not able to work at all. When asked if they were content with the quality of their life right now, 20.9% responded as very much, the majority (41.1%) responded as quite a bit, 8.3% some-what, 16.8% a little bit and 12.9% responded as not at all.

Regarding prostate cancer symptoms including weight loss, appetite, pain, bowel movement, urinary symptoms, and erectile dysfunction. When asked the question on losing weight, majority of the participants (28.4%) responded as very much, 23.8% quite a bit, 14.5% some-what, 8.5% a little bit and 24.8% responded as not at all; on having a good appetite, majority of the participants (57.6%) responded as very much, 22.2% quite a bit, 9.3% some-what, 9% a little bit and 1.8% responded as not at all; on experiencing pain in certain parts of the body, majority of the participants (35.1%) responded as very much, 23.3% quite a bit, 12.9% some-what, 11.4% a little bit and 17.3% responded as not at all; on having trouble moving bowels, 21.7% responded as very much, 7% quite a bit, 15.8% some-what, 14% a little bit and majority of participants (41.6%) responded as not at all; on urinating frequently, majority of the participants (34.4%) responded as very much, 11.4% quite a bit, 14.5% some-what, 17.1% a little bit and 22.7% responded as not at all; and on being able to have and maintain an erection, a large majority of the participants (49.1%) responded as not at all, 22.2% a little bit, 14.2% some-what, 8% quite a bit, and only 6.5 responded as very much.

RESULT OF HYPOTHESIS TESTED

Research Hypothesis (H$_A$): Significant difference exists between the health-related quality of life level of prostate cancer patients receiving care in a private tertiary hospital and those receiving care in a public tertiary hospital

An independent sample t-test was used in assessing the difference in HRQoL between patients receiving care in a public tertiary hospital and those receiving care in a private tertiary hospital. In the analysis, 288 participants were from FMCA and 99 participants from BUTH. The mean HRQoL score of participants in FMCA and BUTH was 84.3785 and 98.3131 respectively (See table 4); the Levene's test for equality of variance showed that the variance is not equal. At a

statistical significance level of .000, the t-statistics was -6.308, corresponding to a statistical significance of .000; t (325.978) = -6.308, p = 0.000. The result showed that there was a significant difference in the HRQoL score for patients in BUTH (M = 98.31, SD = 14.58) and patients in FMCA (M = 84.38, SD 28.06); t (325.978) = -6.308, p = 0.000.

Furthermore, to categorise the level of health-related quality of life for patients receiving care in a public tertiary hospital and those receiving care in a private tertiary hospital, the health-related quality of life (HRQoL) level of the study participants was assessed using the FACT-P instrument which is measured on a 156-point scale with the Likert-type 5-response options. A score between 0-31.2 indicates a very poor HRQoL; a score between 31.3-62.4 indicates a poor HRQoL; a score between 62.5-93.6 indicates an average HRQoL; a score between 93.7-124.8 indicates a good HRQoL; while a score between 124.9-156 indicates a very good HRQoL.

Therefore, with a mean score of 98.31, participants receiving care in a private tertiary hospital (BUTH) had a good quality of life level. While participants receiving care in a public tertiary hospital (FMCA) had a mean score of 84.38, indicating an average quality of life level among participants receiving care in a public tertiary hospital.

Table 4: Independent Sample T-Test Group Statistics Table Showing the Difference in Health-Related Quality of Life Between FMCA and BUTH

Facility	N	Mean	Std. Deviation	Std. Error Mean
HRQOL (Measured On a 156-Point Scale)	FMCA	288	84.3785	28.05667	1.65326
	BUTH	99	98.3131	14.57818	1.46516

DISCUSSION

The number of cancer survivors has increased due to advancements in therapeutic and diagnostic techniques (Weaver et al., 2012), which is associated with a rise in the five-years cancer survival rate (Maruvka et al., 2014). However, as more men with prostate cancer live longer, many of these patients will have to contend with the psychological effect of a cancer diagnosis along with the physical and socioeconomic effects of its treatment, which may significantly affect their quality of life. Therefore, using a public health approach, this research assessed the health-related quality of life (HRQoL) of prostate cancer patients.

The Health-Related Quality of Life (HRQoL) of study participants was measured on a 156-point scale, using the FACT-P instrument. The results suggest that the average prostate cancer patient in this region has an average health-related quality of life. Meanwhile, the minimum quality of life score among the prostate cancer patients was 14-points, indicating a very poor health-related quality of life and the maximum score was 137-points indicating a very good health-related quality of life, although the maximum score was still 19-points away from the standard point (156). These indicate that the patients with the highest quality of life score still need some form of intervention to attain their best health; this implies that the entire population,

from the lowest HRQoL score (14) to the highest HRQoL score (137), needs different degree of intervention to improve their quality of life, enabling them to achieve their best health.

Moreover, this study was also interested in assessing the four domains of Health-Related Quality of Life (physical wellbeing, emotional wellbeing, social wellbeing and functional wellbeing) to determine the domain of HRQoL most affected among prostate cancer patients. The data showed that the physical wellbeing domain of participants HRQoL was most affected by prostate cancer, with physical wellbeing having the lowest mean score of 14.66. This was followed by emotional wellbeing (M = 15.57), functional wellbeing (M = 17.7), with social wellbeing [relationship with family and friends] being the least affected (M = 18.33). Further analysis of the data showed that physical wellbeing was most affected among participants in both facilities (private and public hospitals).

Conversely, the difference in HRQoL between patients receiving care in a public tertiary hospital and those receiving care in a private tertiary hospital was assessed using an independent sample t-test. The independent sample t-test was conducted to compare the Health-Related Quality of Life (HRQoL) of prostate cancer patients in Babcock University Teaching Hospital (private hospital) and Federal Medical Centre Abeokuta (public hospital). The result showed that there was a significant difference in the HRQoL score for patients in BUTH (M = 98.31, SD = 14.58) and patients in FMCA (M = 84.38, SD 28.06); t (325.978) = -6.308, p = < .001.

These results suggest that receiving care in different tertiary hospitals [either public or private] does have an effect on patients' health-related quality of life. The findings in this study suggest that prostate cancer patients receiving care in private tertiary hospitals have a better Health-Related Quality of Life (HRQoL) compared to prostate cancer patients receiving care in public tertiary hospitals; this validated the findings of De Carvalho et al. (2022), who conducted an observational, prospective, longitudinal study to examine the Quality of Life (QoL) among Acute Coronary Syndrome (ACS) patients who got professional medical care in either a public or privately owned health care facility. They found that the group of participants who received care from public/government health care facilities had lower quality of life scores compared to the group who received care from private health care facilities.

CONCLUSION

This study provided new evidence to our knowledge of the health-related quality of life of prostate cancer patients in this region. The study found that the average prostate cancer patient in this region has an average health-related quality of life level, which implies that the entire population, from the lowest health-related quality of life score (14) to the highest score (137), needs different degree of intervention to improve their health-related quality of life, so as to enable them achieve their highest level of health. Furthermore, it was found that patients who received care in private tertiary hospitals have a better health-related quality of life, when compared to those receiving care in public tertiary hospitals. Similarly, the physical wellbeing and emotional wellbeing domain of HRQoL was found to be most affected by prostate cancer among men with prostate cancer in this region.

RECOMMENDATION

Tertiary hospitals should ensure the inclusion of psycho-oncology counselling and psychotherapy into the treatment plan of all patients after a prostate cancer diagnosis to improve the emotional wellbeing/psychological wellbeing of prostate cancer patients. Similarly, access to physical rehabilitation and physiotherapy should be made available to improve physical wellbeing among prostate cancer patients. This study used the cross-sectional study design in elucidating the problem phenomenon; therefore, a cause-and-effect relationship cannot be established. Hence, further research studies using experimental design or longitudinal studies are required to establish a cause-and-effect relationship among study variables.

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