

UNIVERSITY OF CAPE COAST



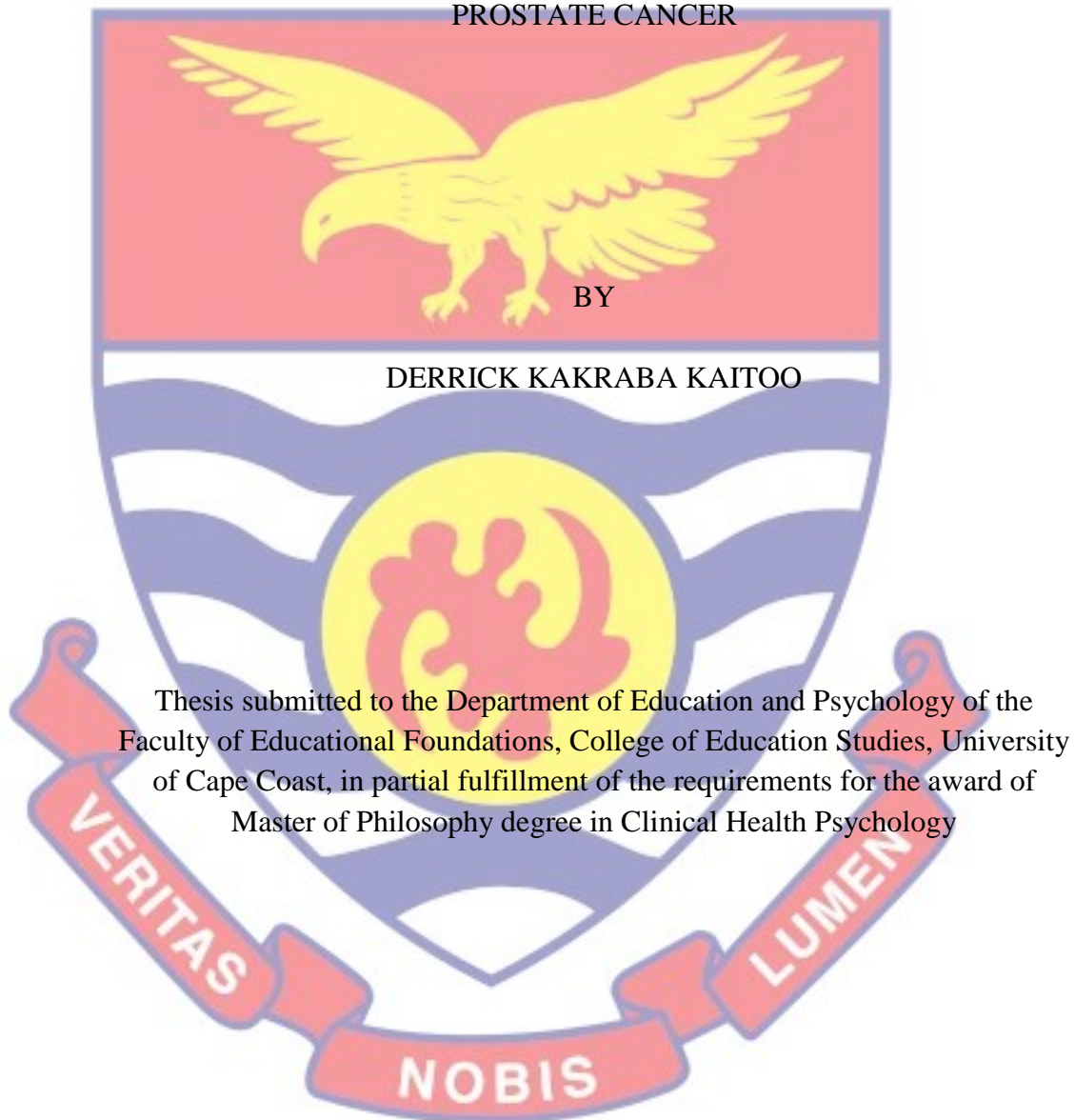
2021



© Derrick Kakraba Kaitoo
University of Cape Coast

UNIVERSITY OF CAPE COAST

BIOPSYCHOSOCIAL EXPERIENCES OF MEN LIVING WITH
PROSTATE CANCER



Thesis submitted to the Department of Education and Psychology of the
Faculty of Educational Foundations, College of Education Studies, University
of Cape Coast, in partial fulfillment of the requirements for the award of
Master of Philosophy degree in Clinical Health Psychology

NOVEMBER 2021

DECLARATION

Candidate's Declaration

I hereby declare that this thesis is the result of my own original research and that no part of it has been presented for another degree in this university or elsewhere.

Candidate's Signature:..... Date:.....

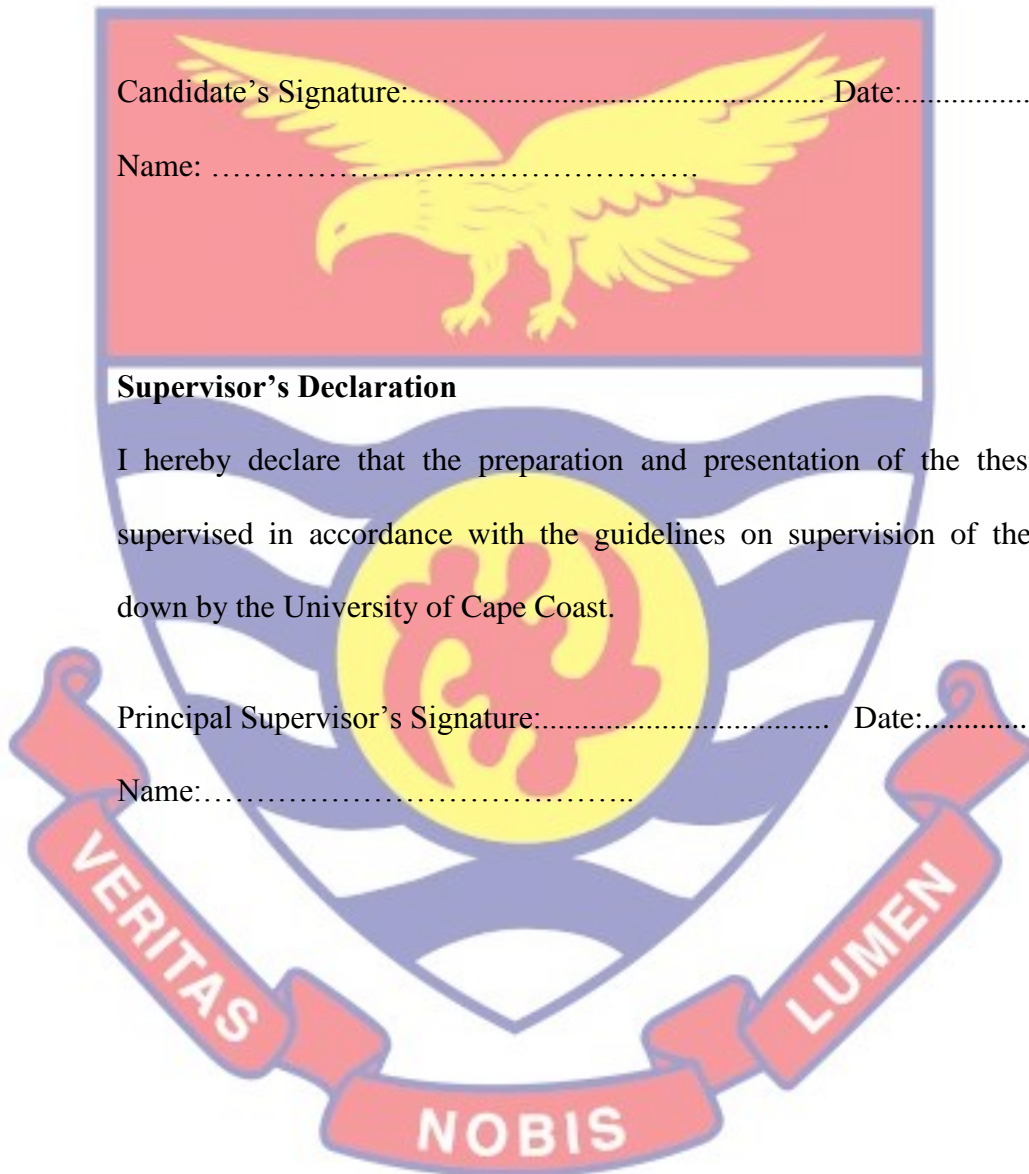
Name:

Supervisor's Declaration

I hereby declare that the preparation and presentation of the thesis were supervised in accordance with the guidelines on supervision of thesis laid down by the University of Cape Coast.

Principal Supervisor's Signature:..... Date:.....

Name:.....



ABSTRACT

The attention men's health is receiving recently, specifically, prostate cancer, can be largely attributed to the World Health Organisation's efforts to create awareness and invest in research on prostate diseases. Of all the prostate diseases, prostate cancer seemed to have the highest incidence rate and these patients are plagued with several issues from the moment of diagnosis. Meanwhile, a myriad of studies on prostate cancer have largely focused on experiences of the spouses of the men with prostate cancer and creating awareness of the disease, with little or no attention on the experiences of men living with prostate cancer in Ghana. This research therefore explored the biopsychosocial experiences of men living with prostate cancer using the phenomenological research design. Nine men were conveniently sampled and interviewed face to face and on phone at the 37 Military Hospital. The researcher used a semi-structured interview guide for data collection and the data were analysed using the Interpretative Phenomenological Analysis (IPA). The results of this study showed that men living with prostate cancer are bedevilled with biological and social problems which affects their psychological wellbeing. It was found that pain and erectile dysfunction were biological problems patients contend with and lack of professional psychotherapy was a social problem and they also experienced psychological reactions such as fear, worry, anxiety, shock and depression. Additionally, it was found that despite all these experiences, the respondents seemed to have good social support from their nuclear family which aid their management of the disease. It was recommended that professional psychotherapy be made available to mitigate the psychological problems they encounter.

KEYWORDS

Prostate cancer

Pain

Erectile dysfunction

Depression

Anxiety

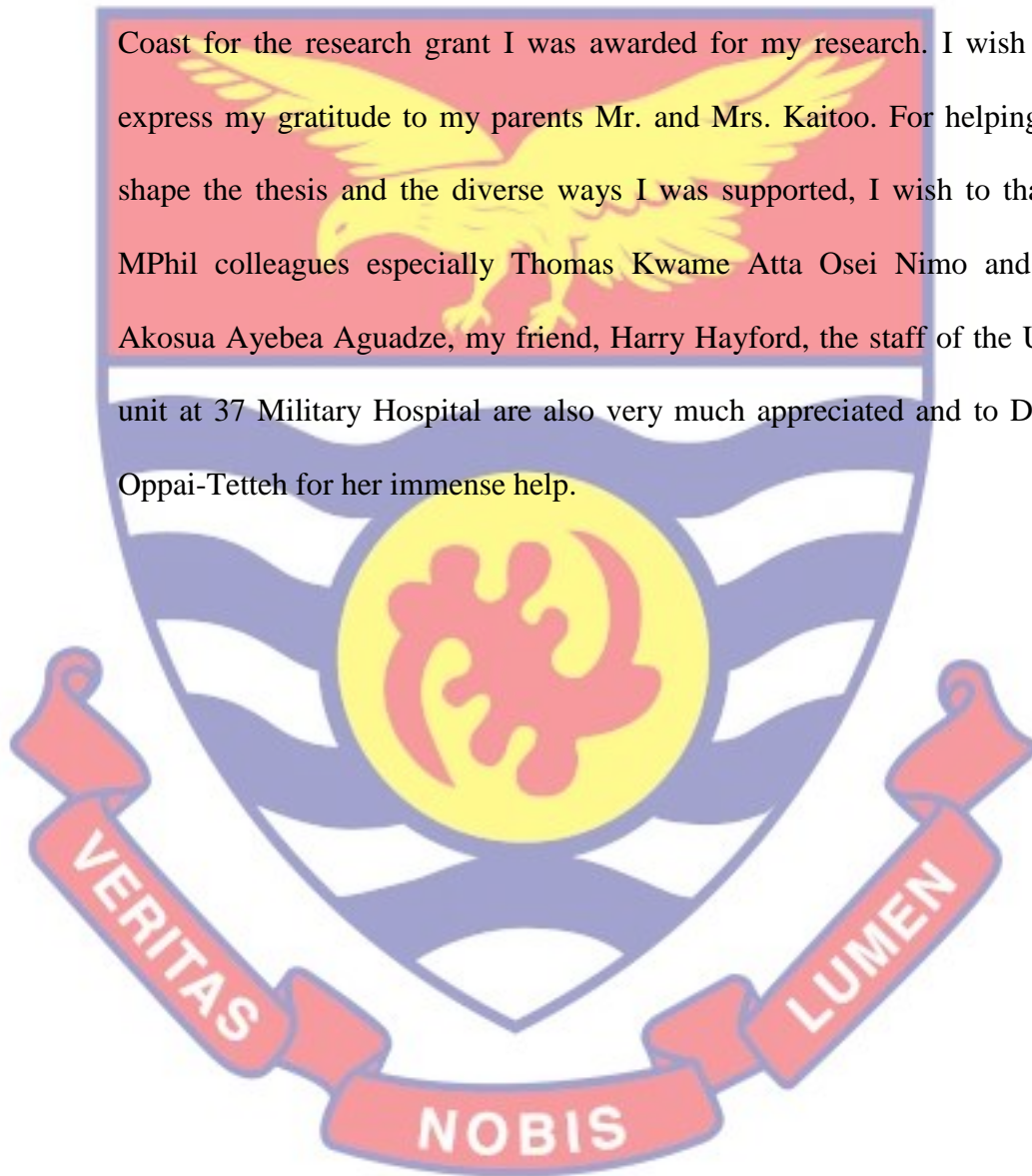
Fear



ACKNOWLEDGEMENTS

My utmost gratitude first of all goes to my supervisor Dr. Kofi Krafona for his unflinching dedication and guidance, and to the faculty members of the Department of Education and Psychology of the University of Cape Coast.

I acknowledge the Samuel and Emelia Brew-Butler-University of Cape Coast for the research grant I was awarded for my research. I wish to also express my gratitude to my parents Mr. and Mrs. Kaitoo. For helping me to shape the thesis and the diverse ways I was supported, I wish to thank my MPhil colleagues especially Thomas Kwame Atta Osei Nimo and Gloria Akosua Ayebea Aguadze, my friend, Harry Hayford, the staff of the Urology unit at 37 Military Hospital are also very much appreciated and to Dr. Irene Oppai-Tetteh for her immense help.



DEDICATION

To all men living with prostate cancer



TABLE OF CONTENTS

	Page
DECLARATION	ii
ABSTRACT	iii
KEYWORDS	iv
ACKNOWLEDGEMENTS	v
DEDICATION	vi
TABLE OF CONTENTS	vii
LIST OF TABLES	x
CHAPTER ONE: INTRODUCTION	
Background to the Study	1
Statement of the Problem	7
Purpose of the Study	11
Research Questions	11
Significance of the Study	11
Delimitation	12
Limitations	12
Definition of Terms	12
Organisation of the Study	12
CHAPTER TWO: LITERATURE REVIEW	
Introduction	14
Theoretical Framework	14
Self -Discrepancy Theory (Higgins, Klein & Strauman, 1985)	16
Conceptual Review	17
Concept of Prostate Cancer	17

Treatment options of prostate cancer	20
Physiological reactions of prostate cancer	21
Psychological reactions of prostate cancer patients	27
Social reactions prostate cancer patients encounter	30
Empirical Review	32
Physiological issues in Prostate cancer	32
Psychological Experiences of Men with Prostate Cancer	43
Social experiences of men with prostate cancer	53
Summary of literature review	60
CHAPTER THREE: RESEARCH METHODS	
Introduction	61
Research Paradigm	61
Research Approach	62
Research Design	62
Study Area	63
Population	63
Inclusion criteria	63
Exclusion criteria	63
Sampling Procedure	64
Data Collection Instrument	64
Reliability, Validity and Trustworthiness of Data	65
Data Collection Procedure	65
Data processing and Analysis	66
Chapter Summary	66
CHAPTER FOUR: RESULTS AND DISCUSSION	

Advanced Organiser	68
Socio-demographic Characteristics of Participants	68
Main Results	69
Research Question 1	69
Research Question 2	71
Research question 3	75
Discussion of Main Findings	78
Physiological issues men with prostate cancer encounter	79
Psychological Experiences of Men with Prostate Cancer	83
Social Experiences of Men with Prostate Cancer	90
Summary of key findings	98
CHAPTER FIVE: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS	
Overview	100
Summary	100
Conclusions	102
Recommendations	103
Suggestions for Further Research	105
REFERENCES	106
APPENDICES	136
APPENDIX A: SEMI-STRUCTURED INTERVIEW GUIDE	136
APPENDIX B: INTRODUCTORY LETTER	137
APPENDIX C: ETHICAL REVIEW BOARD CLEARANCE LETTER	138
APPENDIX D: ETHICAL CLEARANCE	139

LIST OF TABLES

Table		Page
1	Socio-demographic Characteristics of Participants (n=9)	68
2	Summary of main findings	78



CHAPTER ONE

INTRODUCTION

Chapter one of this research provides the background to the research, statement of the problem, purpose of the study, research objectives, significance of the study, delimitations, limitations, definition of terms, and organisation of the study. Literature proves that not much attention has been paid to men's health. Recently, however, the World Health Organisation has been making efforts to direct attention to men's health, specifically, prostate cancer. Most works on prostate cancer have largely focused on awareness creation and biological interventions with little or no attention on the issues prostate cancer patients deal with in the course of treatment and the consequences of the treatment in Ghana. This research therefore explored the experiences of men diagnosed and are living with prostate cancer, specifically, biopsychosocial experiences. Exploring their experiences in terms of the pain, fear, shock, sadness and the worry they go through since their diagnosis as well as the social support and the professional help they receive after diagnosis, this work provided a deeper understanding of the challenges faced by men living with prostate cancer.

Background to the Study

Cancer as a worldwide problem

Non-communicable diseases are the major cause of death worldwide accounting for 41 million deaths (71%) each year. These chronic diseases include; cardiovascular diseases which is the first ranked, followed by cancer,

respiratory diseases and diabetes (World Health Organisation [WHO], 2018). Cancer being the second highest rate of deaths accounts for 9.3 million deaths annually (WHO). Furthermore, according to WHO, the statistics on premature deaths caused by cancer is about 30% among adults between the ages of 30 to 69. In addition, in terms of types of cancers, lung cancer and breast cancer

(occurring in females) are the most recorded type of cancers with a percentage of 11.6, specifically, lung cancer contributes to 18.4 percent of all cancer death cases, followed closely by cancers affecting the colons (10.2%). Ferlay et. al. (2015) also found that new cancer cases, except non-melanoma skin cancer were about 3.91 million, which caused about 1.93 million deaths across Europe. The study also suggested that 500,230 of these cases were female breast cancer, which was also the most recorded case of cancer, followed closely by colon cancers (500,000), with lung and prostate cancers recording 470,000 and 450,000 respectively.

It has been estimated that by the year 2040, there would be an increase in the incidence of cancer cases, with the majority of the cases emerging from low and middle-income countries (WHO, 2018). In some studies, on cancer-related deaths, next to lung cancer is prostate cancer and among the African-Americans, Hispanics and Africans, prostate cancer was the leading cause of cancer-related death (Pinheiro et al., 2019). These statistics on the rates of incidence and death of cancer particularly prostate cancer, make it imperative for this study to be conducted among this population.

Cancer and Gender

Males show a significantly high risk of being diagnosed with cancers with a mortality rate of 40% higher than females (Siegel et al., 2016) and one

of the reasons is that women are more likely than men to engage in health-promoting behaviours. (Lee & Owens, 2002). Research also suggests that women are more likely to contact health professionals and accept the invitation to health screening programmes than men (SAGA, 2013). A study by Hilton et. al. (2009) similarly suggested that, men are more likely to have an apathetic lifestyle to cancer and hide cancer diagnosis from friends for fear of being viewed differently by them.

In addition, the social construction of ‘maleness’ (Hegemonic masculinity) may play a role in this phenomenon. Men in most societies are taught not to show weakness, thus being emotionless and physically strong (Lee & Owens, 2002). When this social construct is applied to health, it may explain gender differences in males and females concerning cancer.

Prostate cancer within Africa

According to the GLOBOCAN (2018), 47 countries from Africa record 4.5% of the global incident rate of cancer with 7.3% cancer of the world’s total rate (Ferlay et al., 2019). In African females, the two most common cancers i.e., breast and cervical cancer represent 27.7% and 19.6% of the cancer burden respectively whereas in males, prostate cancer rates 18.1% of all the total cases (Pinheiro et al., 2019).

In sub-Saharan Africa, prostate cancer is one of the major health problems with the highest incidence and mortality rates (Bray et al., 2018). In West Africa, these rates have been rising in the last decade due to lack of public awareness and lack of early detection (Jemal et al., 2012). Accordingly, studies in Africa have found that most patients report to the hospital when they are at the last stage of the cancer (Jalloh et al., 2013). Aside these two as

prognostic factors, of utmost importance is the issue of origin. African ancestry has been established as an underlying factor for the diagnosis of prostate cancer and this was confirmed in a study by Blackburn et. al. (2019) who investigated the association between genes and susceptibility to prostate cancer. Their study established that black men were at an increased risk to cancers compared to white men. Other studies also proposed that poor prognosis in men could be attributed to inaccessible medical care or inadequate screening and treatment facilities. The disparities in terms of socioeconomic, ethnic, racial and cultural factors, may also play a role in the cause of death due to prostate cancer.

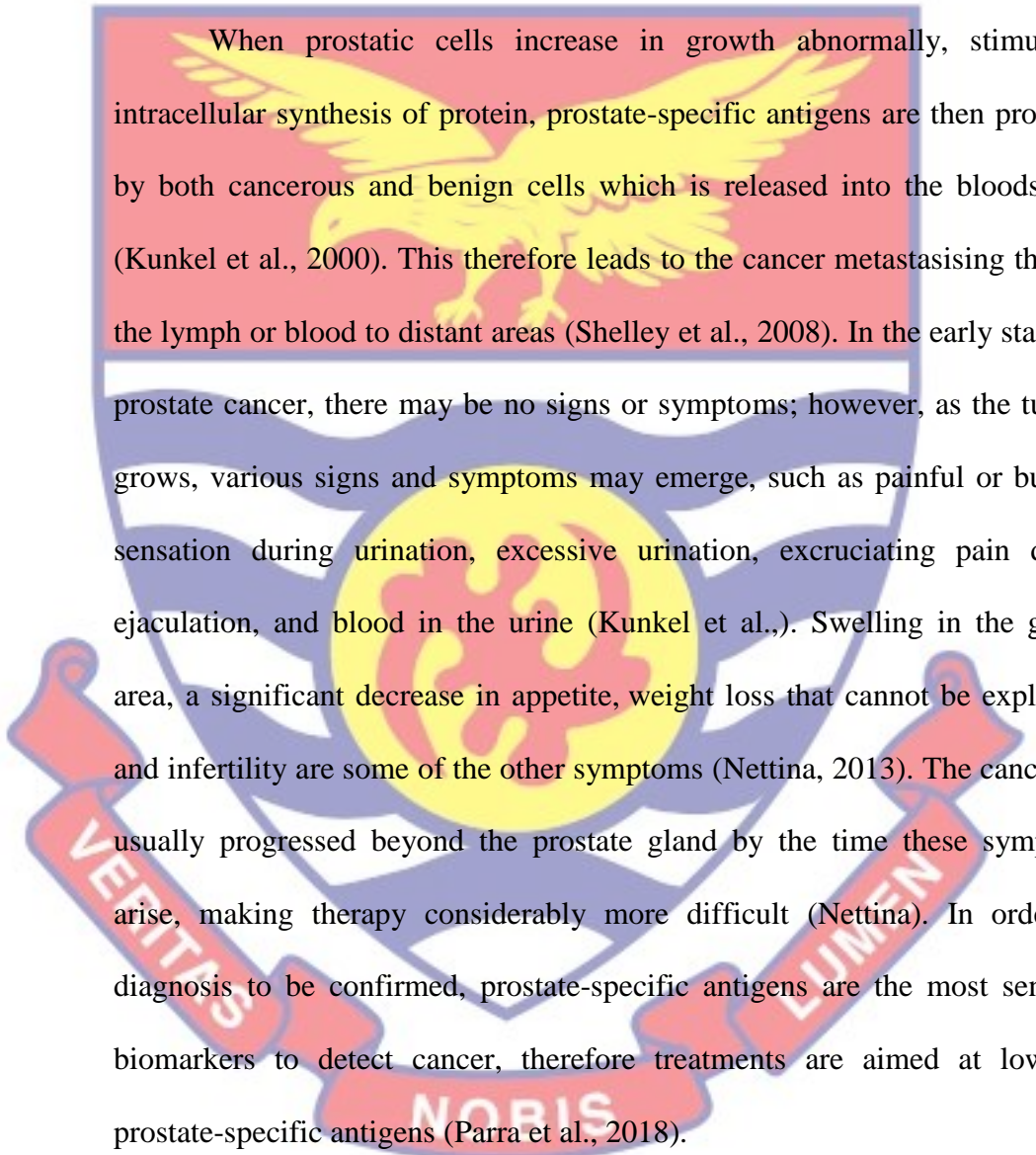
Prostate cancer in Ghana

According to Egote and Nana (2012) prostate cancer accounted for 41.2% of prostate diseases amongst males in Ghana and has the highest mortality rate amongst males in Ghana with about 16,600 cases of cancer being recorded annually at a rate of 109.5 cases per 100,000 persons (Ferlay et al., 2015). Furthermore, GLOBOCAN 2020, ranked prostate cancer as the 4th of all cancers in Ghana but it is the first ranked cancer in men (Kugbey et al., 2020). In terms of risk with respect to age, out of every three men around age 40, one person is at risk of prostate cancer (Necku et al., 2019). There seems to be scanty data on prostate cancer in Ghana, and rightly so because more than 70% of patients who report at the hospital do so at the last stage of the cancer when it has become a metastatic disease (Necku et al.,).

Prostate Cancer

The prostate is a tiny gland that lies beneath the bladder and in front of the rectum near the base of the penis (Ittmann, 2018). The gland is the size of

a small pea at birth, and it stays that way until adolescence, when it begins to produce hormones, causing a growth spurt (Ittmann). The secretions from this gland form part of the seminal fluid (Kunkel et al., 2000). It remains this way until around middle age, when it begins to gradually grow in size, most likely as a result of hormonal changes that occur with time (Ittmann).

The logo of the University of Cape Coast is a watermark in the background. It features a shield with a yellow eagle at the top, a yellow sun in the center, and a red banner at the bottom with the Latin motto "VERITAS NOBIS LUMEN".

When prostatic cells increase in growth abnormally, stimulating intracellular synthesis of protein, prostate-specific antigens are then produced by both cancerous and benign cells which is released into the bloodstream (Kunkel et al., 2000). This therefore leads to the cancer metastasising through the lymph or blood to distant areas (Shelley et al., 2008). In the early stages of prostate cancer, there may be no signs or symptoms; however, as the tumour grows, various signs and symptoms may emerge, such as painful or burning sensation during urination, excessive urination, excruciating pain during ejaculation, and blood in the urine (Kunkel et al.,). Swelling in the genital area, a significant decrease in appetite, weight loss that cannot be explained, and infertility are some of the other symptoms (Nettina, 2013). The cancer has usually progressed beyond the prostate gland by the time these symptoms arise, making therapy considerably more difficult (Nettina). In order for diagnosis to be confirmed, prostate-specific antigens are the most sensitive biomarkers to detect cancer, therefore treatments are aimed at lowering prostate-specific antigens (Parra et al., 2018).

Risk factors of prostate cancer

Possible risk factors of prostate cancer have been explored in literature but there seems to be a controversy on the definite causes. Notwithstanding, the consistent factors that remain include, demographics, for example, race,

age, family history of prostate cancer, high fat diets and high plasma testosterone (Kunkel et al., 2000; Coley et al., 1997). Prostate cancer advancement also tends to be influenced by dietary variables for example, prostatic cancer is linked to vitamin D insufficiency, unsaturated fats, and saturated fats (Coley et al.).

Treatment of prostate cancer

Treatment of prostate cancer is determined by the patient's age, health, digital rectal exam, tumour stage, prostate-specific antigens levels, prostate biopsies, Gleason scores, and response to previous prostate cancer treatments, nevertheless, watchful waiting, radical prostatectomy, radiotherapy, hormonal therapy, orchiectomy, and antineoplastic medication therapy are all acceptable treatment (Lu-Yao & Yao, 1997).

Living with prostate cancer

The symptomology of prostate cancer as well as treatment side effects may take a negative toll on the quality of life of men with prostate cancer. Aside the physiological deficits it comes with, there are several psychological and social issues that make life difficult for patients. Some physiological side effects include pain, loss of libido, impotency, wan penis, reduced production of androgens, and decrease in muscle mass (Kelly & White, 2011).

Psychologically, prostate cancer comes as a shock and may change the daily life routines of both patient and family members, raising levels of anxiety and uncertainty about treatment, prognosis, and the future. Most men especially, must concurrently face risks to their sexuality and masculinity when they are diagnosed with a terminal illness like this and they are also less likely to consent to psychological evaluation or treatment, and they are also

less likely to disclose their emotional discomfort (Kelly & White, 2011). Meanwhile, it has been proven that most patients need psychological help. For example, a routine screen of prostate cancer patients who might need such help showed that 25% and 47% were experiencing anxiety and depression respectively (Kunkel et al., 2000).

Research again suggests that patients experience physical and practical problems which put significant emotional toll and existential strain on them during treatment and in some cases after treatment has ended (Kelly, 2009; Sekse et al., 2010).

Prostate cancer had not received the same level of attention in the public press as other cancers until lately. Although there is a considerable spike in the volume of life experiences of men living with prostate cancer being published, the stigma associated with the disease and the possibility of sexual dysfunction may hinder individuals from receiving proper psychological and social care (Kunkel et al., 2000), the spouses of patients render support to clients and there is evidence to show that social support correlates with psychological well-being (Nayeri, et al., 1992). Emotional support has also been found to increase self-esteem; informational support provides guidance and counselling whereas social companionship provides contact with others a source of distraction for patients (Nayeri, et al.,).

Statement of the Problem

Prostate cancer is a major public health issue (Ozoemena et al., 2015). As the second common cancer in men, prostate cancer is the sixth leading cause of death among men globally (Center et al., 2012). Prostate cancer is a diagnosed cancer in men, and an estimated 2,000 men are diagnosed each day

worldwide, with one man expected to die from the disease every 2 minutes (Fitzpatrick et al., 2009).

Prostate cancer is the most common cancer in Africa, both in terms of incidence and mortality (Rebbeck et al., 2013) and it accounted for 41.2% of prostate diseases in Ghana, recording the highest mortality rate in men (Egote & Nana, 2012). These aforementioned studies show that Africans are at a higher risk of being diagnosed with the disease, and with these alarming rates, it is expected that more studies could be done in this field, however, in Ghana, there is a dearth of prostate cancer research.

Studies that were published in Ghana mainly focused on awareness, available treatment options, perception and screening behaviour of individuals with prostate cancer, and experiences of spouses of men with prostate cancer (Yeboah et al., 2016; Hsing et al., 2016; Asamoah et al., 2018). Meanwhile some few studies have shown that prostate cancer in most cases is comorbid with psychosocial problems (Imm et al., 2017; Kunkel et al., 2000; Mehnert et al., 2010). This suggests that there is a link between prostate cancer prognosis and psychosocial problems. Thus, there is the urgent need to explore the overall experiences of men living with prostate cancer encapsulated in the physiological problems they go through, the issues they encounter which affect their mental health and the social issues that engulf them and to explore these problems.

In terms of physiological issues, Helgason et al. (1996) for instance have reported that diminished sexual function for men with prostate cancer creates psychological problems and studies by Bacon et al. (2002) and Clark et al. (2003) also had similar findings of patients with prostate cancer with

psychological problems higher than the normal population. In essence, although the condition affects them biologically, men with prostate cancer did report more psychological problems than the healthy population.

Additionally, a physiological problem like pain has been associated with cancer and pain is a multifaceted experience with sensory, affective, cognitive, and behavioural components that arise from a complex interaction of biological, psychological, sociological, and other factors (Porcelli & Todarello, 2007). According to statistics, 70% of people with advanced cancer experience substantial pain, and the pain can be devastating, causing emotional and behavioural changes in patients, especially when they are towards the end of their lives (Portenoy et al., 1990). Cancer pain is frequently linked to psychological issues such as increased depression, anxiety, fear, and a poor mood (Zaza & Baine, 2002). The persistence of discomfort experienced by patients, which could lead to cancer progression, could potentially decide cancer advancement. This may lead to sentiments of hopelessness as patients may think that life has no meaning, therefore it is not worth it to live (Tavoli et al., 2008).

Studies have also found out that psychologically, the disease affects the body image perception of individuals with prostate cancer. A qualitative study of men and their spouses' treatment-related experiences with prostate cancer found that those receiving external beam radiation therapy felt exposed and mutilated, which was linked to diminishing erectile ability; additionally, the self-perception of a "little penis" resulted in the unwillingness to expose the body (Hedestig et al., 2005; Oliffe, 2005). Hormone-induced changes in personality and bodily appearance caused emotional distance in spousal

relationships, according to the 15 Israeli men interviewed by Navon and Morag (2003). In addition, the males blamed hormonal therapy for their lack of masculine coping abilities and 'disgust' with their bodies.

In terms of social issues, an analysis of focus group data by Harden et al. (2002) indicated that hormone therapy had an impact on spousal relationships. Men blamed hormones for a loss of dominance, while their intimate partners reported a loss of femininity as their husbands lost interest in them as sexual partners. These three broad areas i.e., physiological issues which may or may not lead to psychological issues and social factors patients need to grapple with need to be explored.

Additionally, despite the proliferation of literature on the biological, psychological and social issues prostate cancer patients encounter, most of these studies were conducted outside Ghana, creating a geographical gap in local content on the biopsychosocial (BPS) experiences of prostate cancer patients. Notwithstanding, there are published and unpublished studies in Ghana on prostate cancer, but these studies mostly focused on awareness, biological treatment options available, perception and screening behaviour of individuals with prostate cancer, and experiences of spouses of men with prostate cancer (Yeboah et al., 2016; Hsing et al., 2016; Asamoah et al., 2018). Studies that merely looked at these factors without exploring the biological, psychological and social factors creates doubts about their findings.

This study therefore aimed at exploring the physiological, mental and social issues that engulf individuals living with prostate cancer. This study in terms of methodology seems to be the first to explore the biopsychosocial

experiences of men using a qualitative method in Ghana to aid create awareness on psychosocial issues surrounding prostate cancer.

Purpose of the Study

The purpose of the study was to explore the biopsychosocial experiences of men living with prostate cancer. Specifically, the study sought to:

1. Explore the physiological issues men with prostate cancer deal with
2. Investigate the psychological issues men with prostate go through.
3. Explore the social aspects of living with prostate cancer

Research Questions

1. What physiological issues do men with prostate cancer encounter?
2. What psychological issues do men go through due to prostate cancer?
3. What are the social issues that prostate cancer patients deal with?

Significance of the Study

The findings of this research sought to expand the knowledge base of the discipline of clinical health psychology. In addition, the qualitative approach helped in providing first-hand and in-depth information about the experiences of individuals with Prostate Cancer. The study is significant in Ghana because not many studies have been done on the experiences of men who live with prostate cancer. Knowledge about the issues prostate cancer men encounter serves as grounds for strategies to be adopted by the Ghana Health Service to support these patients by instituting systems that will see to supporting these patients wholistically.

Delimitation

The study focused on patients' physiological experiences with prostate issues that bothered on their mental health and social aspects of living with the condition. Also, the study was delimited to patients with Prostate cancer receiving treatment at the 37 Military Hospital.

Limitations

The methodology for this study makes it impossible for the results of this study to be generalised, nevertheless, the study was able to, with the sample that was used, unearth the experiences of men living with prostate cancer.

Definition of Terms

Prostate: prostate is a walnut-sized gland located between the bladder and the penis

Cancer: cancer is the outgrowth of cells in various body parts, which may spread to other parts.

Hegemonic masculinity: Hegemonic masculinity is defined as the idea of men dominating society in terms of power and strength compared to women.

Organisation of the Study

The research was divided into five (5) sections. The study's background, the problem statement, the objective of the study, the research questions that guided the study, the significance of the study, the delimitation and limitation of the research, and the study's organisation were all covered in Chapter one.

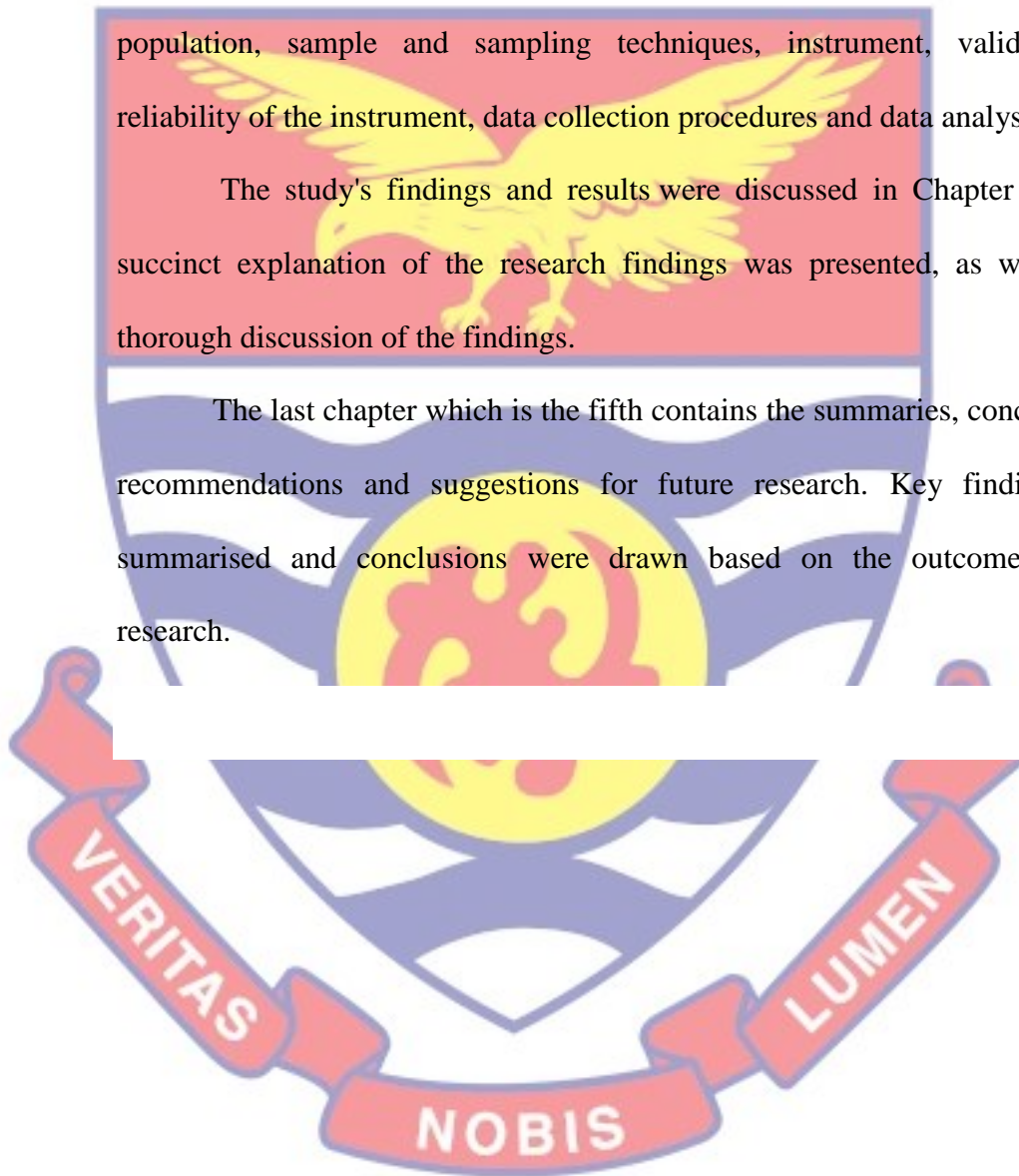
The second chapter is the review of relevant literature, providing a conceptual review, theoretical and empirical reviews for the study. The

concepts in the study were reviewed to elaborate on the variables of interest in the study. Theories that guided the study were explained. Lastly, based on the research questions, relevant empirical literature was reviewed.

Procedures and techniques that were used in the course of the study are described in chapter three. This third chapter describes the research design, population, sample and sampling techniques, instrument, validity and reliability of the instrument, data collection procedures and data analysis.

The study's findings and results were discussed in Chapter four. A succinct explanation of the research findings was presented, as well as a thorough discussion of the findings.

The last chapter which is the fifth contains the summaries, conclusions, recommendations and suggestions for future research. Key findings are summarised and conclusions were drawn based on the outcome of the research.



CHAPTER TWO

LITERATURE REVIEW

Introduction

Review of literature is a vital component for the researcher, aiding the researcher to have in-depth knowledge and understanding of the research topic. This chapter dealt with existing literature and reviewed the studies on physiological issues that come up in prostate cancer, the issues that affect the mental health of prostate cancer patients and the social aspects of living with prostate cancer. The literature review was captured under the following areas; the theoretical framework conceptual review and empirical review.

Theoretical Framework

Biopsychosocial Model for Health (Engel, 1977)

Engel first propounded the Biopsychosocial Model of health in 1977. The model posits that biological, psychological, social, and recently spiritual factors are essential to the total wellbeing of individuals, which is contrary to the traditional Model of health — the Biomedical Model, which is of the biological standpoint. Engel postulates that the interaction between biological, psychological, social, and recently spiritual factors determine an individual's health status (Engel, 1977). The biopsychosocial theory has provided a distinct approach to health by adapting a comprehensive framework for understanding any disease or condition exclusively. In this model, Engel propounds that biological, psychological and social factor cause illness, thus individuals should be held accountable for their health or illness, in other words, an

individual holds the key to preventing or avoiding illnesses. What this also means is that, if a person's state of well-being is compromised, in the course of treatment, that person should be treated not just in the physical but must be treated in terms of physical, psychological and social aspects. This is because when a person is ill, the person's behaviour and beliefs might change, and the coping strategies may be compromised. Therefore, to them health and illness are on a continuum and that people progress back and forth on this continuum. More importantly, this theory also posits that there is an interaction between the mind and body and that psychological factors may not always be consequences of an illness but can also be a contributing factor to illness as well as social factors.

In the case of men living with prostate cancer, they are not only experiencing physiology changes but may be encountering some psychosocial issues. For example, men with prostate cancer, receiving treatment are likely to experience wanning of erectile ability which is a physiological change, however this change may have a significant negative effect on their mental health in terms of thoughts about their masculinity. Additionally, another factor linked to the high mortality rate in men with Prostate is the lack of social support. Thus, no emotional support from the spouse of the men with prostate cancer may increase the risk of mortality in men.

This Model is therefore useful for this study because it helps to concentrate on the potential relationship between the study's objectives (physiological, psychological and social aspects) of living with prostate cancer. Thus, the biopsychosocial model aids in the appreciation of various aspects of an individual's life, which is being affected by Prostate cancer.

Self -Discrepancy Theory (Higgins, Klein & Strauman, 1985)

The self-discrepancy theory suggests that individuals compare their actual self to internalised standards or the ideal self and inconsistency between them create negative emotions. According to Higgins et. al. (1985), the theory involves two basic assumptions. The first assumption is that individuals have different self-concepts which relates to different domains of the self. What this means is that, how a person may view him or herself may be different from the various domains of self the person has. These self-domains include; the actual self, which is a personal representation of the characteristics that someone (self or other) believes the individual possesses; the ideal self, which is a person's representation of the characteristics that someone (self or other) would like the individual, ideally, to possess—the aspirations, hopes, or goals of someone for their purpose; the ought self, which is the reflection of the qualities that someone (self or other) believes the individual should or should possess—the laws, in- junctions, or specified rights and obligations of someone for the individual. In the classical dispute between one's 'ideal' and one's 'ought,' the disparity between the 'personal desires' self and the 'sense of duty' self is expressed.

The second supposition is that each individual has unique self-concepts linked to various standpoints on the self. Consequently, the self-concept discrepancy theory also suggests three basic hypotheses; that a state of discomfort is caused by discrepancies between two self-concepts; various forms of discrepancies in self-concept cause discrepancies in various forms of discomfort; a change induced by either short or long-term in the accessibility or content of discrepant self-concepts leads to discomfort changes. Thus, in

the case of men diagnosed with Prostate Cancer and undergoing management, this may come with various changes in the body, such as waning erectile ability. In most cases, African men may not want to defy the ideal standards of masculinity set by most African societies about the definition of man and sex life (good in bed —the ought self). Therefore, failure to maintain a good erection for instance may leave them questioning their current state and what they wanted —discrepancy. The stronger the ought self, the worse these men may feel about themselves, resulting in various psychological problems.

The self-discrepancy theory sits well in this study because it exposes how prostate cancer patients tend to compare their actual self with their ideal self or their ought self and the disappointments that brings as well the impact of psychological problems arising from these discrepancies making it significant to understand the biopsychosocial experiences men diagnosed with prostate cancer go through.

Conceptual Review

Concept of Prostate Cancer

Prostate cancer is a malignant tumour that begins to grow inside the prostate gland. The cancer could be contained (localised) within the prostate or it could have progressed to the tissues close outside the prostate (locally advanced). When cancer has spread beyond the prostate gland to other areas of the body, advanced or metastatic cancer occurs.

Age appears to be the most significant risk factor for prostate cancer. Males under the age of 40 are mostly unaffected. However, men have an 80% risk of either getting or developing the disorder by the time they hit the age of 80 (Burford et al., 2009). Men are also at greater risk of being diagnosed with

prostate cancer if they are exposed to the disease in the first degree or if multiple family members have suffered from the disease (Prostate Cancer UK, 2017). In addition, individuals of African and Caribbean descent are significantly more likely than other ethnicities to be affected by prostate cancer (Rebbeck et al., 2013). Furthermore, Prostate cancer is generally linked to the consumption of the typical Western diet (Lin et al., 2015); high calcium intake, diets high in saturated fat and milk products seem to increase the risk. After a diagnosis of prostate cancer, whole milk consumption has been linked to an increased risk of recurrence, especially in overweight men (Tat et al., 2018). Lower levels of vitamin D in blood may increase the risk of developing prostate cancer (Tuohimaa et al., 2004).

Red meat and processed meats also appear to have little effect overall, but some studies suggest increased meat consumption is associated with a higher risk (Richman et al., 2011), multiple lifetime sexual partners or starting sexual activity early increases the risk of prostate cancer. Frequent ejaculation may decrease prostate cancer risk, but the reduced ejaculatory frequency is not associated with an increased risk of advanced prostate cancer (Spence et al., 2014; Rider et al., 2016).

Additionally, sexually transmitted infections may be associated with the incidence and development of prostate cancer. Thus, infections with chlamydia, gonorrhoea, or syphilis seem to increase the risk of developing prostate cancer (Sfanos & De Marzo, 2012; Hayes et al., 2000).

Prostate cancer is associated with numerous symptoms. Some of the more common signs are issues associated with urination. These involve not being able to drain the bladder because a tumour places pressure on the urethra

or desiring to urinate more often, pressure or blood in the urine, or the existence of backache, weight loss and exhaustion are also indicators that cancer may be evident (Lange & Adamec, 2011). Some men, by comparison, do not experience any symptoms. In such cases, only as a result of undertaking diagnostic examinations or treatments for an unrelated medical condition will the disorder be identified. In prostate cancer screening, the aim is to diagnose the disease early enough before it spreads. Tests for prostate cancer diagnosis are as follows (Ghana Ministry of Health (MOH), 2011).

Digital rectal exam (DRE)

A simple and easy procedure that can be used to detect prostate cancer is the digital rectal exam. To determine if cancer is present, an abnormal DRE needs further assessment. A typical DRE does not rule out cancer. This test examines an individual's lower rectum, pelvic and lower belly. A normal Prostate will have a smooth surface, a larger prostate to the age of the individual may be signs of prostate enlargement, and a hard or lumpy prostate could indicate the presence of prostate cancer.

Prostate-specific antigen (PSA) test

A protein developed by both normal prostate gland tissue and prostate cancer cells is a prostate-specific antigen. The PSA test tests a man's blood PSA level. A blood sample is sent to a lab for examination for this test. A PSA value higher than 2.5 ng/ml is abnormal for males in their 40s and 50s. For this age group, the PSA median is 0.6 to 0.7 ng/ml. A PSA score greater than 4.0 ng/ml is associated with prostate abnormality for men in their 60s. The standard range is 1.0 to 1.5 ng/ml.

Transrectal ultrasound and biopsy

Neither the PSA test nor DRE, alone or together, is a truly accurate test for prostate cancer. If a PSA test or DRE detects abnormalities, tissue specimens will be needed for diagnosis, usually with transrectal ultrasound (TRUS) imaging to permit the spatial positioning of biopsy needles. Thus, to

direct several small needles through the rectum wall through areas of the prostate where the health care provider sees something irregular, a prostate biopsy uses transrectal ultrasound imaging — this means it passes through the lining of the rectum for a tiny amount of tissue to be removed by the needles and this is called a biopsy.

Treatment options of prostate cancer

There are several treatment options available for the management of prostate cancer. This management option may have some side effects (Chen & Zhao, 2013).

Radical prostatectomy

Removal of the prostate gland. This is achieved only if the cancer is localized within the prostate. Infertility or problems associated with erectile dysfunction, such as dry orgasms, reduction in penile length, and urinary incontinence, may be a side effect of this procedure.

Hormone therapy

Hormones are administered to suppress testosterone by injection or tablet form. Occasionally, a procedure which involves the use of a subcapsular orchidectomy is done to eliminate from the testicle, the testosterone-generating portion. Potential adverse reactions can include, weight gain, reduced libido, hot flushes, fatigue, loss of muscle and strength, swelling of

the breast, changes in mood, loss of hair, risk of bone thinning , diabetes and heart disease.

Brachytherapy

Through the tumour, small radioactive seeds are implanted. This treatment is typically provided in conjunction with radiotherapy with an external beam. Urinary and bowel issues may be affected.

Chemotherapy

Chemotherapy medications are typically orally administered to reduce and regulate cancer and alleviate symptoms. Potential side effects associated with this treatment choice are exhaustion, hair loss, fluid retention, nausea and vomiting, lack of appetite, gastrointestinal issues, peripheral neuropathy, and mood swings.

Cryotherapy

This utilises the freezing and thawing of cancer cells in the prostate gland to destroy the cancer cells. Erectile dysfunction and urinary issues can be possible side effects.

Active surveillance

With this therapy is delayed, and cancer is tracked before progression occurs.

Watchful waiting

The main aim, similar to Active Surveillance, involves monitoring symptoms until they occur rather than starting treatment actively.

Physiological reactions of prostate cancer

Concept of sex life

Physiological needs are human basic needs such as food, water, clothing, shelter (accommodation or housing), sleep as well as sex (Aruma &

Hanachor, 2017). Having put across the above, it needs to be mentioned that while nearly all humans are attracted to one kind of person or another (with all sexualities considered), illness or disease can hinder the human ability to have sex. The importance of sex has been viewed to include procreation, pleasure, and confirming one's sexuality especially given the current sexual behavioural changes or evolution ongoing across the globe (Crowell et al., 2016; Fiaveh, 2017; Lucas & Fox, 2021). One common similarity between illness and sex is the body or physiology. Both sex and illness happen in the body, albeit one can be beneficial and the other detrimental. Hence, disease or illness tends to disrupt the sex life of patients irrespective of the type or form of the disease. It is even direr when the disease affects the body parts that are needed for sexual activity, such as a woman's breasts or the genitalia of either sex. Another impact of the disease is that it robs people of their strength or ability to engage in any sexual activity. Especially for men, it is even more common as prostate cancer has become one of the deadly diseases claiming their lives (Amoako et al., 2019; King et al., 2015; Okuku et al., 2016). The disease affects their relationships either by disintegrating them or making it difficult to have a pleasurable sexual life.

Sex as a basic need exist for pleasure and procreation. In view of this, the WHO (1975), provides a standard for a healthy sex life by describing it as the integration of the somatic, emotional, intellectual and social aspects of individuals in ways that positively enriching one's personality, communication and love. Furthermore, in order for an individual to engage in sexual activity, there should be a sexual desire. The presence of sexual thoughts, fantasies, and motives to engage in sexual behaviour in response to relevant internal and

external cues is referred to as sexual desires (Regan & Atkins, 2006). Many additional factors have a role, including attitudes, opportunity and/or partner availability, mood, and health. During the excitement phase, the body prepares for coitus as a result of any erotic physical or mental stimulation that creates sexual desire. Sexual arousal, which is closely linked to sexual desire, can be described in both subjective and physiological terms (i.e., genital vasocongestion and tumescence).

The first sign of physiological sexual arousal in males is an erection, which is a reflexogenic event caused by sensory impulses sent by the dorsal nerve of the penis after stimulation of free nerve terminals found along the penis and glans. Vasodilation causes tumescence of the cavernous bodies, which characterizes penile hemodynamics during erection. This is due to the endothelium's production of nitric oxide in response to parasympathetic stimulation of the pelvic nerves. Penis detumescence, on the other hand, is mediated by the sympathetic nervous system's pelvic, cavernous, and pudenda nerves, as well as many vasoconstrictor factors. In response to tactile, visual, imaginative, and olfactory cues, erection is dependent on spinal and supraspinal regulation. Reflexogenic and psychogenic stimuli are expected to work in concert via the sacral parasympathetic pathway. Although the supraspinal processes that affect erectile function are poorly known and primarily based on animal models, hypothalamus and limbic circuits appear to be important in erection. As a result, sexual behaviour is dependent on the processing of sexual impulses that allow people to enter the human sexual cycle. This is a crucial behaviour in evolutionary terms because it facilitates

interactions directed at reproduction, which is necessary for biological adaptability and species self-preservation.

Sex's impact on people's daily lives, on the other hand, is far from its archetypal goal. Several studies report that frequent engagement in sex has a good impact on both physical and mental health throughout history. Thus, an

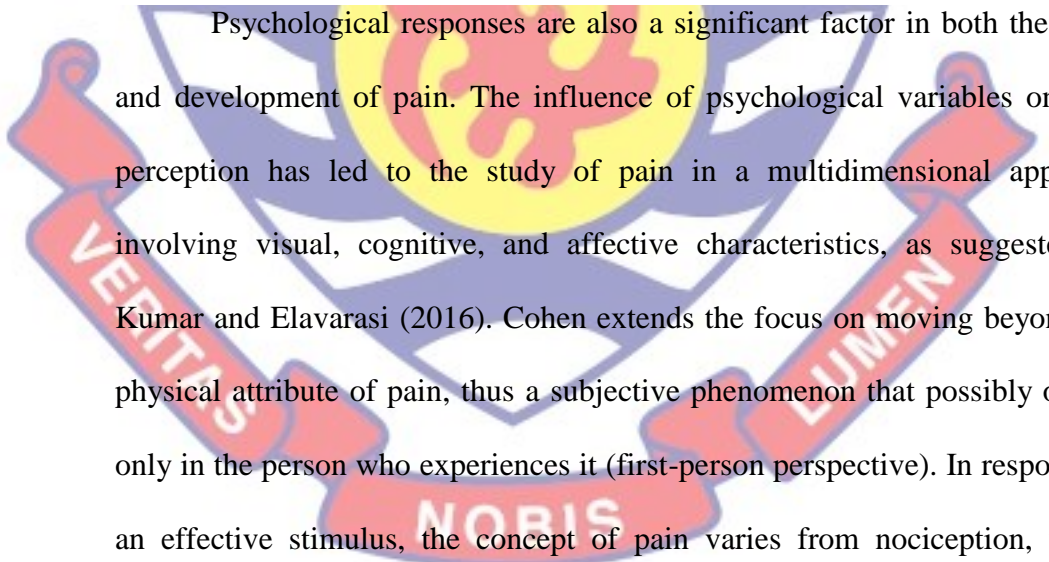
inactive sexual life may have debilitating effect on individuals.

In the case of men with Prostate cancer, treatment is often associated with significant adverse physiological and psychological effects, including sexual problems (Saitz et al., 2013). Men with prostate cancer often experience increased rates of sexual problems and reduced sexual functioning at baseline pre-treatment and, most significantly, after cancer treatment (Stensvold et al., 2013). These problems include erectile dysfunction (ED), reduced sexual desire, sexual pain, orgasmic problems, and ejaculatory problems. Among these sexual problems, ED is most commonly studied, and while other sexual problems are less studied, they appear to be highly prevalent and takes a psychosocial toll on men with to prostate cancer (Saitz et al., 2013; Wassersug et al., 2017).

Concept of pain

Pain is an uncomfortable sensory and emotional sensation that stems from a known or potential damage to tissue (Bennett et al., 2019). It is the most known reason individuals seek health care, and it is comorbid with many health conditions and some medical procedures. It is a subjective reaction usually perceived as unpleasant and unwanted to a physical or psychological stressor. Pain may also be a protective reaction to health-threatening conditions (Dueñas et al., 2016).

In addition, various theories exist to explain pain (Moayed & Davis, 2013). The intensity theory of pain by Plato for instance suggests that pain has emotional basics that occur. This emotional sensation arises when the stimulus is greater than normal and does not correlate with a particular sensory stimulus (Moayed & Davis). The gate control theory also offers a physiological standpoint for pain concerning the psychological nature of pain (Melzack & Wall, 1965). Thus, when pain-related information reaches a point that exceeds the inhibition caused, it opens the gate and activates receptors, resulting in pain perception and sensation. Furthermore, The Specificity Theory also suggests that pain refers to the existence of specific pathways with a particular receptor and corresponding sensory fibre (primary afferent) for each somatosensory mechanism with the basic tenet of each mechanism that is responsive to one given stimulus (Dubner et al., 1978).

The logo of the University of Cape Coast is a watermark in the background of the text. It features a shield with a yellow sun-like symbol in the center, flanked by two red banners. The left banner contains the word 'VERITAS' and the right banner contains 'LUMEN'. Below the shield is a red banner with the word 'NOBIS'.

Psychological responses are also a significant factor in both the onset and development of pain. The influence of psychological variables on pain perception has led to the study of pain in a multidimensional approach involving visual, cognitive, and affective characteristics, as suggested by Kumar and Elavarasi (2016). Cohen extends the focus on moving beyond the physical attribute of pain, thus a subjective phenomenon that possibly occurs only in the person who experiences it (first-person perspective). In response to an effective stimulus, the concept of pain varies from nociception, which depicts noticeable action in the nervous system (third-person perspective).

Prostate cancer, like other cancers, has a significant correlation with pain (Kelly & White, 2011). Pain is often due to bone metastasis in prostate cancer. It may also be seen as a result of perineal pain or obstruction of the

lower end of the ureter and prostatic urethra as a result of local prostatic pathological invasion. Osteoporosis, which occurs as a result of hormone treatment and ageing, significantly escalates the risk of bone issues in patients with prostate cancer, in addition to metastasis. Androgen deprivation, which is the primary treatment for metastatic prostate cancer, causes bone loss, and hormonal therapy lowers bone mineral density by 3% to 5% per year (Bienz, & Saad, 2015). Prostate cancer has a higher rate of bone bone metastasis than any other cancer, with bone metastasis occurring in around 65 percent to 75 percent of individuals with advanced form of the cancer (Bienz, & Saad). The vertebra, bony pelvis, and ribs are common sites for metastasis. When a person with prostate cancer develops a bony metastasis, the risk of skeletal problems rises. Individuals with bone metastases and hormone resistance due to prostate develop skeletal problems in 30.3 percent of cases, with a yearly incidence of 12 percent. In effect, the patient's quality of life is also impacted by activities involving the skeletal system (Macedo et al., 2017).

Thus, bone metastasis from prostate cancer is usually seen as pain, pathologic fractures, and spinal cord compression. Structural damage, mechanical stress, periosteal strain, microfractures, pressure on neighbouring nerves and tissues, and the production of chemical mediators such as prostaglandin and cytokines are all factors that contribute to pain in bone metastases. Generalized, chronic, or intermittent pain are all possibilities. An aching, a burning sensation, or a sting are common symptoms. The pain gets worse at night or while you're carrying heavy objects. While the discomfort may be minor at first, it may grow more severe as the condition progresses. Metastasis-related pain is typically of the somatic variety, but neuropathic pain

may be present as a result of the tumoral mass's strain on nearby neural structures or invasion. Despite the prevalence of pain among Prostate Cancer patients, there are still reports on inadequate interventional pain management methods.

Psychological reactions of prostate cancer patients

Concept of depression and anxiety

Patients diagnosed with cancer have a significant risk of psychological reactions (Holland & Alici, 2010). Psychological reactions are usually characterised by the manifestation of depression (e.g., lost interest; sadness; hopelessness) and anxiety (e.g., restlessness; feeling tense) (Zhao et al., 2013).

These manifestations may be comorbid with somatic symptoms (e.g., insomnia; headaches; lack of energy) and distinct across cultures (Kleinman & Kleinman, 1991). Furthermore, scholars of the stress-distress model postulate that psychological reaction results from the exposure to stressful conditions which affect both the physical and mental health resulting from the inability to cope effectively with the stressor (Ridner 2004). They also suggest that there is a positive correlation between the stressor and psychological reactions. Additionally, they may vanish when individuals can cope effectively with the stressor (Ridner).

Individuals living with cancer for about half a decade tend to need significant attention due to changes in their functioning, which encompasses several psychological reactions (Harding et al., 2012) which may lead to psychiatric illness.

Concept of body image

Body image is a complex concept involving self-perception of size and body shape, surrounded by the sensations and immediate experiences. It also involves a subjective component that refers to an individual's satisfaction with the body size (de Guzman & Nishina, 2014). It basically incorporates what a person believes about the appearance, feels about the body, including height, weight, and shape. It can be positive or negative. A negative body image is frequently linked to disorders such as body dysmorphic disorder, body integrity identity disorder, and eating disorders (Song et al., 2012). Negative body image consists of a disoriented view of one's shape; whereby one may often feel self-conscious or feel ashamed, ugly and assume others are more attractive. It is linked to internal sensations, emotional experiences, fantasies, feedback from others, and plays a key role in a person's self-concept. Self-perceptions of physical inferiority can strongly affect all areas of one's life. Positive body image is the ability to separate how one values oneself from physical appearances. Positive body image tends to realize that self-worth is not linked to appearance nor personality. There is pride, self-confidence and self-acceptance (Tylka & Wood-Barcalow, 2015).

Therefore negative impacts such as stigma and labelling due to one form of illness or another have a way of impacting negatively on a sufferer's ability to overcome the disease as a challenge and to fit in society again (Arrington, 2015; Ervik, 2012; Ettridge et al., 2018; Vamos, 1993). For instance, it has been argued that people who are stigmatized due to one form of illness or another saw themselves "reduced in their minds from a whole and usual persons to a tainted, discounted people" (Ettridge et al., 2018). A counter

argument of the above is that stigmatized people who felt they had lost their body image due to sickness can transform such thoughts through new identities that can empower sufferers to thrive and survive the disease (Arrington).

An individual's self-image, therefore, contributes largely to their healing. It is a contrast that relates both to the actual body and the psychological image of the person. Body perception and experience are, therefore, a conscious aspect of being sick. In the study, Beese et. al. (2019) present discussions on one aspect of body image that affects many diseases: body image dissatisfaction. While body image has been described as how a person perceives themselves generally, body image dissatisfaction concerns how sufferers have a skewed and negative perception of themselves, feeling anxious and uneasy about their appearance. This negative perception has a toll on their health and wellbeing as it creates a mindset that hinders the body's ability to cover whatever form of the disease.

Bolton et. al. (2010) suggest that many variables contribute to the response of illness by a patient, including their behaviour, thought patterns, and appearance. They added that physical changes in appearance, function, and body integrity are commonly associated with sickness and medical treatment. Unfortunately, unhappiness with one's appearance has increased since the early 1970s, probably due to increased media impact. Trauma, endocrine diseases, cancer, steroid treatment, and antidepressants, for example, are all known to cause changes in appearance that might contribute to body image problems. This unhappiness can be seen more in women with

cancer (breast or vaginal), where many-body changes harm their image (Gibson et al., 2016).

Harrington et. al. (2009) suggests that men with prostate cancer experience body image issues resulting in negative cognition leading to low self-esteem. Body image issues have an influence on their social construct of masculinity. Thus, although each treatment for prostate cancer has a unique side-effect profile, one can expect negative body image issues, through alterations in physical appearance i.e., loss of muscle mass and state of health.

Social reactions prostate cancer patients encounter

Concept of social support

Social support has gained significant attention since the 1970s (Barrera et al., 1981). According to Cassel (1974), there is a significant relationship between wellbeing and social support. Thus, several social conditions are significant to wellbeing from a functionalist perspective: thus, it promotes health or may produce disease. Additionally, he suggests that social support may be a protective factor for individuals when faced with physiological or psychological stressors. Cassel classifies social support as information and groups it into three parts; information leading a person to believe that he or she is cared for and loved (i.e., emotional support); information leading a person to believe is esteemed and valued (i.e., esteem support); individuals believing to have a sense of belonging to a communication network and mutual obligation.

In addition, Caplan (1974) suggests that social support is a relationship with significant others that plays an important role in maintaining both physical and psychological wellbeing over time. He also lists three

components of social support activities. Firstly, significant others aid individuals in mobilising their psychological resources and master their emotional burdens. Secondly, significant others share the task of individuals. Thirdly, they aid individuals in terms of money, materials, skills, and psychological guidance to aid the individual handle situations.

Additionally, Cohen and Blaszczynski (2015) also suggests social support can be classified to; instrumental- the material support individuals gain from interacting with others which may take financial support; informational – this refers to relevant information given to others to aid individuals in coping with stressful events such as chronic illness. This information usually takes the form of advice or guidance; emotional support refers to empathy and care individuals get from social support, which creates room for venting and emotional expressions.

Thus, various studies suggest that people who are more socially integrated and experience more supportive and rewarding relationships have better mental health, higher subjective wellbeing levels, and lower morbidity and mortality rates. Research suggests that perceived social support is associated with cancer survivors improved emotional wellbeing (Zhou et al., 2010). For example, perceptions relating to positive social support are significantly correlated with lower anxiety and depression, increasing psychological wellbeing levels. However, lack of social support predicts a decline in the functional status of cancer patients (Michael et al., 2000). Thus, men who do not have emotional support from significant others are likely to be depressed, which in effect may affect their psychological wellbeing (Poole

et al., 2001). Lack of social support with prostate cancer has also been linked to higher mortality rates (Jan et al., 2016).

In essence, there is the need to consider psychosocial factors in the delivery of health care and management of Prostate cancer to aid in the recovery and reduce mortality rates associated with Prostate Cancer.

Empirical Review

Physiological issues in Prostate cancer

Pain experiences of men with Prostate Cancer

Pain from cancer cannot be dismissed and it may erupt either from the cancer itself, treatment, or a combination of both. Caraceni and Shkodra (2019) iterate this by expressing that not every form of pain is related to tumour growth, and therefore physicians must find out from patients the type of pain, its severity, or intensity in order to help alleviate the pain. The European Society for Medical Oncology also argued that pain from cancer is assessed based on the stage of cancer and primarily from the patient's feelings (ESMO, 2019). They added that while the pain may arise from cancer, pain may also erupt from different sources, which may not necessarily relate to cancer.

The site of pain can be considered in determining the pain experience and the medical therapy to consider (Caraceni & Shkodra, 2019). Pain from cancer may affect any body part, including bone, viscera, nervous and soft tissues. The British Pain Society (2010) concurs with the above as they stated that cancer patients report several sites of anatomical pain, which makes life unbearable for patients. They further argued that pain from cancer shares the same neuropathophysiological pathways as non-cancer pain. That is to say that

the neurological and pathological senses of pain are the same, which explains why physicians cannot detect the exact site of pain of prostate cancer patients. This is because pain may erupt from other sources that are unrelated to cancer in any way. Notwithstanding, Mehta and Chan (2008) noted that, clearly, all cancer patients experience and exhibit pain differently. While a great number try to bear the physical pain, yet others are left at the mercy of it, leading to their early deaths.

The perception of the pain an individual experiences when diagnosed with prostate cancer seems to have an influence on the rate at which men screen for prostate cancer. From the genesis, while most men with prostate cancer may not detect it, and this detection may never happen until death, others may however, show symptoms at the latter part of their lives when they are very old and may experience pain not necessarily from prostate cancer but due to other health-related conditions (MoH, 2016).

Consequently, research has shown that the knowledge of, attitude, and experiences of prostate cancer differs from man to man. In a study by Laweh and Manortey (2021), they assessed what men knew about prostate cancer screening in Ghana. Adopting a quantitative stance, they collected data from 363 men within the Lower Manya Krobo in the Eastern region of Ghana using a multi-stage sampling technique. It was curious to find from their study that a lower percentage of the respondents agreed that prostate cancer screening was painful. While this was regarded as untrue, a little over half (59.1%) of the men agreed that one sign of developing prostate cancer was in feeling pain in the waist and back. Although a large number of the respondents had not suffered prostate cancer, the few who had the disease confirmed based on their

experiences. Their study again revealed that 71.1% of men perceived that prostate cancer was without pain. However, this is discredited by a previous study conducted by Amoako et. al. (2019). In their study, they found that 736 cancer cases had been recorded in 2015 in Ghana, while prostate cancer was prevalent among men in Ghana, they also recorded in their findings that prostate cancer was associated with pain.

In a similar study by Yeboah-Asiamah (2015), they examined knowledge and perceptions of men about prostate cancer in the Sunyani Metropolis in Ghana. He employed a cross-sectional descriptive study and collected data from 160 males between 40 and 60 years. He found from his study that men perceived prostate cancer to be associated with pain. The physical pain of men with prostate cancer included pain in the hips, erection dysfunction, back, ribs, and weakness in the legs and feet. There is also pressure on the spinal cord, which causes prostate cancer patients to lose control over the bowels. While this is common among many patients who suffer general prostate cancer, peculiar prostate cancer may present a similar or entirely different pain.

Gater et. al. (2011) also found from their study that men with prostate cancer experienced pain in the bone. They conducted a semi-structured in-depth interview among 17 men and found this pain associated with castration-resistant prostate cancer. This type of prostate cancer develops even at very low testosterone levels, which is quite different from regular or common prostate cancer, wherein growth requires normal testosterone levels in the early stages of cancer. This pain in the bone has been described as common among 90% of men with castration-resistant prostate cancer (Saad et al.,

2006). This pain results from a deconstruction of the tumour of the bone and a compromise of nerves around it (Pinski & Doff, 2005). Pressure on the spinal cord was also a painful experience among men with castration-resistant prostate cancer, which is supported by the work of Yeboah-Asiamah (2015).

Therefore, men with prostate cancer did not only suffer pain around their prostate area but were somewhat spread across other regions of the body. For instance, Eton and Lepore (2008) intimated that men with prostate cancer suffer pain in the bone and experience general bodily pains where they lack high levels of vitality to perform various tasks at home and work. This is due to the continuous loss of energy exerted on them by the painful experiences due to the disease. Their study was based on a literature review comparing the health-related quality of life of men with prostate cancer to men without prostate cancer with the same age brackets. With the attending effects of prostate cancer on the quality of life of men, their lives are left at the mercy of the pain, and how the pain experiences disintegrate their desire to achieve their goals and aspirations. As Haraldstad et. al. (2019) and Itoh and Miyairi (2001) put it, an individual's quality of life is measured by their health and their overall perception of life about their health. Prostate cancer here becomes damaging for men who experience the disease early, such as in their mid-40s or early 50s.

In yet another study by Thompson et. al. (2007) and relation to Quality of life, they make mention the description of the pain associated with prostate cancer which as total pain. This was because the pain from any type of cancer was considered physical and emotional, psychological, and spiritual. They also describe bone pain, weight loss, and fatigue as the associated physical pain of

prostate cancer. Other physical painful experiences include pain during urination, anaemia, and attending symptoms such as headaches, shortness of breath, increased pace of heartbeat, and dizziness. There is also the compression of the spinal cord with the increasing growth of the tumour. They (Thompson et al.,) noted that such pain might impact habits such as eating, sleeping, and one's interaction with others.

Kaya and Feuer (2004) argued that pain experiences of men with prostate cancer usually the physical aspects cannot be treated separately, neither can the patient be relieved of their pain while suffering physically. This shows the severity of pain that men with prostate cancer suffer or have to endure. While prostate cancer may present its forms of pain, non-cancer pain cannot be dismissed. Kaya and Feuer intimated that more often than not among older males, comorbidity is likely to occur, which may increase the pain experiences of patients with prostate cancer. They, however, stated physical pain to include bone pain, bone fractures, fatigue, anorexia, urinary outflow obstruction, anaemia and oedema, coagulation disorders and spinal cord compression. The International association of pain further emphasized reported that some men reported an irritable bladder or certain indiscipline regarding urinary sensation leading to an uncontrolled urinary flow (Raja et al., 2020).

Mazhar and Waxman (2002), however, also stated that the physical pain associated with prostate cancer could be devastating and unending, especially among older men. They described one distinguishing pain which was common among men with prostate cancer – perineal pain. This type of pain was usually experienced among men at an advanced stage of the disease

where the tumour had grown large enough to cause damage to the prostate. Kamat et. al. (2003) argued that locally recurrent prostate cancer could cause obstinate perineal pain. They concluded that perineal pain could lead to losing lives as all other types of cancers do. Other forms of pain associated with men with prostate cancer include pain in the bones, spinal cord compression, and weight loss, as emphasized by other authors (Eton & Lepore, 2008; Kaya & Feuer, 2004; Thompson et al., 2007; Yeboah-Asiamah, 2015).

In a nutshell, pain experiences include loss of appetite, loss of weight, dull pain in the lower pelvic area, painful urination, and ejaculation. Others include pain in the lower back, hips, thighs, and legs. This is supported by a report by the European Association of Urology, which also presented symptoms such as pain in the back, hips, haematuria, spinal cord, and blood in the semen (EAU, 2019). The association argued that most men who have the disease are asymptomatic at the onset; thus, they do not show any signs or symptoms at the early stages of cancer.

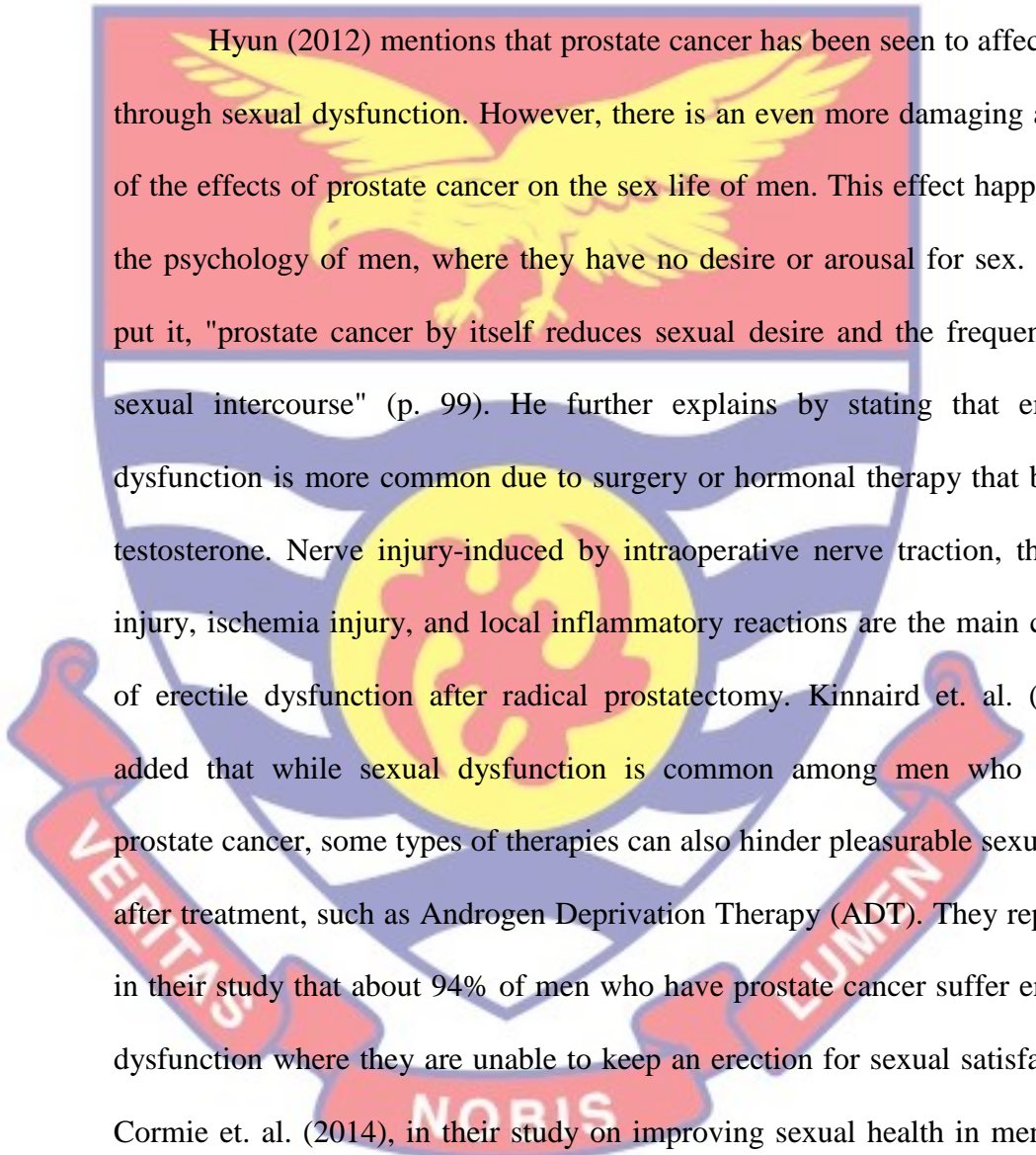
Sex life living with prostate cancer

Apart from the efforts to minimize its interference into their daily lives, questions persist about the extent to which men are concerned by their sexual impotence. Sexuality was considered as a central supportive care need for men with prostate cancer, especially the young men, in a recent survey (Steginga et al., 2004). The results of studies on sexual dysfunction adjustment are inconsistent. In a study, it was found that men with prostate cancer and on treatment had diminished sexual libido as their main problem (Helgason et al., 1996). However, Lilleby et. al. (1999) reported in their study that only a small portion of the men in their study reported erectile dysfunction.

Jannini et. al. (2015) report that sex is a genetic, natural, and innate desire in humans that has to be satisfied. They further added that the sexual behaviours of humans are governed by biological and congenital factors that regulate both the male and female. Santos and Stepleman (2015) added that sexual behaviour among humans emerged from the sexes or gender of humans. While people discovered their sex identities (gender), they also discovered the attractions they developed for the opposite sex. These sexual attractions are breeding grounds for sexual relationships leading to copulation. Lin et. al. (2019) also stated that sexual behaviour denotes the frequency of sex, sexual activities, and sexual partners.

The National Cancer Institute (2011) highlighted some sexually related symptoms of prostate cancer in men to include painful ejaculation, blood in semen, and difficulty in keeping an erection. De Sousa et. al. (2012) reported impotence, sexual issues, erectile dysfunction, and incontinence as some sexual-related issues men face when they have prostate cancer. This worsens the fate of these men as they feel embarrassed and lose their sense of masculinity. As Fiaveh et. al. (2015) put it, a large part of masculinity has been defined by women as sexual competence, and this is usually the case for patriarchal societies such as Africa and parts of Europe and the Americas. Hence, a man who fails to perform sexually is considered weak and even further "not man enough." The above findings in De Sousa et. al. are confirmed in similar work by Albaugh et. al. (2017), who assessed the life of men after treatment of prostate cancer, particularly about their sexual lives with their couples. They collected data using in-depth interviews from 27 men who have had prostate cancer treatment in the last 1-5 years and are suffering

sexual dysfunction. Their findings revealed that men expressed that they were frustrated due to sexual dysfunction. Depression and anxiety also set in from the lack of sexual intimacy. Sexual intimacy has been perceived as a form of bonding for couples and, without this, creates some form of tension among couples and their relationships (Fiaveh, 2017).

The logo of the University of Cape Coast is a watermark in the background. It features a shield with a yellow eagle with wings spread, perched on a yellow circular emblem containing a red stylized figure. Below the shield are two red banners with white text: the left banner says 'VERITAS' and the right banner says 'LUMEN'. At the bottom of the shield is a red banner with white text that says 'NOBIS'.

Hyun (2012) mentions that prostate cancer has been seen to affect men through sexual dysfunction. However, there is an even more damaging aspect of the effects of prostate cancer on the sex life of men. This effect happens in the psychology of men, where they have no desire or arousal for sex. As he put it, "prostate cancer by itself reduces sexual desire and the frequency of sexual intercourse" (p. 99). He further explains by stating that erectile dysfunction is more common due to surgery or hormonal therapy that blocks testosterone. Nerve injury-induced by intraoperative nerve traction, thermal injury, ischemia injury, and local inflammatory reactions are the main causes of erectile dysfunction after radical prostatectomy. Kinnaird et. al. (2021) added that while sexual dysfunction is common among men who suffer prostate cancer, some types of therapies can also hinder pleasurable sexual life after treatment, such as Androgen Deprivation Therapy (ADT). They reported in their study that about 94% of men who have prostate cancer suffer erectile dysfunction where they are unable to keep an erection for sexual satisfaction. Cormie et. al. (2014), in their study on improving sexual health in men with prostate cancer, reacted that while many men suffer the embarrassing impact of the disease (prostate cancer), some men have been found to sacrifice about 10% of their five-year advantage to survive to maintain sexual function. This shows the importance of a good and functioning sex life for men. This is

partly because men are more sexually active than women and are likely unable to stay away from the activity if they are already engaged in it (Martins-Fonteyn et al., 2017; Santos & Stepleman, 2015; Shegog et al., 2017).

Prostate Cancer UK (2017) argued that prostate cancer affects patients in three overlapping ways: the mind, the body, and relationships. For the mind, knowing you have cancer might make you feel depressed or anxious, affecting your sexual feelings. For the body, the nerves and blood supply required for erections can be damaged by treatment. Hormone therapy can have an impact on your sexual desire. For relationships – when dealing with cancer, it can affect your close relationships or your plans to develop one. While sexual erection is possible after treatment and depending on the type of treatment, libido begins in mind and requires that men who have undergone prostate cancer treatment develop a mind ready for sex after treatment.

Intimacy is an important part of relationships. Thus, when men have had prostate cancer treatment and lose their sexuality, they are encouraged by support groups to develop new ways of getting intimate with their partners. Thus in a study conducted by Schantz (2017), data was collected from 4 men in a support/counselling group who have had prostate cancer treatment through interviews. After treatment, men felt a loss of sexual identity, and also due to the reduction in the penis as a result of treatment, they also felt they lost their masculinity as men. However, the study offered men options such as petting and closeness. Moreover, open discussions about sex and their condition have proven very effective.

In similar studies, Wassersug et. al. (2017) reported that men have the edge to recover from erectile dysfunction, redefine sexual practices, and use

support groups to help better their condition, explore anal sex, and masturbation. Contrariwise, Santos-Iglesias et. al. (2020) reported differently from their study. They found that men who had had prostate cancer treatment had a low to moderate impact on their sexual satisfaction. This is partly due to the inconsistency in the articles that were reviewed for the study. Other studies (Bokhour et al., 2001; Brucker & Cella, 2003; Ervik, 2012) have also reported challenges that men usually face after undergoing prostate cancer treatment and how these impact their sex life their relationships.

In other studies, men saw themselves as a burden on their partners as they supported them in every way but could not satisfy them sexually. While their partners understood this new situation, men with prostate cancer felt it was embarrassing, especially those who could not keep an erection. According to the Prostate Cancer Foundation of Australia, knowing and understanding your sexuality is important if men who have had prostate cancer treatment have to recover and enjoy pleasurable sex if possible (PCFA, 2014). They, therefore, argue that generally, for men, sexual desire or libido is hinged first on age. This is because men at their younger age have higher testosterone compared to when they are older. Be that as it may, one of the factors to be considered for men with prostate cancer is erectile dysfunction. Conversely, erectile dysfunction is also experienced nearly by all males across the globe, with age as an increasing factor. Other medical factors include obesity, diabetes, unhealthy lifestyles such as excessive alcohol, smoking, high blood pressure, less exercise, etc. while these remain, prostate cancer is yet a concluding factor for men's sexual dysfunction, particularly keeping an erection.

In a study by Matthew et. al. (2018), they assessed the sex life of men after rehabilitation from prostate cancer. The study was based on longitudinal analysis where data was collected from 7 different rehab clinics. They found that men relied on pro-erectile devices and agents but after one year. Research had proven erectile devices to be inadequate for men because most men desired to have a natural erection compared to the use of devices and agents. This reiterates the fact that men are embarrassed by the changes in their sex life and would prefer it was the same before prostate cancer diagnosis and treatment.

Most studies have reported on the impact of prostate cancer on the sex life of men and their spouses, who are usually women. Lee et. al. (2015) take it on a different angle by examining the sex life of men with prostate cancer. Post-treatment revealed that sex life issues included erectile, urinary, ejaculatory, and orgasmic dysfunctions. They also face issues of intimacy coupled with a dearth of oncological and psychosocial care for prostate cancer survivors. These sex life issues decrease the sexual quality of life of men with prostate cancer and their sex partners.

Grondhuis et. al. (2019) explore the effects of prostate cancer treatment on couples and its related impact on relationships from another lens. They employ a quantitative design and collected data from 171 men with prostate cancer treatment and their partners. The findings revealed that 70% of the men experienced erectile problems that negatively impacted their partners. This eventually had bearings on their relationships, given that their partners found the change in their sex lives unbearable. Further, some partners, 33.3%, also saw this change as a disappointment as it altered their relationships entirely.

Lasting relationships are important bits for all couples until faced with one form of challenge or another, such as prostate cancer. The ramifications of such intrusion create a gap in their relationship, leaving it either complicated or come to an end. Such situations require much social support from family, friends, and professionals to help couples endure such difficulty.

Psychological Experiences of Men with Prostate Cancer

Depression and anxiety

The psychological experiences of men with prostate cancer come in different forms ranging from pre-psychological anxieties to post-diagnosis distress. Yeboah-Asiamah (2015), in his study of the attitudes and perceptions of men about prostate cancer, found that men exhibited fear or anxiety when they were asked why they have not undergone screening. In his study, he employed a survey method to collect data from 160 men within the Sunyani Municipality who were between 45 and 60. This fear created a barrier that prevented men from getting screened and further posed a danger to their lives because they had no knowledge of their prostate cancer status and hence could not start early treatment if they had the disease. Another factor was embarrassment on men's side to talk to their doctors about the prostate cancer status. This also affected their will to screen and received treatment for the same. Larsen and Kramer-Kile (2014) expressed that when people know a certain type of disease, they build a negative or positive mental attitude towards it. This mental attitude aids them to want to act in ways that lead to getting relieved or getting worse. This Mental attitude again is hinged on the type of disease and its severity and whether or not the disease may be deadly. For instance, Stafford et. al. (2009) pointed out that people developed a

negative attitude towards coronary artery diseases as they exhibit higher rates of depression.

Psychological distress is associated with cancer and Arvidsdotter et. al. (2016) suggest that a state of mental pain marked by depression and anxiety symptoms is psychological distress. Patients may exhibit some symptoms and a variety of chronic diseases and these frequently coexist and co-occur with these symptoms. Psychological distress has been described with six defining characteristics: changes in emotional status, discomfort, expression of distress, injury, and perceived incapacity to cope with the disease. This is supported by a previous study conducted by Massé (2000), who analysed the qualitative and quantitative aspects of psychological distress and reported features such as demoralization and pessimism about the future, agony, and tension, self-depreciation, social disengagement and isolation, somatization, and retreating oneself from others.

Similarly, Rönningås et. al. (2019) assessed the association between prostate-specific antigen (PSA) levels and distress among men with prostate cancer. The researchers employed a cross-sectional survey and collected data from 3165 men in Sweden who had prostate cancer. The analysis included descriptive statistics, bivariate and multivariate. The finding suggested that higher PSA levels were associated with greater discomfort in men. They express fear and worry from diagnosis to treatment.

Andersson and Mårtensson (2020) also posit that when individuals are faced with any form of sickness, they are confronted with a certain responsibility where their actions can act as enablers or barriers. Fear and anxiety are common psychological experiences that patients express when

confronted with, especially diseases they find overwhelming. This fear and worry are a state of mind usually created after diagnosis of a disease they have experienced. Hence, men who suffer prostate cancer later in life express this kind of worry and fear to show their dislike and discomfort about the disease.

The above findings extends the study conducted by Oba et. al. (2017).

In their study they aimed at examining the psychological effects of prostate cancer in men and their partners. As psychological distress tends to increase based on the patient's information, the study was a longitudinal one that assessed their levels of distress before and after diagnosis. A total of 115 men were sampled in this study, and the data were collected through a questionnaire. The study exposed that men with prostate cancer exhibited higher distress levels than men without prostate cancer, especially after six months of diagnosis. Psychological distress was at its peak after one month of diagnosis. This showed a higher state of psychological imbalance where men after their diagnosis were in a state of shock with the news after diagnosis. Again, their study revealed that the partners of men with prostate cancer also experienced higher stress levels than the wives of men without cancer. It was curious to find that while both partners suffered this psychological distress, it appeared this distress was higher among their partners than in the men who had prostate cancer. This was partly due to gender-related factors where women have been perceived to attach much emotion to situations they have never experienced and find overwhelming. Moreover, whereas men with prostate cancer in their study received therapy three months after diagnosis, their psychological distress levels increased due to some other news unrelated to prostate cancer.

Prostate cancer patients experience significant psychological discomfort and a higher chance of suicide. Quality urology care necessitates the management of this suffering and danger. In their study, Occhipinti et. al. (2019) examine psychological distress among men after prostate cancer surgery. They collected data from 233 patients recently diagnosed with localised prostate cancer and were scheduled for surgery. Patients were evaluated pre-surgery, then six weeks, three months, six months, 12 months, and 24 months after surgery. They found that psychological distress trajectories differed from man to man who had prostate cancer. Before treatment, younger age, more comorbidities, and worse bowel function were linked to higher psychological distress, while younger age and better urinary, sexual, and bowel function were linked to improved health-related Quality of life.

In another study, De Sousa et. al. (2012) conducted a systematic review of psychological aspects of prostate cancer. They collected data using secondary data only from 1999 through 2011. Databases included Medline, PubMed, and the Cochrane Database, with a total of 189 articles that were reviewed for the study. The findings revealed that depression, anxiety, stress, exhaustion, pain, and psychosocial issues were major psychological experiences that men with prostate cancer go through. They added that while anxiety may exist before and after diagnosis and after surgery, patients may also suffer from higher anxiety levels due to confusion over interventions to choose from. Because anxiety usually cannot be determined by a particular trigger, it is often more difficult for clinicians to help patients out of such situations. This again increases the psychological trauma the patient goes

through because of the inability to receive help for relief. This is confirmed by Goodman (2017), who propounded that men with prostate cancer confront difficult decisions at many points throughout their disease, including biopsy and diagnosis, initial therapy selection, and what to do about a growing prostate-specific antigen (PSA) level. Treatment of metastatic prostate cancer, as well as end-of-life options, all pose psychological challenges. Goodman (2017) further pointed out that one condition that worsens the psychological pain of men with prostate cancer is recurrence. Recurrence of prostate cancer means that cancer has not been cured by initial treatment (Karnes & Ahmed, 2020; Paller & Antonarakis, 2013; Tourinho-Barbosa et al., 2018; Venkatesan et al., 2021). The recurrence of prostate cancer poses graver psychological pain to patients because they lose hope and feel helpless at this stage.

Psychological morbidities continue to be a serious challenge for most clients with prostate cancer. For instance, Temi et al. (2021) assessed the treatment of anxiety and depression among males with prostate cancer in South-Western Nigeria. Data were collected from 46 males who had been recently diagnosed with prostate cancer. The Hospital Anxiety and Depression Scale (HADS) was used to determine the patients' level of anxiety and depression. They found from their study that forty-three and a half percent (43.5%) of the respondents were depressed, whereas 21.7 percent of the respondents had anxiety disorders. Only 2.2 percent of the respondents had anxiety problems without depression, while 23.9 percent had anxiety disorders without depression. Respondents with depression and anxiety disorders had a significantly lower quality of life (QoL). It was evident from their study that

one form of morbidity coexisted with another, and this multiplied the pain that patients went through.

In Malu (2019), his study focused on prostate cancer screening intentions among men in Nigeria. While his study did not focus on the psychological aspects of prostate cancer, his findings revealed that psychological factors contributing to low levels of screening intention had been fatalistic ideas, embarrassment, and the physical pain one may have to go through. Terwase (2014) also confirmed that anxiety and depression were major psychological experiences that men with prostate cancer face. In another study, Nuhu et. al. (2009) acknowledged that cancer among patients could be frustrating as it affects the individual's total life. Therefore, in their study, they examined the psychological and physical pain among residents of Ibadan, Nigeria. Two hundred ten patients were consecutively interviewed based on admission. Among other forms of cancer, prostate cancer occurred among 43 patients representing 20.5%. These exhibited depression, anxiety, sleeplessness, impaired concentration, and suicidal intentions. Larsen and Kramer-Kile (2014) mentioned that patients with cancer have high psychological challenges that place them in positions that are more likely to consider suicide. Myers (2021) stated that while suicide and cancer are major causes of mortality across the globe, they also emphasize that cancer has also been a major cause of suicides have been recorded across the world. Zaorsky et. al. (2019) are of the view that depression and anxiety have been common among men with prostate cancer. The authors have argued the same to increase the rate of suicides due to the overbearing psychological impact on patients, especially at metastases level.

Although prostate cancer tends to cause the death of men with the disease, many have also lived over several years after diagnosis. Bloch et. al. (2007) conducted a study on how men adjusted to the psychological experiences of men with prostate cancer. A systematic review of 60 articles concluded that men with prostate cancer face depression, anxiety, and the inability to cope with the disease. It was also revealed that with support from friends, family, and loved ones, prostate cancer patients cannot cope with the disease and are more likely not to survive. Albaugh et. al. (2017) take psychological aspects of prostate cancer from a different context examining the phenomenon among men after surgery. They interviewed 27 men who had completed treatment of prostate cancer through surgery or radiation therapy. Psychological experiences included frustration, anxiety, and depression largely due to sexual dysfunction. The situation worsens, especially for men who do not have support and understanding from partners. Groarke et. al. (2020) also found similar results in their study of men with prostate cancer undergoing treatment. They confirmed that such patients faced depression and anxiety, resulting in poor QoL. This makes them ineffective and creates a negative picture of their overall perspective of life. Adjusting in society, first among family and further the larger society becomes challenging and found unrewarding. Curiously, whereas screening has been thought of as beneficial as it offers knowledge about a man's status regarding prostate cancer, the idea has also been found as frustrating for younger men who find it depressing and worry about the future complications should they undergo screening (Roth et al., 2008).

Impact of prostate cancer on the body image of men

Although all humans are concerned about their appearance, social media and celebrity attention have been seen as major contributors to individual mindfulness about their appearance (Cohen & Blaszczynski, 2015; Brown & Triggerman, 2016). It is even more common for women who follow fashion on various social media handles to appear better and complimented. People's self-concept may be negatively impacted by sickness, as they feel pain, discomfort, changes in appearance, and a lack of control over their bodies. Prostate Cancer UK (2017) expressly stated that one of the things any disease does, including cancer, is to affect one's mind, relationships, and, more importantly, body. The impact of disease on one's body is perhaps one of the major contributors to distress in the lives of sufferers. Without a doubt, it is well to mention that one's body image contributes to high levels of being confident and feeling good about oneself. In this idea about the concept of self, Erving Goffman propounded that the image of the individual self is created by the individual – that is, how they perceive themselves – and society – that is how they think society perceives them.

Cancer particularly has a massive negative impact on an individual's body, thereby causing body image dissatisfaction. This is because cancer causes the deterioration of large parts of a sufferer's body. Cormie et. al. (2014) posited that, men with prostate cancer face body image problems, especially sexual life. This is because certain treatment harms men where there is a reduction of their sex organs. While this contributes to their incompetence in their sex lives, it also paints a negative picture about their masculinity to society, especially to their spouses, even when the latter is ever-supportive.

Prostate cancer, therefore, changes the perception of men about what their spouses think of their body image after diagnosis and, more commonly, prognosis.

In yet another study, (Chambers et al., 2018) examined the general experiences of men with prostate cancer in Australia. The employed cross-sectional qualitative interviews and open-ended questionnaires in collecting data from 39 men who have undergone treatment of prostate cancer. They found in their study that aside from the negative effects of the disease on men, it also caused changes in appearance and bodily structure, including gynecomastia, weight gain, sarcopenia, and decreased bone density. They also found that most of these bodily changes occurred after treatment. It implied the need for clinicians to review treatment options and methods as applicable to each man. The situation is darker among younger men with prostate cancer. In Takeuchi et. al. (2018) they examined the impact of prostate cancer on younger men and their spouses. They collected data from 259 patients and their spouses through the survey. They found that younger men experienced changes in their physiology which changed their perception of themselves. Most of them felt different around their spouses and felt they were treated differently by their spouses. Again, this harmed their relationship with their spouses, family, and friends.

Horschke et. al. (2020) explored body image in men with prostate or laryngeal cancer and their female partners. The used survey and collected data from 73 heterosexual couples with men being diagnosed with prostate or laryngeal cancer. The respondents completed questionnaires on body image acceptance (Self Image Scale), relationship satisfaction (Quality of Marriage

Questionnaire), and cancer-related distress (Questionnaire on Stress in Cancer Patients). Their findings revealed that patients with prostate cancer gave their female partners a poorer rating for perceived partner acceptance. It meant that men with prostate cancer were dissatisfied with their body image after treatment. Their findings revealed that although their body changes after treatment, it made no difference in relationships; spouses were ever supportive. It implied that men with prostate cancer struggle with holding on to a positive body image of themselves.

Such notions have an impact on their psychosocial wellbeing and capacity to overcome disease. Another study by Shiridzinomwa and Harding (2020) confirmed the above findings as they explored how body image affected patients' choice of treatment for prostate cancer and the regret after treatment. They interviewed nine men who had been diagnosed with prostate cancer, and their views sought about the form of treatment they would prefer about body image. Findings showed that men saw the need to prolong their lives hence were willing to undergo surgery. Post-surgery-related issues also created problems such as loss of function in masculinity and loss of confidence due to changes in appearance. Manier et. al. (2018) believe that cancer and its treatments can cause harmful changes in the physical look, integrity, and function of the body, putting cancer patients at a higher risk of developing body image issues or insecurities. Body image insecurities do not exist only in the thoughts and feelings but also exhibited in behaviour. Thus, a negative body image can contribute to negative behaviours that do not promote healing among patients. Negative body image can cause patients to

ignore the advice of clinical professionals, put up behavioural hindrances to health development and consider isolation more often (Manier et al.,).

A study conducted by Gentili et. al. (2019), examined how body image issues and attitudes affected men's ability to exercise while undergoing treatment. A semi-structured interview was used to collect data from 22 men who had prostate cancer. They found that participants stated body feminization as a source of body image dissatisfaction with their appearance.

Previous studies such as DeFrank et. al. (2007) investigated medical and psychosocial aspects linked to body image dissatisfaction in cancer survivors. The Appearance Evaluation Subscale of the Multidimensional Body Self-Relations Questionnaire was used to assess body image dissatisfaction. They found that prostate cancer survivors had lower body image dissatisfaction than males with other cancers. The researchers failed to investigate body image dissatisfaction in prostate cancer survivors by forms of treatment.

This current study addresses a gap in the literature by investigating the body image dissatisfaction of prostate cancer patients. A change in the appearance of men after treatment does not immediately cause them to develop depression and anxiety, among other emotional disturbances. Rather, these emotional disturbances are, one way or another, caused by certain alterations of which change in the body is a constant (Cormie et al., 2014; Twitchell et al., 2019; Ussher et al., 2015).

Social experiences of men with prostate cancer

The social aspect of being sick is perhaps one of the most significant factors to be considered in the lives of people with cancer. Jones et. al. (2018)

expressed that, humans are social beings and therefore interact at every point in their lives. Thus, when they are faced with challenges such as this, there is often a positive or negative interaction that is developed. They added that individuals with cancer develop new social identities, learn new behaviours, and change their relationship formation. It connotes that when people are sick in any form, they re-strategize their identities to fit their current status or situation. They do this by acquiring and learning new forms of behaviour that complements their situation. Jones et. al. (2018) put it this way; the social incorporates the sick person as a new individual into an already existing social life. Roij et. al. (2019) emphasize that the social bit of the sick individual is profoundly affected as this is the only aspect that shares a connection with others. Thus, relationships are either positively or negatively affected. Social wellbeing, therefore, is as important as physiological and mental wellbeing.

The WHO defined health, they emphasized that every individual has complete well-being, including complete social wellbeing and not just the absence of illness or pathology. Studies have reported feelings of isolation, social difficulty, and problems in social relationships (Wright et al., 2005; Knox et al., 2017 & Sodergeren et al., 2017) as some of the social experiences that sick individuals go through, including those with cancer. For cancer patients, the disease affects their physiology and affects their partners, family, friends, and other relations (Roij et al., 2019). For instance, Vrontaras (2018), in his study of patients with cancer and their views about family changes and family social support, employed a qualitative lens and interviewed eight client with cancer of any sort. Findings revealed that family changes were either positive, negative, or ambivalent. Positive changes helped patients react and

adapt well to the changes in their lives, while negative changes did not benefit the patients. He found ambivalent changes to either benefit the patients or not because they did not fall under any of the two categories. Positive changes can be motivation, social trust, and support from family and friends. For instance, in another study, Solbraekke and Lorem (2016) found among Norwegian women who had breast cancer consider social experiences such as social trust and continuous presence of family as a source of encouragement. Therefore, social experiences go a long way in determining the disease's pathways, whether the patient gets better with treatment or gets worse. Medical treatment and clinical care, therefore, are not enough to help patients get better with cancer.

Social support is considered as equally important for the patient as medical treatment. Naderifar (2019) also reported that patients chose isolation rather than interaction because they felt different and perhaps "unneeded." Support also tends to increase the general quality of life and offered promises of a better future for patients diagnosed with cancer (Awolu & Koranteng, 2020).

The social experiences of men with prostate cancer vary from man to man as age difference, stage of prostate cancer, and other environmental factors contribute to these experiences. In Nabisubi et. al. (2020), they address men's lived experiences with prostate cancer in Uganda. They particularly look into the case of men below age 55. They employed a qualitative lens and collected data from 20 participants using in-depth interviews and analysed thematic content analysis. They found from their study that men with prostate cancer have their lives altered, which affects the socio-economic status of

families. For instance, in their interviews, it was reported by the spouse of a participant that because the man was sick, caring for the needs of the children and especially their education would be difficult for her.

Gibson et al. (2016) and Takeuchi et al. (2018) observed that the social experiences of their spouses become direr given the familial responsibility and burden that is doubled on a woman. Here, the woman doubles as a caregiver and breadwinner at the same time in order to care for both the sick husband and the children, if any. They further reported in their study that some other men also face the problem of losing their spouse or disintegration of marriage due to the heavy burden placed on the woman as she is unable to cope or bear with the current situation (Nabisubi et al., 2020). While many spouses are affected by the conditions of their husbands, their social lives are altered as well. For instance, spouses felt they were cut off from friends and social gatherings due to the constant need to be at the hospital or care for the family (Lehto et al., 2018; Oba et al., 2017; Takeuchi et al., 2018).

Again, it was reported specifically in Bradley et. al. (2005) and Gray et. al. (2000) that men with prostate cancer had to battle social experiences such as managing to keep relationships and the urge to stop illness from interfering with social lives. They added that couples in trying to work out these portions of their social lives end up incurring psychological costs. This is because there is the issue of status and role strain where couples, especially women, have to take on different responsibilities and manage their feelings simultaneously.

Prostate cancer before and after diagnosis does not only alter relationships but as well creates some form of disillusionment for some men.

Mccaffery et. al. (2019) examined the situation of men who were secretly diagnosed with prostate cancer and how they refused treatment. The study opted for a qualitative design and interviewed 11 men who resisted treatment because of over-diagnosis and overtreatment. For these men, some were concerned about how they will care for their families if they underwent treatment because they will have to get out of well-paying jobs and social life choices that they have to make., other studies such as Yu Ko et. al. (2018) have pointed out that men diagnosed with prostate cancer and gainfully employed face social challenges because they found their jobs to extend their masculinity. Their jobs conferred on their social status, financial freedom, and social development. Hence, they found the diagnosis and deciding prognosis an overwhelming situation. This is confirmed by another study, Yu Ko et. al. (2020), which reviewed prostate cancer in men and their work. They conducted a systematic review of articles from databases between 2006 and 2020. They found that men felt that prostate cancer affected their financial lives, work, and for some others, their retirement plan. More importantly, men who had to return to work after prognosis and treatment faced challenges. They felt backward in their career development, learning new things such as technology, procedure, methods, and adjusting to new bosses or colleagues. Ullrich et. al. (2018) propounded that returning to the same social setting, such as a former workplace, was challenging for some men because they felt their social identity at work had been lost and may not be respected by colleagues or even subordinates. However, for some other men, social experiences such as work are painted dark as they try to hide their conditions from their employers. While some employers are concerned about the health conditions

of their employees, the latter tend to feel they become a burden on their organizations. Some organizations offer benefits such as health insurance policies to their employees and their families to cater to this situation (Hakim, 2020; Sigler, 2011).

Men receive support after being diagnosed with prostate cancer from peers from work or the community and their partners. In a review conducted by (King et al., 2015), they collected secondary data from seven databases and conducted a thematic synthesis of the articles reviewed. They found that while support from partners was greatly appreciated, men also valued support from their peers. These forms of support could be from support groups referred to by other patients, health workers, or significant others. Others included people from patients' familial or friendship networks such as churches, social clubs, communities, or work colleagues. Building healthy relationships and networking can be seen here as a great asset. People who are generally moody and seldom make friends are likely to isolate themselves from others after diagnosis. Chambers et. al. (2018) intimated that, men with prostate cancer have had to face an identity crisis. Prostate cancer is associated with many challenges, including losing the ability to engage in any form of activity for oneself. Men felt helpless because they were naturally weak, which increased their need to depend on another person to move or do anything at all. Although family and friends could be supportive, men felt embarrassed as they thought themselves a burden on these people. Their study collected data through interviews over the telephone with 39 men diagnosed with prostate cancer. One of the social experiences of these men was the use of support groups or shared experiences of other patients diagnosed with any form of

cancer or prostate cancer in the past. While support services have been proven to be an effective way of helping prostate cancer patients, little research has been conducted in the field through the qualitative lens to reveal the constellations regarding the method.

While social support has been a major experience for most prostate cancer patients, there was also the issue of stigmatization of some men. For instance, Nelson et. al. (2019) interviewed 18 couples using semi-structured interview guides in their study. They found that men feel some stigma knowingly or unknowingly. This was a general stigma that was attached to cancer patients. Although their family and spouses were there to support them and help them, they still felt such support was not enough as such men had unmet needs where they felt the need for emotional support from health professionals. Wright et. al. (2019) continued that, more often than not, men may desire to go through the first stage of prostate cancer that is by screening. However, due to fear and stigma associated with the disease, they stay hidden until worse. Men with prostate cancer must engage with family, friends, and health professionals about their status and the options to getting better. Stigma leads to uncertainty as one may be ashamed of seeking the needed help. Arrington (2015), in their study, noted that stigma changes the survivor narrative of men with prostate cancer. He intimated that, diseases such as epilepsy and cancer carry such strong stigma connotations that destroy the identity of patients. An individual's self-identity is critical to building and forming relationships; hence, stigmatized prostate cancer patients are likely to seek the needed social support, which prolongs their healing capacity. Buote et. al. (2020) confirmed this issue of stigma as a social experience as they

examined the phenomenon among 11 men who had been diagnosed with cancer of the prostate. They found that stigma affected their behaviour and sense of self-worth, which negatively impacted their total self. The above is in line with findings from the study conducted by Ettridge et. al. (2018), who also interviewed 20 men diagnosed with cancer of the prostate. They found that stigma affected men in various ways, including isolation, non-disclosure of disease, self-blame, and cause internalization.

Summary of literature review

The two theories that were utilised for the study were the Biopsychosocial and Self-discrepancy theories. These two theories underpinned the study and the various research questions in the study guided the review.

From the review, it became clear that prostate cancer is a devastating cancer and one of the highly ranked in Africa in terms of mortality and morbidity, and the lack of proper education, advocacies and awareness creation were some of the few issues surrounding the condition. It was also established that the condition is fraught with a number of challenges. One of such challenge is the fact that patients have to deal with physiological issues such as pain and erectile dysfunction. Another challenge is with the psychological issues which include depression, anxiety and stress. Lastly social experiences empirical found social support mitigates coping in men living with prostate cancer.

CHAPTER THREE

RESEARCH METHODS

Introduction

This study sought to explore the biopsychosocial experiences of men living with prostate cancer. The methods that were employed in the study are described in this chapter. Specific areas discussed includes research paradigm, research design, the setting of the study, sample and sampling procedure, the population, data collection instrument, data collection procedure, data processing and analysis.

Research Paradigm

The research paradigm which underpinned the study was the interpretivist. This paradigm is shared knowledge by a community of researchers who are of the view that social reality is not singular or objective but rather it is subjective and shaped by human experiences and social contexts (Kivunja & Kuyini, 2017). Unlike the objective epistemological perspectives such as positivism, which is of the view that aside from human cognition, meaning and meaningful reality exist (Kivunja & Kuyini), interpretivist suggests that when a person comes into contact with reality (or phenomena) that exist in the world, they construct meaning and meaningful reality. Therefore, reality is best studied within a socio-historic concept by reconciling the subjective meaning participants give to a phenomenon. Bearing the objectives of this study in mind, this paradigm deems fit for this study.

Research Approach

This study was guided by the qualitative approach because this approach is appropriate for the paradigm of this study. In qualitative research, the researcher collects and analyses non-numerical data such as texts, videos or audios with the aim of understanding concepts, experiences and opinions of respondents. In this approach, in-depth insights are gathered and new ideas may be generated. This approach is the opposite of the quantitative research which involves the collection and analysis of data statistically.

Research Design

In view of the interpretivist research paradigm of this study, and the qualitative research approach that was adopted for the study, the phenomenological research design was adopted for this study. According to Smith and Osborn (2007), phenomenological research design is used to explore in detail how individuals make sense of particular experiences, occurrences, or states. The approach is phenomenological in that it involves a detailed investigation of the participant's lifeworld; it attempts to explore personal experiences and it is concerned with an individual's appraisal of an object or event (Tindall, 2009).

The design was chosen because it is a psychological-oriented approach and a more suitable method of presenting the living situations of men living with prostate cancer, allowing the participants to express themselves the way they see fit without any distortion. It further assists the researcher in getting in-depth information and interpret a coherent narrative about the event instead of data collection methods like questionnaires and inventories (Pietkiewicz & Smith, 2012).

Study Area

The research was carried out in the Greater Accra region of Ghana, specifically at the 37 Military hospital. The 37 Military Hospital is a specialized hospital located on the main road connecting Kotoka International Airport and Central Accra, and it receives numerous referral cases from various hospitals in Ghana. It is the Republic of Ghana's largest military hospital (Addae, 2004). It was the 37th military hospital to be erected in the British colony of West Africa, hence the number 37. General Giffard, a British military officer, established the hospital in 1941, and it is currently under Ghana's Ministry of Defence jurisdiction.

Population

The target population of the study comprised men with prostate cancer. The accessible population was all men with prostate cancer attending the 37 Military Hospital. This hospital was purposely selected because of easy accessibility.

Inclusion criteria

The study included men who have been diagnosed with cancer and receiving treatment at the 37 military hospital. In addition, individuals with prostate cancer and willing to participate in the study were employed.

Exclusion criteria

Participants with significant comorbidities were not selected for the study. Additionally, men who were not literate in English were excluded from the study to cater for accuracy in transcription.

Sampling Procedure

As suggested by Mason (2010), for a qualitative study the sample size ranges between 5 to 25 bearing in mind data saturation (a methodological principle where on the basis of the data collected, further data collection is not necessary). According to Ritchie et al., (2003) qualitative research, frequencies are rarely important hence, as the study goes on more data does not necessarily imply more or new information because the appearance of a code is almost all that one needs to form an analysis framework.

Consequently, bearing in mind data saturation the researcher recruited 9 men diagnosed with Prostate cancer and receiving treatment at the 37 military Hospital. All 9 participants interviewed were Ghanaians within the ages of 58 and 79 years. Eight of the participants were tertiary level educated and one with an O' level qualification. Additionally, all participants were married.

The convenience and purposive sampling method were employed to select participants. Convenience and purposive sampling are a non-probability sampling method that rely on data collection from individuals who are readily available and have distinct characteristics from the normal population respectively to participate in the study (Saunders et al., 2009).

Data Collection Instrument

A semi-structured interview guide was developed by the researcher and was used for collecting data. It was designed to meet the objectives of the research and sought detailed responses from the participants during the interview.

The interview guide consisted of two parts. The first part covered of socio demographics of the participants i.e., age, level of education and religious affiliation. The second part consisted of questions in relation to their biopsychosocial experience in relation to prostate cancer.

The interview was conducted conversationally with a participant, which employed a blend of closed- and open-ended questions, often accompanied by follow-up of why or how questions (Galletta, 2013). The maximum length for interview was an hour and half to minimize fatigue for both interviewer and respondent (Longhurst, 2009).

Reliability, Validity and Trustworthiness of Data

To ensure reliability, validity and trustworthiness of data collected during the study, triangulation and member checks were used to establish authenticity and accuracy, while purposive sampling, which considers the participants' characteristics that are directly related to the research questions, was employed to meet the transferability criteria. A data audit was used to check for dependability, ensuring that replicable studies will produce similar results.

Data Collection Procedure

An introductory letter was obtained from the Department of Education and Psychology of the University of Cape Coast and ethical clearance from the University of Cape Coast and 37 Military Hospital Institutional Review Boards, before the study was conducted.

Data were collected from respondents within a period of six weeks and interviews were conducted by the researcher. The researcher explained the aims and objectives of the study to participants and informed them on

confidentiality, anonymity and the right to refuse to partake, as well as the right to withdraw at any point even after giving consent. With the help of the hospital staff, patients were contacted on their availability to partake in the study and four participants opted for a face-to-face interview while five opted for a mobile phone interview due to their inability to meet the researcher in person.

Data processing and Analysis

Interpretative Phenomenological Analysis (IPA) was used to analyse the data collected by transcribing. Interpretative phenomenological analysis (IPA) is a qualitative thematic approach rooted within the philosophies of phenomenology, hermeneutics, and ideography. Key principles of phenomenological psychology are peoples' subjective experiences and the meanings they ascribe to their lived world and how they relate to it ((Saunders, 2009). Hermeneutics can be understood in terms of how experience is interpreted from language and text (Suanders) believed that understanding a phenomenon or experience involved the researcher attempting to understand the participants who in turn are trying to make sense of their own experiences (termed the "double hermeneutic"). In other words, IPA was used because it provided the greatest opportunity to understand the innermost deliberations of the biopsychosocial experiences of men living with prostate cancer.

Chapter Summary

The phenomenology research design was used for this qualitative study and data were collected through interview from nine men who were seeking treatment at the 37 Military Hospital. The hospital was purposively selected and the participants were conveniently sampled. A structured research

interview guide was used to collect the information from the clients after they agreed and signed the consent forms. Three research questions guided the study and they were analysed using the Interpretative Phenomenological Analysis. In order to ensure data trustworthiness, triangulation and member checks were conducted.



CHAPTER FOUR

RESULTS AND DISCUSSION

Advanced Organiser

The purpose of the study was to explore the biopsychosocial experiences of men living with prostate cancer. The study used the qualitative approach with the interpretative phenomenological analysis (IPA) which was used to analyse data collected. The sample comprised of 9 men who had been diagnosed of prostate cancer and receiving treatment at 37 military Hospital.

Socio-demographic Characteristics of Participants

Interviews were conducted with 9 participants. All the nine participants were Ghanaians within the ages of 58 and 79 years. Eight of the participants were tertiary level educated and one with an O' level qualification. Additionally, all participants were married.

Data were collected after participants have had a consultation session with their urologist. For the purposes of anonymity, participants were assigned pseudonyms.

Table 1: Socio-demographic Characteristics of Participants (n=9)

Pseudonym	Age	Level Of Education	Marital Status	Religion
Nairobi	60	Tertiary	Married	Christian
Lisbon	64	Tertiary	Married	Christian
Oslo	67	Tertiary	Married	Islamic
Helsinki	73	Tertiary	Married	Christian
Moscow	70	Tertiary	Married	Christian
Conakry	71	Tertiary	Married	Christian
Bali	66	O' Level	Married	Christian
Caracas	72	Tertiary	Married	Christian
Chicago	58	Tertiary	Married	Christian

Source: Field Survey, (2021)

Main Results

The findings are presented based on the research questions that were raised in the study. The analysis answered the questions on the subjective biopsychosocial experiences of men living with prostate cancer using thematic analysis.

Research Question 1

What physiological issues do men with prostate cancer encounter?

This research question examined the physiological experiences men go through due to prostate cancer.

Major Theme: Physiological issues

The findings were put under a major theme i.e., physiological issues and sub themes being pain and erectile dysfunction.

Sub-Theme 1: Pain

Pain was one of the sub themes under physiological experiences. Most of the participants experienced pain in similar areas of their body.

One participant said;

“...Oh, for me I get swollen feet which usually comes with some pains but I was told it happens sometimes because of the injections. Sometimes too I feel pains in my thighs ...” (Conakry)

Caracas also said;

“... I was in pain ooo when I was taken to the theatre when a sample was taken from my prostate, I felt pain...”

Oslo voiced out;

“...You know when you are urinating it’s quite a painful one you are given some drugs to help the pain but I still feel it sometimes....”

Additionally, Moscow said;

“...if something could be done to help the pain that will help because it is not easy. ...sometimes I feel the pain in my waist and I have been given drugs to be taking for the pain but still it’s there...”

Sub-Theme 2: Erectile dysfunction

Majority of the men reported that there was shrinking of the penis due to treatment and their libido also reduced.

Bali said;

“... you wake up at dawn expecting your “morning hood” but it does not come and it’s not like first... and you don’t even feel for sex...”

Additionally, Chicago voiced out that;

“...when I look at my penis, I see ma penis smaller than first when I hadn’t started with the drugs ... I feel the drugs have quenched my desire for sex..”

Helsinki added that;

“...oh for the penis dei it gets affected, you see it small down there it’s not like first...It does not even get up like first...”

Oslo voiced out that;

“...Well, if you were very active during your youthful days and you having so many women it gets to a time the lord takes your thing away from you hahahahaha he will tell you it’s ok so he has taken it away from me so hahaha it is small now hahaha...”

Lisbon voiced that;

“...now I can’t perform the thing has even become small there it can’t do anything...”

Research Question 2

What issues do men with prostate cancer deal with that affects their mental health?

This research question examined the issues that bring up psychological distress experienced by men who have been diagnosed of prostate cancer. The

presentations of the findings of this research question are themed as psychological reactions. The sub themes identified were Fear, worry, sadness, shock and body image

Major theme: Psychological reactions

Psychological state encompasses the state of mind of men diagnosed of Prostate cancer and in treatment. Fear, worry, sadness, shock and body image issues were the sub themes identified.

Sub-theme 1: Fear

One acknowledged feeling of most men was fear. Thus, they expressed anxieties due to Prostate cancer. One participant said; *“...When I heard the word cancer, all along, I thought it was prostate enlargement and then I was hit with the news that it was rather prostate cancer then there was fear also attached about me going to die...”* (Bali).

Moscow said;

“...It wasn't easy for me especially when the doctor told me I will need surgery...I was scared I would die in the course... I didn't do it because for the surgery when you complicate things for yourself and if you are not lucky you are finished and if I must die, I must die whole...”

Conakry voiced out;

“...I felt so bad You see there is something associated with cancer you think that’s the end of you ...”

Further Caracas said;

“... it’s only my wife and children who knows about this you ... you know the way we see cancer.... even though they don’t voice it I know they are scared that the worse will happen...”

Sub- theme 2: Shock

Some of them expressed shock.

One participant said;

“... I was shocked when I was told because three months ago, I visited the hospital with complains of frequent urination and the doctor ruled out any health problem...so to say to me now that I have had it for about a year ago and it has already spread to other parts of my body, is surprising”
(Chicago).

Caracas said;

“... Nine years ago, I saw a doctor friend and after our session I was told my PCA was 30 and so I came to 37 Military Hospital to do a biopsy and they said it was inconclusive so I should go on and live my life. Nine years later I am told I have prostate cancer I was just surprised. Do you think this is fair to me?...”

Bali voiced out that;

“.... I was on admission for something else and then suddenly they told me to do a biopsy. I had a doctor who takes care of me then he was changed. Then the new doctor tells me to prepare for surgery. I said ah what surgery.... He

said prostate cancer and I was shocked. So, all along I was kept in the dark and I decided not to do the surgery. I opted for injections rather...”

Sub-theme 3: Sadness

Another theme identified was sadness which majority of the participants voiced out.

Nairobi said;

“...It’s just sad when you realise your end is near. I wished you experience death right after you are born and you know how it feels like and later come back to life, with that you won’t be sad when you realise you will be dying again...”

Lisbon voiced out that;

“... the first day I was told I was just down. I kept on thinking that my life is not going to be the same again which made me sad because it’s not easy ooo...”

Additionally, Oslo voiced out that;

“... And then the craziness begun... But I’d say it’s been a crazy ride with a lot of sad moments since those words fell off my doctor’s tongue. Where did I go wrong? What did I do? I kept asking myself these questions as I lie in bed waiting for something... I don’t know... Something, a miracle, a sign, to be woken out of this nightmare but this is my reality. I can’t do anything about it. But it wasn’t easy accepting it my brother...”

One participant also said;

“... hmmm it’s sad when you start coming for the injections and it’s affecting your performance in bed but there is nothing you can do about it”

(Helsinki).

One participant also voiced out;

“...You know I have not reached the time where I will say am too old not to stop having sex but this disease has cut things short for me... sometimes when I think about it hurts and a look at myself and I feel sad for myself.....”

(Chicago – 58 years).

Sub-theme 4: Worry

Worry was also a psychological subtheme that emerged from the study, with some participants expressing their psychological reaction as that.

Moscow said;

“...Ah who won't worry about this? something that is going to change your life forever? It's definitely going to take a toll on you ...If you look at yourself you feel, should I go through this by this time ...”

Oslo voiced out that;

“...at times I look at my wife and I can see she wants to have fun in bed with her but there is nothing you can do. You know you feel like you have disturbed her but she can't say it and it is worrying...”

Additionally, Conakry said;

“...when you are thinking a lot about your condition there is no joy...I worry a lot...”

Sub-theme 5: Body image

Body image issues was also a psychological subtheme that emerged from the study.

Lisbon voiced out that;

“... you look at yourself in the mirror and you see that your penis has shrunk and it’s not like first... the doctor says after treatment maybe there is something we can do about it but me I’m not thinking about it ...”

Additionally, Conakry said that;

“...I only look at myself in the mirror when I am shaving. I see ma penis smaller than first when I haven’t started with the drugs ...”

Bali added that;

“...oh for the penis dei it gets affected, you see it small down there it’s not like first...you don’t even want anyone to see it...”

Caracas also voiced out that;

“... Well, if you were very active during your youthful days and you having so many women it gets to a time the lord takes your thing away from you hahahahaha he will tell you it’s ok so he has taken it away from me so hahaha it is small now hahaha...”

Chicago voiced that;

“...now I can’t perform the thing has even become small there it can’t do anything...I am not proud of how I look in the mirror...”

Research question 3

What social experiences do men go through due to prostate cancer?

This research question examined the social experiences of men living with prostate cancer. The presentation of the findings was put into two themes; social support and lack of professional psychological therapy.

Major Theme: Social Support

Social support was identified as a major theme with subtheme being financial support received and emotional support from children and spouse.

Sub Theme 1: financial support

According to all participants, treatment of prostate cancer is capital intensive therefore they get financial support from their children and work places.

One participant said;

“.... the cost of brachytherapy is about 90,000 Ghana cedis which is around 13,000 pounds sterling.... Now tell me if you don't get support from your children how are you going to pay for this?” (Nairobi).

Bali also voiced out that;

“....in this life trust me if you give birth and you look after your children when you grow up and you are sick, I tell you your daughters will come to your aid to pay any amount needed for you to get well....”

Oslo also stated that;

“...oh, I have three children abroad and I told them I was sick they send money for me to come for the injections... “

Another participant voiced out that;

“...for me my company has a policy that take cares of their staffs even when you are on pension so that's where I get some support from and also my children when they pass by, they give me something for my medical bills...” (Chicago).

Lisbon also said;

“...see I even came with my daughter she drove me here and she is the one who even takes care of my injection bills too...”

Sub-theme 2: Emotional support from nuclear family

Another that emerged under social support was emotional support from nuclear family. The findings suggest most of the participants had good emotional support from their children and their spouses.

Conakry voiced out that;

“...oh, as for my wife and children they have been very supportive even I think the money my children give me is enough emotional support hahaha For my wife she understands what I am going through she has been beside me since day one”

Another participant said;

“In life you need to marry the right woman it is very important. You see my state now if it's any other woman like she's gone but osofo maame has been supportive ...” (Caracas).

Bali also voiced out that;

“... As I said my children are not around but they call me regularly to check up on me especially the last one, she was daddy's girl when she was growing up and she still is hahahaha...”

Major theme: lack of professional psychological therapy

This major theme was noticed in all participants. Thus, none of them received professional psychological assistance.

One participant said;

“... Clinical Psychologist? I wasn't referred to a psychologist oooo...” (Oslo).

Nairobi Reported that;

“... Oh no no no no I didn't see a psychologist. The doctor just broke the news to me that's all and asked me when do I start treatment...”

Helsinki also said;

“...Which clinical psychologist? do they care about you? It’s just the doctor who sees us...”

Additionally, Tokyo said;

“.... I haven’t seen a clinical psychologist before but I have this book I read “the power of positive thinking” which is helping me cope small small.....”

Another participant voiced out that;

“...I have just been visiting the doctor but for a clinical psychologist I haven’t seen none...” (Moscow).

Table 2: Summary of main findings

Major themes	Sub themes
Physiological Issues	Pain, Erectile dysfunction
Psychological Reactions	Fear, Shock, Sadness, Worry, Body image perception
Social Support	Financial support, Emotional support from nuclear family
Lack of Professional Psychotherapy	

Source: Field Survey, (2021)

Discussion of Main Findings

This study aimed to explore the biopsychosocial experiences of men who have been diagnosed and receiving treatment due to prostate cancer. The study aided in bringing to light the biopsychosocial co-morbidities related to prostate cancer and the need for a wholistic approach in treatment. The physiological issues, psychological issues and social experiences of men living with prostate cancer were explored using the interpretative phenomenological design. The three major themes included: physiological issues and sub themes

were pain and erectile dysfunction; psychological issues were sub-themed as fear, shock, sadness, worry, and body image issues; and social experiences were- social support with sub themes being- financial and emotional support and lack of professional therapy as the last major theme under social experiences.

Physiological issues men with prostate cancer encounter

Pain

Findings from this study revealed that most of the participants experienced some pain in their body and the pain occurred at different times in their prognosis. Some experienced it before diagnosis, during treatment, during surgery and post treatment. The severity of the pain was mostly described by using the word pain and with grimaces on their face to show it.

Pain from any form of cancer has not been necessarily attributed to the tumour itself and it can be best assessed depending on the stage of the cancer (Caraceni & Shkodra, 2019). The European Society for Medical Oncology also reiterate that pain is primarily assessed from how the patient feels (ESMO, 2019). Consequently, the site of pain is what determines the form of treatment to consider. The British Pain Society (2010) also are of the view that cancer patients typically report more than one site of anatomical pain which can be very devastating. Furthermore, they are of the view that pain due to cancer shares the same neurological and pathological pathway just like any other form of non-cancerous pain.

This study confirmed the existence of various sites of pain among prostate cancer men, including hips, legs and feet. Additionally, Yeboah-Asiamah (2015) conducted a study in the Sunyani Metropolis in Ghana and he

found that the anatomical sites for pain among them were hips, legs and feet. This finding is not farfetched from the findings of this present study. In this study, most of the men reported pains in these similar regions.

On the other hand, some studies found other pain sites. For example, Gater et. al. (2011) found that men living with prostate cancer experienced pain in their bones and spinal cord and it could be attributed to castration-resistance, and this form of pain has been recorded as common among 90% of men who have had castration-resistant prostate cancer (Saad et al., 2006). This type of pain seems to result from the deconstruction of the tumour and the nerves around it. These sites of pain were absent or not reported in this study probably because participants of this study did not go through a surgery for deconstruction of the tumour.

Furthermore, other pain sites include general bodily pains (Eton & Lepore, 2008). Thompson et. al. (2007) also describe bone pain, fatigue, pain during urination and headaches which are consistent with this present study. The men in this study reported similar pains.

Consistent findings were also reported by Amoako et. al. (2019), where they associated prostate cancer with pain in their study in Ghana, just as was seen in this present study, as most of the men with prostate cancer are living with pain. Conversely, Laweh and Manortey (2021), found from the Eastern region of Ghana that 71.1% of men with prostate cancer had no issue with pain. Nevertheless, in that study, 28.9% of the participants reported experiencing pain. This result from Laweh and Manortey is inconsistent because it defies the results of this present study. Largely, methodological reasons may be attributed to this disparity. For instance, in this present study,

the sample size was 9 and it was a qualitative study whereas theirs was a quantitative study.

The implications of these findings are that this reveals the reality and the issues surrounding pain that prostate patients deal with, in that regard, this information creates the room for proper management. The pain sites vary hence each person needs attention to be evaluated and treated individually.

Erectile dysfunction

Sexuality is an important area and for most men the ability to want, and enjoy sex is a need. Therefore, sexual dysfunctional problems in any form i.e., diminished libido, change in size and functionality of sex organ, and ejaculation problems, are seen as huge problems (Helgason et al., 1996). As the central supportive care need for men living with prostate cancer, sexual dysfunction may need maximum attention (Steginga et al., 2004).

Efforts have been geared towards minimising the interference of sexual dysfunction in the lives of men with prostate cancer and in a longitudinal study by Matthew et. al. (2018), men relied on erectile devices and agents nevertheless, it did not quench their desire to have a natural erection. This simply reiterates how much men desire to have the same sex life they used to have prior to prostate cancer diagnosis and treatment.

The findings from this study showed that the sexual libido, how men with prostate cancer feel about the new look of their manhood, and the inability of the manhood to erect were sources of concern for most of the participants. These feelings culminated into source of worry for not been able to satisfy their spouses sexually. These findings are in line with what is in the literature. For example, The National Cancer Institute (2011) mentioned the

following as part of the sexual problems prostate cancer men encounter; difficulty in having or keeping an erection, painful ejaculation and impotence.

Prostate Cancer UK (2017) argues that this sexual dysfunctional problem affects the patients in three synergistic ways; their mind, body and relationships. Taking the mind for instance, dealing with and accepting the reality that the body is no longer as functional as it used to be is very difficult, it makes one feel anxious depressed and ultimately makes one lose the sexual libido. This reality, that due to treatment, the nerves and blood supply to make an erection will no longer be like it used to, will be difficult to accept. To reiterate this, Steginga et. al. (2004) reported that reduced sexual libido was a big problem for the men.

These sexual issues apart from giving the men feelings of embarrassment and loss of their sense of masculinity, as Fiaveh et. al. (2015) put it, women define sexual competence as masculinity and for an African setting, a man who fails to perform sexually is considered as weak putting a strain on the relationships of most men. Albaugh et. al. (2017) reported that for married couples, the men express how frustrated they feel about their inability to have intimacy with their spouses due to their sexual dysfunctional problems and this could lead to anxiety and depression. This is not far from what this present study found, where participants reported not even having the urge for sexual intimacy. This is troubling for their spouses, however for most respondents in this study, they seemed to have very supportive wives who were still in the marriage despite this problem.

Grondhuis et. al. (2019), in a similar study explored the effects of prostate cancer and its impact on relationships. Using 171 men, 70% of the

men were experiencing erectile problems that negatively impacted their spouses. Most of the spouses were disappointed and this altered the relationship.

The biopsychosocial theory posits that health and illness are on a continuum and that there is an interaction between the physical health, psychological health and social wellbeing. In that regard prostate cancer patients experiencing pain consequently deal with the psychological reaction in the course of experiencing the pain. The social support, and ability of the patient to draw strength from within seems to be a sure way to be able to handle the situation according to this model. Therefore, the absence of fortitude to deal with the synergistic nature of the biopsychosocial model does not auger well with treatment.

Psychological Experiences of Men with Prostate Cancer

Prostate cancer is devastating considering how life changing it could be and the psychological experiences that it comes with are numerous. In this study the psychological issues of the respondents included; fear, shock, sadness, worry, and body image issues.

Fear

In terms of fear, the men reported in this study how they were scared of dying and the thought that they would need surgery. These findings are consistent with literature because in a study by Yeboah-Asiamah (2015), he recruited 160 men from the Sunyani metropolis in Ghana and he found that most of the men exhibited fear even prior to screening for the condition and the fear was exacerbated after diagnosis.

Larsen and Kramer-Kile (2014) similarly found that an individual's mental attitude towards a diagnosis either led to relieve or getting worse.

Shock

The participants of this study expressed shock upon diagnosis with prostate cancer. One participant particularly expressed his disbelief because he was at the hospital for a check and he was told everything was fine only to return and be diagnosed with prostate cancer. From the literature, this is not uncommon. A number of the men tend to be shocked when they are diagnosed. For example, in a study by Sharpley et al., (2018), they explored the patient's worst aspects of diagnosis and it was reported that 30.1% of the participants expressed immense shock at their diagnosis and this served as a barrier in accepting any interventions.

Another study by Stinesen Kollberg et al., (2017) similarly found in their study that 75% of their participants (2426) experienced shock by their prostate cancer diagnosis.

Worry

In terms of worry, the men in the study expressed how worried they feel about their new state. Their worry was linked to issues such as; how they will have to live the rest of their lives with this condition, and how that will affect their marriage, and everything in general.

Arvidsdotter et. al. (2016) reiterates that patients with cancer frequently experience worry. These experiences are characterised by emotional discomfort, expression of distress and perceived incapacity to cope with the disease as this study confirmed. Similarly, Massé (2000) who used a qualitative method in his study also discovered that feelings of worry were

expressed by patients in the form of agony, tension, self-depreciation, somatisation and social disengagement.

Sadness

Results of the study showed that the men in this study were generally sad about how the condition is affecting their sex life and their physical health

this was corroborated in a study by Rönningås et. al. (2019), who also assessed in their study the relationship between prostate cancer and levels of sadness among men in Sweden who had prostate cancer. They found that the levels of sadness were very high among the men with prostate cancer.

Quite recently, Andersson and Mårtensson (2020), posited that individuals who are faced with sickness take actions which could either be a barrier or an enabler. One of the common psychological experiences they therefore encounter is sadness. Hence, men suffering with prostate cancer usually express some form of disappointment or shock as well as fear or dislike about the disease.

De Sousa et. al. (2012) conducted a thorough evaluation of psychological effects of prostate cancer. The findings revealed that depression, anxiety, stress, exhaustion, pain, and psychosocial issues were major psychological experiences that men with prostate cancer go through. They went on to say that while anxiety can occur before, during, and after a diagnosis or operation, patients may also experience increased anxiety owing to a lack of knowledge about the many interventions available. Because anxiety is rarely caused by a specific trigger, therapists find it more challenging to help patients get out of such situations. Because the patient is

unable to access aid for relief, this adds to the psychological stress he or she is experiencing.

This is supported by Goodman (2017), who asserted that men with prostate cancer have difficult choices at several stages of their condition, including biopsy and diagnosis, initial medication selection, and what to do about a rising PSA level. Treatment of metastatic prostate cancer, as well as end-of-life options, all pose psychological challenges. Goodman further pointed out that one condition that worsens the psychological pain of men with prostate cancer is recurrence. Recurrence of prostate cancer means that cancer has not been cured by initial treatment. The recurrence of prostate cancer poses graver psychological pain to patients because they lose hope and feel helpless at this stage (Karnes & Ahmed, 2020; Paller & Antonarakis, 2013; Tourinho-Barbosa et al., 2018; Venkatesan et al., 2021).

Psychological morbidity is a key challenge for most prostate cancer patients. For instance, Temi et. al. (2021) assessed the treatment of anxiety and depression among males with prostate cancer in South-Western Nigeria. Data were collected from 46 males who had been recently diagnosed with prostate cancer. The Hospital Anxiety and Depression Scale (HADS) was used to determine the patients' level of anxiety and depression. They found from their study that forty-three and a half percent (43.5%) of the respondents were depressed, whereas 21.7 percent of the respondents had anxiety disorders.

Body image perception

Majority of the men in this study reported that they felt that their new look considering their condition made them feel less confident and less proud about themselves especially when they looked into the mirror. These feelings

of low self-esteem and low self-confidence have been reported as having devastating consequences.

According to Prostate Cancer UK (2017), one of the things that any condition, including cancer, does is alter one's thinking, relationships, and, more significantly, one's health. One of the biggest contributions to suffering in the lives of victims is the impact of disease on one's body. Without a dispute, one's body image adds to high levels of self-confidence and self-esteem.

Cancer especially, has a significant detrimental influence on a person's body, resulting in negative body image. This is due to the fact that cancer causes vast portions of a patient's body to deteriorate. According to Cormie et. al. (2014), men with prostate cancer have body image issues, particularly in their sexual lives. This is due to the fact that certain treatments affect males by reducing their genital organs.

While this adds to their sex inadequacy, it also casts a terrible light on their manhood in the eyes of society, particularly their spouses, even when the latter is always supportive. As a result, after a diagnosis and, more typically, a prognosis, men's perceptions of what their spouses think of their body image shifts. It is therefore not surprising that the findings of this study confirm what is in existing literature.

A study that found similar results by Chambers et. al. (2018) looked at the typical experiences of males in Australia with prostate cancer and they gathered data from 39 males who had prostate cancer therapy using cross-sectional qualitative interviews and open-ended questionnaires. In their research, they discovered that, in addition to the disease's detrimental impacts

on men, it also produced changes in look and physiological structure which was a trigger to low self-esteem and the fear of not being seen as a man.

Younger men with prostate cancer face a more serious scenario. Takeuchi et. al. (2018) looked at how prostate cancer affects younger men and their spouses. The survey gathered information from 259 patients and their spouses. They discovered that younger men's physique changed, causing them to have a completely different view of themselves. The majority of them felt different around their marriages and that their wives treated them differently. Their relationships with their families, and friends were all impacted as a result of this. Conversely, even though the spouses of the men in this this present study were supportive and took care of their husbands, it was clear that the men felt that they were not satisfying their wives.

Furthermore, Horschke et. al. (2020) explored body image in men with prostate or laryngeal cancer and their female partners. The used survey and collected data from 73 heterosexual couples with men being diagnosed with prostate or laryngeal cancer. The respondents completed questionnaires on body image acceptance (Self Image Scale), relationship satisfaction (Quality of Marriage Questionnaire), and cancer-related distress (Questionnaire on Stress in Cancer Patients). Their findings revealed that patients with prostate cancer gave their female partners a poorer rating for perceived partner acceptance. It meant that men with prostate cancer were dissatisfied with their body image after treatment. Their findings revealed that although their body changes after treatment, it made no difference in relationships; spouses were ever supportive and this is similar to what was found in this study. It implied

that men with prostate cancer struggle with holding on to a positive body image of themselves.

Such notions have an impact on their psychosocial wellbeing and capacity to overcome disease. Another study by Shiridzinomwa and Harding (2020) confirmed the above findings as they explored how body image affected patients' choice of treatment for prostate cancer and the regret after treatment. They interviewed nine men who had been diagnosed with prostate cancer, and their views sought about the form of treatment they would prefer about body image. Findings showed that men saw the need to prolong their lives hence were willing to undergo surgery. Post-surgery-related issues also created problems such as loss of function in masculinity and loss of confidence due to changes in appearance.

Manier et. al. (2018) also believe that cancer and its treatments can cause harmful changes in the physical look, integrity, and function of the body, putting cancer patients at a higher risk of developing body image issues or insecurities. Body image insecurities do not exist only in the thoughts and feelings but also exhibited in behaviour. Thus, a negative body image can contribute to negative behaviours that do not promote healing among patients. Negative body image can cause patients to ignore the advice of clinical professionals, put up behavioural hindrances to health development and consider isolation more often (Manier et al.,) just as was found in this study where most of the men felt they would rather take injections than do surgeries because the surgery would change how they look.

Previous studies such as DeFrank et. al. (2007) investigated medical and psychosocial aspects linked to body image dissatisfaction in cancer

survivors. The Appearance Evaluation Subscale of the Multidimensional Body Self-Relations Questionnaire was used to assess body image dissatisfaction. They found that prostate cancer survivors had lower body image dissatisfaction than males with other cancers.

The current study fills a gap in the literature by looking into prostate cancer patients' body image dissatisfaction. Men do acquire depression, anxiety, or other mental issues as a result of a change in their looks after therapy and this must be addressed in order to yield better outcomes and prognosis. The findings of this present study have lent support to a number of theories that there is a relationship between the body and mind.

Taking the biopsychosocial theory for instance, this study has confirmed that not only does a disease affect the physical body, but it can go as far as affect the human mind and how to perceive the condition, culminating sometimes into feelings of fear, worry, sadness and shock sometimes. The interaction between the biological, psychological and social factors forms the tenets of this theory.

In addition, when the ought self and the real self are not in congruence it creates psychological distress which includes worry, sadness and sometimes shock for individuals and this was observed in participants of the study making the theory of self-discrepancy a relevant theory to underpin the study.

Social Experiences of Men with Prostate Cancer

One of the most important aspects to consider in the life of cancer patients is the social aspect of their illness. According to Jones et. al. (2018), humans are social creatures who engage with others at all stages of their lives. Thus, when they are faced with challenges such as being diagnosed with

prostate cancer, there is often the need to share both positive or negative feelings with others.

Individuals with cancer create new social identities, learn new behaviours, and alter their relationship structure. It implies that people re-strategise their identities to match their current state or condition when they are sick in any way. They do this by acquiring and learning new forms of behaviour that complements their situation. According to Jones et. al., the society integrates the cancer patient as a new person into an established social life. Roij et. al. (2019) also underscore that the social element of the sick person is severely impacted because it is the only aspect of the person that has a connection with others. As a result, relationships are altered in either a positive or negative way. Social wellbeing, therefore, is as important as physiological and mental wellbeing.

Financial and Emotional Support

Positive changes can be motivation, social trust, and support from family and friends. As was seen in this study, the participants reported that they got financial and emotional support from their children and spouses and this corroborates for instance, in another study by Solbraekke and Lorem (2016) who found among Norwegian women who had breast cancer consider social experiences such as social trust and continuous presence of family as a source of encouragement.

More importantly, social support is considered as equally important for the patient as medical treatment. Naderifar (2019) also reported that even though typically, the patients would rather chose isolation than interaction because they feel different and perhaps unneeded, support from their close

relations tend to increase the general quality of life and offered promises of a better future for patients diagnosed with cancer (Awolu & Koranteng, 2020). In this study, it was found that patients had social support from their spouses and children.

Men with prostate cancer have different social experiences depending on their age, stage of cancer, and other environmental circumstances. In Nabisubi et. al. (2020), they address men's lived experiences with prostate cancer in Uganda. They particularly looked into the case of men below age 55. They employed a qualitative lens and collected data from 20 participants using in-depth interviews and analysed thematic content analysis. They found from their study that men with prostate cancer have their lives altered, which affects the socio-economic status of families. For instance, in their interviews, it was reported by the spouse of a participant that because the man was sick, caring for the needs of the children and especially their education would be difficult for her. Conversely, patients report that spouses seemed very supportive with no issues on how the condition had altered their socio-economic status. This can probably be related to the age of the patient and their spouses and the fact that most of them have children who are grown now and the attention children might want is no more needed.

Gibson et. al. (2016) and Takeuchi et. al. (2018) conversely observed that the social experiences of their spouses become direr given the familial responsibility and burden that is doubled on a woman. Here, the woman doubles as a caregiver and breadwinner at the same time in order to care for both the sick husband and the children, if any. They further reported in their study that some other men also face the problem of losing their spouse or

disintegration of marriage due to the heavy burden placed on the woman as she is unable to cope or bear with the current situation (Nabisubi et al., 2020).

While many spouses are affected by the conditions of their husbands, their social lives are altered as well. For instance, spouses felt they were cut off from friends and social gatherings due to the constant need to be at the hospital or care for the family (Lehto et al., 2018; Oba et al., 2017; Takeuchi et al., 2018). These feelings were expressed by participants in this study as feelings their wives equally have, nevertheless, they were supportive.

Again, it was reported specifically in Bradley et. al. (2005) and Gray et. al. (2000) that men with prostate cancer had to battle social experiences such as managing to keep relationships and the urge to stop illness from interfering with social lives. They added that couples in trying to work out these portions of their social lives end up incurring psychological costs. This is because there is the issue of status and role strain where couples, especially women, have to take on different responsibilities and manage their feelings simultaneously.

Prostate cancer before and after diagnosis does not only alter relationships but as well creates some form of disillusionment for some men. Mccaffery et. al. (2019) examined the situation of men who were secretly diagnosed with prostate cancer and how they refused treatment. The study opted for a qualitative design and interviewed 11 men who resisted treatment because of over-diagnosis and overtreatment. For these men, some were concerned about how they will care for their families if they underwent treatment because they will have to get out of well-paying jobs and some social life choices that they have to make.

Furthermore, other studies such as Yu Ko et. al. (2018) have pointed out that men diagnosed with prostate cancer and gainfully employed face social challenges because they found their jobs to extend their masculinity. Their jobs conferred on their social status, financial freedom, and social development. Hence, they found the diagnosis and deciding prognosis an overwhelming situation. This is confirmed by another study, Yu Ko et. al. (2020), which reviewed prostate cancer in men and their work. They conducted a systematic review of articles from databases between 2006 and 2020. They found that men felt that prostate cancer affected their financial lives, work, and for some others, their retirement plan. More importantly, men who had to return to work after prognosis and treatment faced challenges. They felt backward in their career development, learning new things such as technology, procedure, methods, and adjusting to new bosses or colleagues.

Ullrich et. al. (2018) propounded that returning to the same social setting, such as a former workplace, was challenging for some men because they felt their social identity at work had been lost and may not be respected by colleagues or even subordinates. However, for some other men, social experiences such as work are painted dark as they try to hide their conditions from their employers. While some employers are concerned about the health conditions of their employees, the latter tend to feel they become a burden on their organizations. Some organizations offer benefits such as health insurance policies to their employees and their families to cater to this situation (Hakim, 2020; Sigler, 2011).

Some men receive support after being diagnosed with prostate cancer from peers from work or the community and their partners. In a review conducted by (King et al., 2015), they collected secondary data from seven databases and conducted a thematic synthesis of the articles reviewed. They found that while support from partners was greatly appreciated, men also valued support from their peers. These forms of support could be from support groups referred to by other patients, health workers, or significant others. Others included people from patients' familial or friendship networks such as churches, social clubs, communities, or work colleagues. Building healthy relationships and networking can be seen here as a great asset. People who are generally moody and seldom make friends are likely to isolate themselves from others after diagnosis. Conversely, in this study most men only mentioned their condition to their wives and children. Only a few said they confided in their friends. One particular client said he mentioned to only one of his friends.

Chambers et. al. (2018) intimated that, men with prostate cancer have had to face an identity crisis. Prostate cancer is associated with many challenges, including losing the ability to engage in any form of activity for oneself. Men felt helpless because they were naturally weak, which increased their need to depend on another person to move or do anything at all. Although family and friends could be supportive, men felt embarrassed as they thought themselves a burden on these people. Chambers et. al. study collected data through interviews over the telephone with 39 men diagnosed with prostate cancer. One of the social experiences of these men was the use of support groups or shared experiences of other patients diagnosed with any

form of cancer or prostate cancer in the past. While support services have been proven to be an effective way of helping prostate cancer patients, little research has been conducted in the field through the qualitative lens to reveal the constellations regarding the method, however this work has added on to what is in literature that support services remains one of the main things that helps patients to stay sane.

While social support has been a major experience for most prostate cancer patients, there was also the issue of stigmatization of some men. For instance, Nelson et. al. (2019) interviewed 18 couples using semi-structured interview guides in their study. They found that men feel some stigma knowingly or unknowingly. This was a general stigma that was attached to cancer patients. Although their family and spouses were there to support them and help them, they still felt such support was not enough as such men had unmet needs where they felt the need for emotional support from health professionals. Just as in this study, the fear of being stigmatised informed patients to keep their diagnosis to themselves. For instance, one client who held a respectable position in the society lamented on how revealing this to the people around him in his social circle will change the way they look at and treat him. Therefore, to such a person, keeping this to himself was the best decision.

Wright et. al. (2019) continued that, more often than not, men may desire to go through the first stage of prostate cancer that is by screening. However, due to fear and stigma associated with the disease, they stay hidden until worse. Men with prostate cancer must engage with family, friends, and

health professionals about their status and the options to getting better. Stigma leads to uncertainty as one may be ashamed of seeking the needed help.

Arrington (2015), in their study, noted that stigma changes the survivor narrative of men with prostate cancer. He intimated that, diseases such as epilepsy and cancer carry such strong stigma connotations that destroy the identity of patients. An individual's self-identity is critical to building and forming relationships; hence, stigmatized prostate cancer patients are likely to seek the needed social support, which prolongs their healing capacity. Buote et. al. (2020) confirmed this issue of stigma as a social experience as they examined the phenomenon among 11 men who had been diagnosed with cancer of the prostate. They found that stigma affected their behaviour and sense of self-worth, which negatively impacted their total self. The above is in line with findings from the study conducted by Ettridge et. al. (2018), who also interviewed 20 men diagnosed with cancer of the prostate. They found that stigma affected men in various ways, including isolation, non-disclosure of disease, self-blame, and cause internalization.

Lack of professional psychological therapy

Social experiences go a long way in determining the disease's pathways, whether the patient gets better with treatment or gets worse. Medical treatment and care, therefore, are not enough to help patients get better with cancer. Nevertheless, a lack of professional psychological therapy may also be one of the negative changes that need attention. Because in this study, the men lacked psychological interventions. For the devastating nature of living with prostate cancer, it would be prudent to have access to this form of support. A systematic review reiterates this fact of how psychological

interventions can significantly improve the wellbeing of patients, however, the participants in this study did not access this means of support (Vartolomei et al., 2018).

The biopsychosocial model of health posits that all aspect of an individual's life is essential for healing and management of illness. The importance of the social aspect is seen in this study. Thus, participants reported to have a good social support system from nuclear family which is aiding their progress and survival in the management of the disease. This actively demonstrates the need for the biopsychosocial model in the management of men living with prostate cancer.

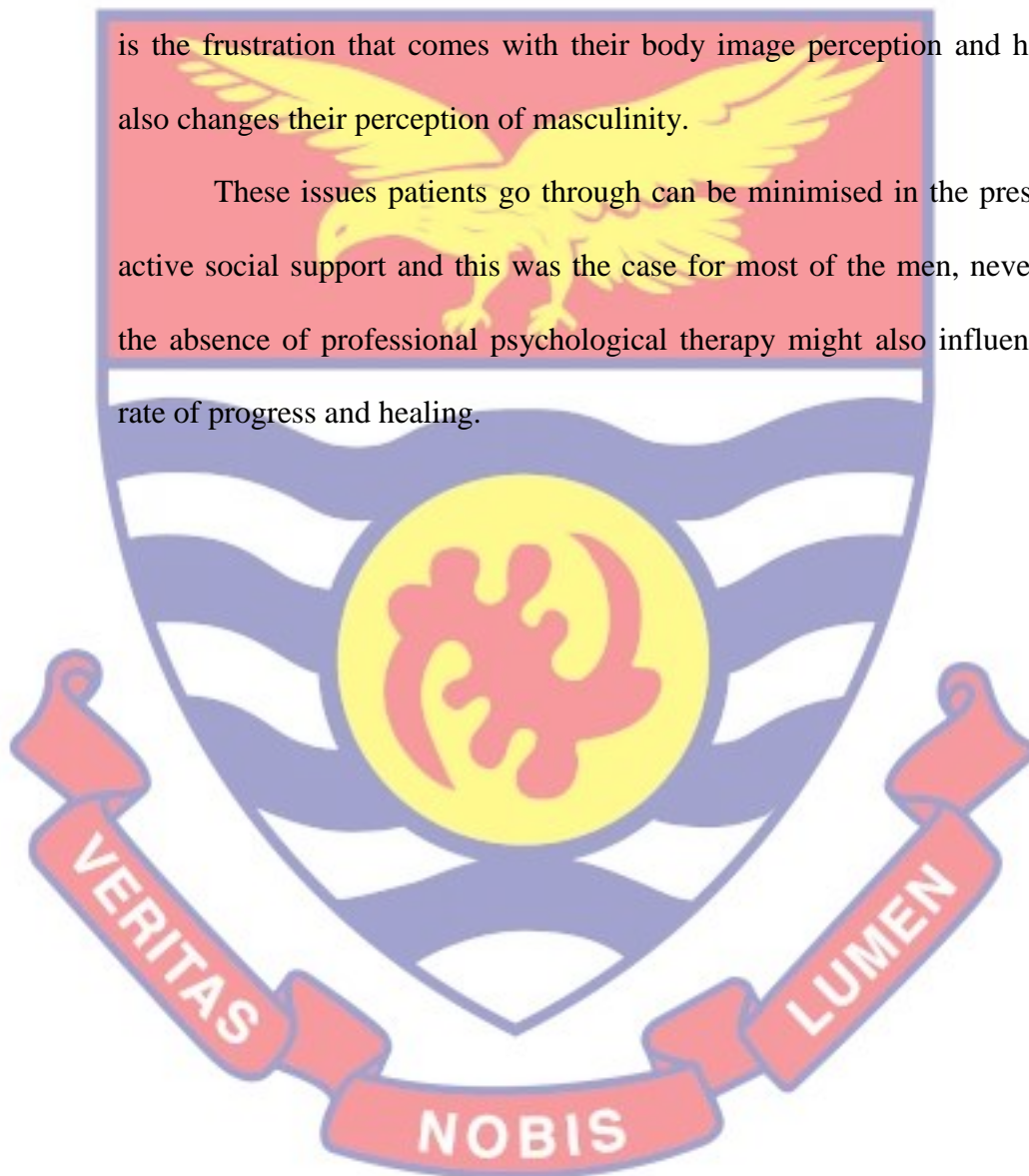
Summary of key findings

In terms of physiological issues, respondents experienced pain and erectile dysfunction. It was found that patients experienced pain in various parts of the body including their waist, feet, legs, and pain during surgery and even when they are urinating. From the literature, anatomical pain was inevitable as long as one was diagnosed with prostate cancer. Erectile dysfunction showing up as one of the biological problems in this study is also consistent with literature. The men explained how the loss of the ability to satisfy their spouses sexually due to erectile dysfunction bothered them immensely. What remains constant is the fact that most of these men wished they could do something about it but there appeared to be nothing that could be done so they only hoped their spouses still stayed with them.

Some of the psychological issues which included fear, shock, sadness, worry and poor body image were all not out of place, since they have been recorded as clear symptoms prostate cancer patients deal with. What this

means is that from the moment patients bear the news of their diagnosis, during treatment and throughout their lives, they are mostly dealing with these emotional tolls and battling seriously to keep their mental health. Aside the physiological problems they have to deal with, they are coupled with the emotional rollercoaster that living with prostate cancer brings. More disturbing is the frustration that comes with their body image perception and how that also changes their perception of masculinity.

These issues patients go through can be minimised in the presence of active social support and this was the case for most of the men, nevertheless the absence of professional psychological therapy might also influence their rate of progress and healing.



CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Overview

This study aimed at exploring into details the biopsychosocial experiences of men living with prostate cancer in Ghana. The study queried the physiological problems that men with prostate cancer deal with as well as their psychological reactions and their social experiences. Nine men were interviewed at the 37 Military Hospital and they were conveniently sampled to respond to the structured interview guide. Using the thematic analytic procedure, the data were analysed.

Summary

Over the years, men's health seemed to be neglected but quite recently there seems to be some gleams of hope and this study is joining in the crusade of highlighting the importance of men's health. In order to make a statement for men's health, there was the need to explore one of the high ranked problems men deal with which is prostate cancer. With the devastating nature of prostate cancer, one would have thought that a lot of attention would be paid to it with a lot of advocacies for awareness creation. In order to hammer home this message of the need to pay attention and for institutions and stakeholders to focus on education of people on prostate cancer and the need for early screening for early detection, there was first the need to acquire evidence for this need through research. This qualitative study therefore set

out to explore the in-depth issues that prostate cancer patients deal with in an umbrella term.

The study employed the interpretative phenomenological analysis using nine men with prostate cancer from the 37 Military Hospital. Most of the participants were Christians with one being a Muslim and most of them were educated with ages between 58-79.

The biopsychosocial model is one of the theories that undergirds this study and it posits that illness is multidimensional, thus when a person is ill, it affects both the biological, psychological and social aspects of that person, which is why this study sought to explore what issues there were in terms of terms of this model and to make a case of the interaction between these three factors.

First of all, this study questioned to know what the physiological issues were when it comes to living with prostate cancer. Already, it has been established that the condition is a physical illness, however, it comes with some physiological symptoms including pain during urination and ejaculation, pain in waist, feet, legs and this affirmed in this study. Most of the participants exhibited most of these physiological symptoms and this is not surprising. What this means is that living with the condition comes with the patients dealing with all these symptoms all the time.

It was found from this study that the men dealing with prostate cancer, battled with psychological issues, ranging from body image issues to fear, worry, sadness and shock. These findings were not far from what was in literature as depression, anxiety and poor body image which leads to low self-

esteem and low self-confidence affecting their masculinity, have been reported.

Lastly, the social experiences of men dealing with prostate cancer revolved around the presence of social support, specifically, emotional and financial support from the nuclear family members of the patients. One other thing was the lack of professional psychological help, which shows that the patients had no form of extra support from their health facilities.

Overall, the results of the study support the theoretical underpinnings of this study. The other theory that undergirds this study is the self-discrepancy theory. For a typical prostate cancer patient, accepting the new self and letting go of the ideal self, will be the gateway to reducing the tension on their mental health. This is because battling with issues around their masculinity because of the consequences of their diagnosis seems to be a tough blow on them.

Conclusions

This study has not only elucidated the plight of prostate cancer men, but it has also given us an awakening to recognise that the issues surrounding such people should be treated as a matter of urgency. This study delved deep into the lives of men with prostate cancer and explored how their physical illness was taking a toll on them, their mental health and their social experiences. Majority of the respondents were experiencing serious physical illness and issues surrounding their masculinity as well as their mental health, however their social support network seemed to be helping. Adopting the biopsychosocial model in this study, it became clear that treatment of prostate

cancer patients should be done using this approach, since it is ideal in the management of illness.

Some of the results were inconsistent with some literature, for example, this study found pain as problem among men with prostate cancer however, some studies found that majority men with prostate cancer were not experiencing pain others also found that pain was a problem among men with prostate cancer just as in this present study, and this makes it quite inconclusive on the presence or not of pain among men with prostate cancer. A possible reason for this inconclusion can be traced to the differences in the methodologies that were used in the various studies.

Furthermore, it was found that spouses of the patients who had no children to take care of intensively as was seen in this study, had more time to cater for their spouses unlike those who had younger children. This implied that spouses with younger children obviously will deal with more stress and may probably not give much support to their husbands who are not well.

Again, with the backdrop of the self-discrepancy theory, one can say that for these individuals to be treated wholistically, one must take into cognisance the perception they have about themselves during treatment management.

Recommendations

This study has helped to draw the interactional and synergistic relationship between the physical illness, psychological issues and social experiences of individuals living with prostate cancer. As a result, the following clinical health psychological practice and policy suggestions are made by the study:

1. It is recommended that the health facilities through the Ghana Health Service should put together a pain relief management system by first of all, establishing pain assessment protocols and relief systems which could be used during and after surgeries.

2. Programmes and interventions should be created by the Ghana Health Service to help support men who battle with erectile dysfunction. Such programs could help to educate all men not only men with prostate on several other ways to still enjoy their sexual lives in very healthy ways. Such workshops should be organised by health facilities and by other stakeholders.

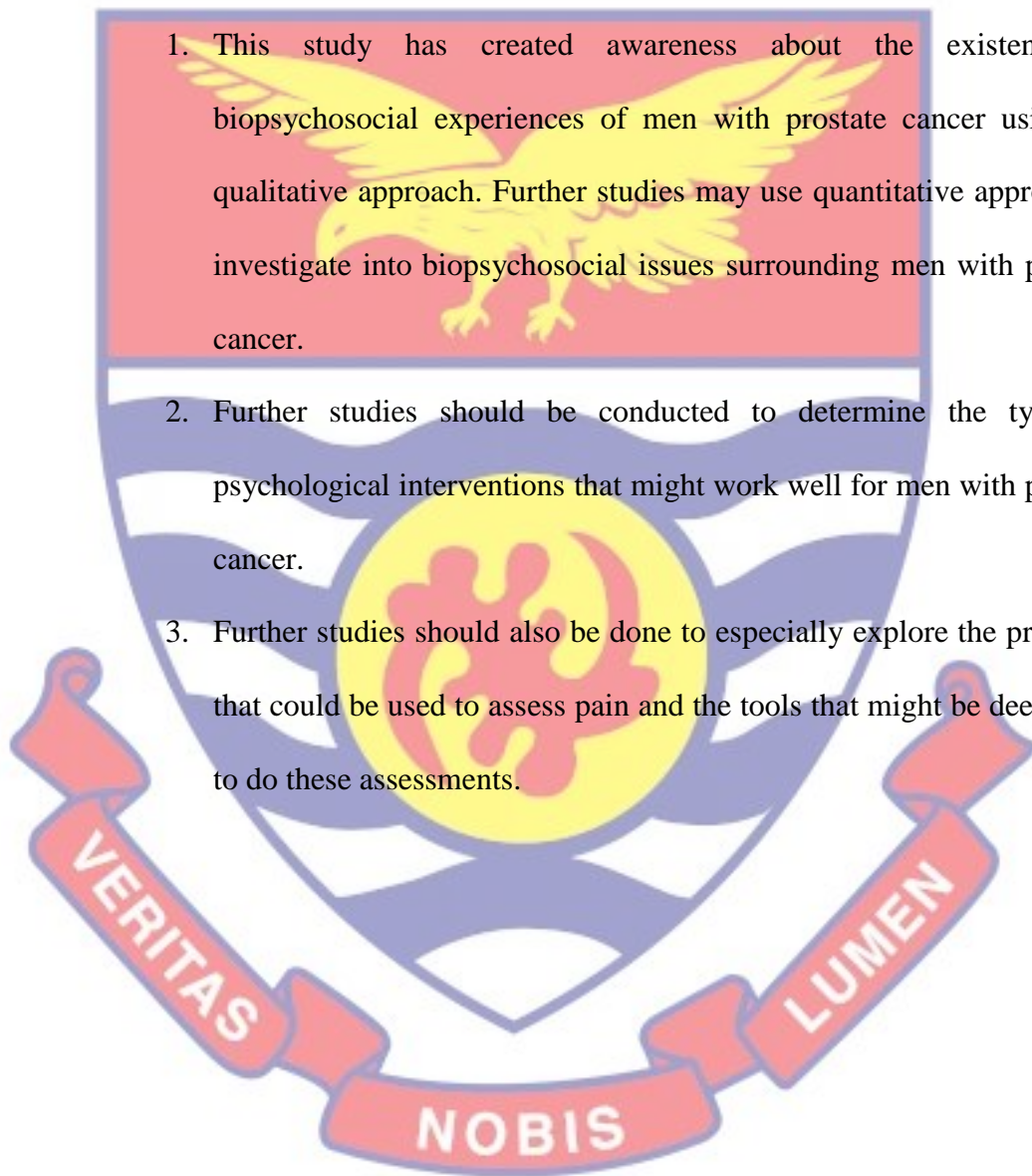
3. Managing the mental health of men living with prostate cancer is very important. It is therefore recommended that the Ministry of Health together with all hospitals that treat men with prostate cancer to institute a psychological management system that will be engaged in pre-counselling of men and advocacy for early screening and post counselling services after diagnosis and throughout their lives. This will aid them to be able to deal with the stressors that this condition comes with.

4. Social support did not seem to be a problem for the men with prostate cancer in this study nevertheless, it is important to state that seeing the relevance of this and creating more room for this form of support is important. This is recommended to the Mental health Authority with support from organisations such as the Ghana Psychological Association.

5. The Ghana Health Service must do well to embark on an intense advocacy campaign to encourage young men to go for screening and to educate them on the need to care for their prostate and go for early screening whenever they see signs.

Suggestions for Further Research

1. This study has created awareness about the existence of biopsychosocial experiences of men with prostate cancer using the qualitative approach. Further studies may use quantitative approach to investigate into biopsychosocial issues surrounding men with prostate cancer.
2. Further studies should be conducted to determine the types of psychological interventions that might work well for men with prostate cancer.
3. Further studies should also be done to especially explore the protocols that could be used to assess pain and the tools that might be deemed fit to do these assessments.



REFERENCES

- Addae, K. S. (2004). *The Gold Coast and Achimota in the Second World War*. Sedco Pub Limited.
- Adams, W. C. (2015). Conducting semi-structured interviews. *Handbook of practical program evaluation*, 4, 492-505.
- Albaugh, J. A., Sufirin, N., Lapin, B. R., Petkewicz, J., & Tenfelde, S. (2017). Life after prostate cancer treatment: A mixed methods study of the experiences of men with sexual dysfunction and their partners. *BMC Urology*, 17(1), 1–9.
- Amoako, Y. A., Awuah, B., Larsen-reindorf, R., Awittor, F. K., Kyem, G., Ofori-boadu, K., Osei-bonsu, E., & Laryea, D. O. (2019). Malignant tumours in urban Ghana: evidence from the city of Kumasi. *BMC Cancer*, 19, 1–12.
- Andersson, C., & Mårtensson, L. (2020). Women’s experiences of being in the sick leave process. *Scandinavian Journal of Occupational Therapy*, 1–10.
- Arrington, M. I. (2015). Uncertainty and stigma in the experiences of prostate cancer survivors: A thematic analysis of narrative elements. *Illness Crisis and Loss*, 23(3), 242–260.
- Aruma, E. O., & Hanachor, M. E. (2017). Abraham Maslow’s hierarchy of needs and assessment of needs in community development. *International Journal of Development and Economic Sustainability*, 5(7), 15-27.

Arvidsdotter, T., Marklund, B., Kylen, S., Taft, C., & Ekman, I. (2016). Understanding persons with psychological distress in primary health care. *Scandinavian Journal of Caring Sciences*, 687–694.

Asamoah, F. A., Yarney, J., Awasthi, S., Vanderpuye, V., Venkat, P. S., Fink, A. K., & Tagoe, S. N. (2018). Contemporary radiation treatment of prostate cancer in Africa: A Ghanaian experience. *Journal of Global Oncology*, 4, 1-13.

Awolu, A., & Koranteng, F. (2020). Availability, accessibility, and impact of social support on breast cancer treatment among breast cancer patients in Kumasi, Ghana: A qualitative study. *PLoS ONE*, 15(4), 1–15.

Bacon, C. G., Giovannucci, E., Testa, M., Glass, T. A., & Kawachi, I. (2002). The association of treatment- related symptoms with quality- of- life outcomes for localized prostate carcinoma patients. *Cancer*, 94(3), 862-871.

Barrera, M., Sandler, I. N., & Ramsay, T. B. (1981). Preliminary development of a scale of social support: Studies on college students. *American Journal of Community Psychology*, 9(4), 435-447.

Beese, S. E., Harris, I. M., Dretzke, J., & Moore, D. (2019). Body image dissatisfaction in patients with inflammatory bowel disease: A systematic review. *BMJ Open Gastroenterology*, 6(1), 1–16.

Bennett, M. I., Kaasa, S., Barke, A., Korwisi, B., Rief, W., & Treede, R. D. (2019). The IASP classification of chronic pain for ICD-11: chronic cancer-related pain. *Pain*, 160(1), 38-44.

Bienz, M., & Saad, F. (2015). Androgen-deprivation therapy and bone loss in prostate cancer patients: a clinical review. *BoneKEy reports*, 4.

- Blackburn, J., Vecchiarelli, S., Heyer, E. E., Patrick, S. M., Lyons, R. J., Jaratlerdsiri, W., & Hayes, V. M. (2019). TMPRSS2- ERG fusions linked to prostate cancer racial health disparities: A focus on Africa. *The Prostate*, 79(10), 1191-1196.
- Bloch, S., Love, A., Macvean, M., Duchesne, G., Couper, J., & Kissane, D. (2007). Psychological adjustment of men with prostate cancer: A review of the literature. *BioPsychoSocial Medicine*, 1, 1–14.
- Bokhour, B. G., Clark, J. A., Inui, T. S., Silliman, R. A., & Talcott, J. A. (2001). Sexuality after Treatment for Early Prostate Cancer: Exploring the Meanings of “Erectile Dysfunction. *Journal of General Internal Medicine*, 16, 649–655.
- Bolton, M. A., Lobben, I., & Stern, T. A. (2010). The Impact of Body Image on Patient Care. *Journal of Clinical Psychiatry*, 12(2), 1–16.
- Bradley, C. J., Neumark, D., Luo, Z., Bednarek, H., & Schenk, M. (2005). Employment outcomes of men treated for prostate cancer. *Journal of the National Cancer Institute*, 97(13), 958–965.
- Bray, F., Ferlay, J., Soerjomataram, I., Siegel, R. L., Torre, L. A., & Jemal, A. (2018). Global cancer statistics 2018: GLOBOCAN estimates of incidence and mortality worldwide for 36 cancers in 185 countries. *CA: A cancer Journal for Clinicians*, 68(6), 394-424.
- British Pain Society. (2010). *Cancer Pain Management*. British Pain Society.
- Brown, Z., & Tiggemann, M. (2016). Attractive celebrity and peer images on instagram: effect on women's mood and body image. *Body Image*, 19, 37–43.

Brucker, P. S., & Cella, D. (2003). Measuring self-reported sexual function in men with prostate cancer. *Urology*, *62*(4), 596–606.

Buote, R., Cameron, E., Collins, R., & McGowan, E. (2020). Understanding men's experiences with prostate cancer stigma: A qualitative study. *Oncology Nursing Forum*, *47*(5), 577–585.

Burford, D. C., Kirby, M., & Austoker, J. (2009). Prostate cancer risk management programme. *NHS Cancer Screening Programmes*.
<http://www.cancerscreening.nhs.uk/prostate/index.html>

Caplan, G. (1974). *Support Systems and Community Mental Health*. Behavioral Publications.

Caraceni, A., & Shkodra, M. (2019). Cancer pain assessment and classification. *Cancers*, *11*(4), 1–13.

Cassel, J. (1974). An Epidemiological Perspective of Psychosocial Factors in Disease Etiology. *American Journal of Public Health*, *64*, 1040-3

Center, M. M., Jemal, A., Lortet-Tieulent, J., Ward, E., Ferlay, J., Brawley, O., & Bray, F. (2012). International variation in prostate cancer incidence and mortality rates. *European urology*, *61*(6), 1079-1092.

Chambers, S. K., Hyde, M. K., Laurie, K., Legg, M., Frydenberg, M., Davis, I. D., Lowe, A., & Dunn, J. (2018). Experiences of Australian men diagnosed with advanced prostate cancer: A qualitative study. *BMJ Open*, *8*(2), 1–12.

Chen, F. Z., & Zhao, X. K. (2013). Prostate cancer: current treatment and prevention strategies. *Iranian Red Crescent Medical Journal*, *15*(4), 279-284.

Clark, J. A., Inui, T. S., Silliman, R. A., Bokhour, B. G., Krasnow, S. H., Robinson, R. A., & Talcott, J. A. (2003). Patients' perceptions of quality of life after treatment for early prostate cancer. *Journal of Clinical Oncology*, 21(20), 3777-3784.

Cohen, R., & Blaszczynski, A. (2015). Comparative effects of Facebook and conventional media on body image dissatisfaction. *Journal of Eating Disorder*, 3(1), 1-11.

Coley, C. M., Barry, M. J., Fleming, C., & Mulley, A. G. (1997). Early detection of prostate cancer. Part I: Prior probability and effectiveness of tests. The American College of Physicians. *Annals of Internal Medicine*, 126(5), 394-406.

Cormie, P., Chambers, S. K., Newton, R. U., Gardiner, R. A., Spry, N., Taaffe, D. R., Joseph, D., Hamid, M. A., Chong, P., Hughes, D., Hamilton, K., & Galvão, D. A. (2014). Improving sexual health in men with prostate cancer: randomised controlled trial of exercise and psychosexual therapies. *BMC Cancer*, 14, 1-9.

Crowell, C., Mosley, D. V., & Stevens-Watkins, D. (2016). Studying Sex: A Content Analysis of Sexuality Research in Counseling Psychology. *Physiology & Behavior*, 176(1), 100-106.

DeFrank, J. T., Mehta, C. C. B., Stein, K. D., & Baker, F. (2007). Body image dissatisfaction in cancer survivors. In *Oncology Nursing Forum*, 34(3), 625-632.

de Guzman, N. S., & Nishina, A. (2014). A longitudinal study of body dissatisfaction and pubertal timing in an ethnically diverse adolescent sample. *Body Image*, 11(1), 68-71.

De Sousa, A., Sonavane, S., & Mehta, J. (2012). Psychological aspects of prostate cancer: a clinical review. *Prostate Cancer and Prostatic Diseases*, 15(2), 120-127.

Dubner, R., Sessle, B. J., & Storey, A. T. (1978). Jaw, facial, and tongue reflexes. In *The neural basis of oral and facial function*. Springer.

Dueñas, M., Ojeda, B., Salazar, A., Mico, J. A., & Failde, I. (2016). A review of chronic pain impact on patients, their social environment and the health care system. *Journal of Pain Research*, 9, 457–467.

EAU. (2019). Prostate cancer: *Recommendations to lower the risk and mortality rate of the most frequent cancer in men*. <https://ecpc.org/wpcontent/uploads/2019/08/ECPC-EAU-White-Paper-Prostate-Cancer-1.pdf>

Egote, A. K., & Nana, N. O. (2012). P093 Prevalence of prostate cancer in Ghana. *European Urology Supplements*, 11(5), 191–235.

Engel, G. L. (1977). The need for a new medical model: a challenge for biomedicine. *Science*, 196(4286), 129-136.

Ervik, B. (2012). *Everyday life with prostate cancer*: University of Tromsø. <https://munin.uit.no/bitstream/handle/10037/4741/thesis.pdf?sequence=2>

ESMO. (2019). ESMO Patient Guide Series. *European Society for Medical Oncology*. <https://www.esmo.org/content/download/6593/114959/1>

Eton, D. T., & Lepore, S. J. (2008). Prostate Cancer and Health-related Quality of Life: A Review of Literature. *Psychooncology*, 11(4), 307–326. <https://doi.org/10.1002/pon.572.PROSTATE>

Ettridge, K. A., Bowden, J. A., Chambers, S. K., Smith, D. P., Murphy, M., Evans, S. M., Roder, D., & Miller, C. L. (2018). “Prostate cancer is far more hidden...”: Perceptions of stigma, social isolation and help-seeking among men with prostate cancer. *European Journal of Cancer Care*, 27(2), 1–12.

Fiaveh, D. Y. (2017). Daddy, today we have a match! ‘Women’s agentic strategies in initiating sexual intercourse in an urban Ghanaian community. *Research on Gender and Sexualities in Africa*, 89-105.

Ferlay, J., Colombet, M., Soerjomataram, I., Mathers, C., Parkin, D. M., Piñeros, M., & Bray, F. (2019). Estimating the global cancer incidence and mortality in 2018: GLOBOCAN sources and methods. *International Journal of Cancer*, 144(8), 1941-1953.

Ferlay, J., Soerjomataram, I., Dikshit, R., Eser, S., Mathers, C., Rebelo, M., & Bray, F. (2015). Cancer incidence and mortality worldwide: sources, methods and major patterns in GLOBOCAN 2012. *International Journal of Cancer*, 136(5), 359-386.

Fiaveh, Daniel Y., Izugbara, C. O., Okyerefo, M. P. K., Reysoo, F., & Fayorsey, C. K. (2015). Constructions of masculinity and femininity and sexual risk negotiation practices among women in urban Ghana. *Culture, Health and Sexuality*, 17(5), 650–662.

Fiaveh, D. Y. (2017). Narratives of Sex on First Date among Young People in Urban Ghana. *SSRN Electronic Journal*, 1–11.

Fitzpatrick, J. M., Kirby, R. S., Brough, C. L., & Saggerson, A. L. (2009).

Awareness of prostate cancer among patients and the general public: results of an international survey. *Prostate cancer and prostatic diseases*, 12(4), 347-354.

Galletta, A. (2013). *Mastering the semi-structured interview and beyond*. New York University Press.

Gater, A., Abetz-webb, L., Battersby, C., Parasuraman, B., McIntosh, S., Nathan, F., & Piault, E. C. (2011). Pain in castration-resistant prostate cancer with bone metastases: a qualitative study. *Health and Quality of Life Outcomes*, 9(1), 88. <https://doi.org/10.1186/1477-7525-9-88>

Gentili, C., McClean, S., Hackshaw-McGeagh, L., Bahl, A., Persad, R., & Harcourt, D. (2019). Body image issues and attitudes towards exercise amongst men undergoing androgen deprivation therapy (ADT) following diagnosis of prostate cancer. *Psycho-Oncology*, 28(8), 1647–1653.

Ghana Armed Forces. (2020). *Ghana's Regional Security Policy: Costs, Benefits and Consistency*. Kaiptc.org. Kofi Annan International Peacekeeping Training Centre.

Gibson, A. F., Broom, A., Kirby, E., Wyld, D. K., & Lwin, Z. (2016). The Social Reception of Women with Cancer. *Qualitative Health Research*, 1–11. <https://doi.org/10.1177/1049732316637591>

Goodman, A. (2017). *Emotional and Psychological Distress Associated with Prostate Cancer - The ASCO Post*. ASCO Post.

Gray, R. E., Fitch, M., Phillips, C., Labrecque, M., & Fergus, K. (2000). Managing the impact of illness: The experiences of men with prostate

cancer and their spouses. *Journal of Health Psychology*, 5(4), 531–548.

Groarke, A. M., Curtis, R., Skelton, J., & Groarke, J. M. (2020). Quality of life and adjustment in men with prostate cancer: Interplay of stress, threat and resilience. *PLoS ONE*, 15, 1–16.

Grondhuis, P. L. A., den Ouden, M. E. M., den Oudsten, B. L., Putter, H., Pelger, R. C. M., & Elzevier, H. W. (2019). Treatment-Related Sexual Side Effects from the Perspective of Partners of Men with Prostate Cancer. *Journal of Sex and Marital Therapy*, 45(5), 440–451.

Hakim, A. (2020). Effect of compensation, career development, work environment on job satisfaction and its impact on organizational commitments in pt Jakarta Tourisindo. *Journal of Critical Reviews*, 7(12), 538–548.

Haraldstad, K., Wahl, A., Andenæs, R., Andersen, J. R., Andersen, M. H., Beisland, E., Borge, C. R., Engebretsen, E., Eisemann, M., Halvorsrud, L., Hanssen, T. A., Haugstvedt, A., Haugland, T., Johansen, V. A., Larsen, M. H., Løvereide, L., Løyland, B., Kvarme, L. G., Moons, P., Helseth, S. (2019). A systematic review of quality-of-life research in medicine and health sciences. *Quality of Life Research*, 28(10), 2641–2650.

Harden, J., Schafenacker, A., Northouse, L., Mood, D., Smith, D., Pienta, K., & Baranowski, K. (2002). Couples' experiences with prostate cancer: focus group research. *Oncology Nursing Forum*, 29(4), 701-709.

Harding, R., List, S., Epiphaniou, E., & Jones, H. (2012). How can informal caregivers in cancer and palliative care be supported? An updated

systematic literature review of interventions and their effectiveness. *Palliative Medicine*, 26(1), 7-22.

Harrington, J. M., Jones, E. G., & Badger, T. (2009). Body image perceptions in men with prostate cancer. *Oncology Nursing Forum*, 36(2), 167–172.

Hayes, R. B., Pottern, L. M., Strickler, H., Rabkin, C., Pope, V., Swanson, G. M., Greenberg, R. S., Schoenberg, J.B., Liff, J., Schwartz, A.G., & Hoover, R. N. (2000). Sexual behaviour, STDs and risks for prostate cancer. *British Journal of Cancer*, 82(3), 718-725.

Hedestig, O., Sandman, P. O., Tomic, R., & Widmark, A. (2005). Living after radical prostatectomy for localized prostate cancer. A qualitative analysis of patient narratives. *Acta Oncologica*, 44(7), 679-686.

Helgason, A. R., Adolfsson, J., Dickman, P., Fredrikson, M., Arver, S., & Steineck, G. (1996). Waning sexual function—the most important diseasespecific distress for patients with prostate cancer. *British Journal of Cancer*, 73, 1417–1421.

Higgins, E. T., Klein, R., & Strauman, T. (1985). Self-concept discrepancy theory: A psychological model for distinguishing among different aspects of depression and anxiety. *Social Cognition*, 3(1), 51-76.

Hilton, S., Emslie, C., Hunt, K., Chapple, A., & Ziebland, S. (2009). Disclosing a cancer diagnosis to friends and family: a gendered analysis of young men's and women's experiences. *Qualitative Health Research*, 19(6), 744-754.

Holland, J. C., & Alici, Y. (2010). Management of distress in cancer patients. *The Journal of Supportive Oncology*, 8(1), 4-12.

- Horschke, S., Steinmann, D., Christiansen, H., De Zwaan, M., & Zimmermann, T. (2020). Body image in men with prostate or laryngeal cancer and their female partners. *Zeitschrift Fur Psychosomatische Medizin Und Psychotherapie*, 66(3), 287–301.
- Hsing, A. W., Mante, S., Mensah, J. E., Kyei, M. Y., Yarney, J., Vanderpuye, V & Gyasi, R. (2016). Management of Prostate Cancer in Accra, Ghana. *Journal of the West African College of Surgeons*, 6(4), 31-65.
- Hyun, J. S. (2012). Prostate Cancer and Sexual Function. *World Journal of Men's Health*, 30(2), 99–107.
- Imm, K. R., Williams, F., Houston, A. J., Colditz, G. A., Drake, B. F., Gilbert, K. L., & Yang, L. (2017). African American prostate cancer survivorship: Exploring the role of social support in quality of life after radical prostatectomy. *Journal of Psychosocial Oncology*, 35(4), 409-423.
- Itoh, E., & Miyairi, K. (2001). Effect of ionic space charge polarization on the charge injection of molecularly doped polymer light emitting diodes. *IEEE International Conference on Conduction and Breakdown in Solid Dielectrics*, 7, 89–92.
- Ittmann, M. (2018). Anatomy and histology of the human and murine prostate. *Cold Spring Harbor Perspectives in Medicine*, 8(5), a030346.
- Jalloh, M., Niang, L., Ndoeye, M., Labou, I., & Gueye, S. M. (2013). Prostate cancer in Sub Saharan Africa. *Journal of Nephrology and Urology Research*, 1(1), 15-20.

Jan, M., Bonn, S. E., Sjölander, A., Wiklund, F., Stattin, P., Holmberg, E. & Bälter, K. (2016). The roles of stress and social support in prostate cancer mortality. *Scandinavian Journal of Urology*, 50(1), 47-55.

Jannini, E. A., Burri, A., Jern, P., & Novelli, G. (2015). Genetics of human sexual behavior: Where we are, where we are going. *Sexual Medicine Reviews*, 3(2), 65–77.

Jemal, A., Bray, F., Forman, D., O'Brien, M., Ferlay, J., Center, M., & Parkin, D. M. (2012). Cancer burden in Africa and opportunities for prevention. *Cancer*, 118(18), 4372-4384.

Jones, E. C., Storksdieck, M., & Rangel, M. L. (2018). How Social Networks May Influence Cancer Patients' Situated Identity and Illness-Related Behaviors. *Frontiers in Public Health*, 6, 1–6.

Kamat, A. M., Huang, S. F., Bermejo, C. E., Rosser, C. J., Pettaway, C. A., Pisters, P. W. T., Guitreau, D. P., & Pisters, L. L. (2003). Total Pelvic Exenteration: Effective Palliation of Perineal Pain in Patients with Locally Recurrent Prostate Cancer. *The Journal of Urology*, 170, 1868–1871.

Karnes, J. R., & Ahmed, M. E. (2020). Localized Prostate Cancer Recurrence. *Applied Radiology*, 70(1), 32–33.

Kaya, E., & Feuer, D. (2004). Prostate cancer: palliative care and pain relief. *Prostate Cancer and Prostatic Diseases*, 7, 311–315.

Kelly, D. (2009). Changed Men: The Embodied Impact of Prostate Cancer. *Qualitative Health Research* 19(2), 151-163.

Kelly, D., & White, K. (2011). Surviving cancer: A new reality and a new challenge (Editorial). *European Journal of Oncology Nursing* 15, 199-200.

King, A. J. L., Evans, M., Moore, T. H. M., Paterson, C., Sharp, D., Persad, R., & Huntley, A. L. (2015). Prostate cancer and supportive care: a systematic review and qualitative synthesis of men's experiences and unmet needs. *European Journal of Cancer Care*, 24(5), 618–634.

Kinnaird, W., Konteti, V. K., Mitra, A., Davda, R., & Payne, H. (2021). Sexual dysfunction in men with advanced prostate cancer. *Prostate Cancer*, 7–12. <https://doi.org/10.1002/tre.800>

Kivunja, C., & Kuyini, A. B. (2017). Understanding and applying research paradigms in educational contexts. *International Journal of Higher Education*, 6(5), 26-41.

Kleinman, A., & Kleinman, J. (1991). Suffering and its professional transformation: Toward an ethnography of interpersonal experience. *Culture, Medicine and Psychiatry*, 15(3), 275-275.

Knox, M. K., Hales, S., Nissim, R., Jung, J., Lo, C., Zimmermann, C., Rodin, G. (2017). Lost and stranded: the experience of younger adults with advanced cancer. *Support Care Cancer*, 25(2), 399–407.

Kugbey, N., Ohene-Oti, N., & Vanderpuye, V. (2020). COVID-19 and its ramifications for cancer patients in low-resource settings: Ghana as a case study. *Ecancer Medical Science*, 14(19), 1-4.

Kumar, K. H., & Elavarasi, P. (2016). Definition of pain and classification of pain disorders. *Journal of Advanced Clinical and Research Insights*, 3(3), 87-90.

Kunkel, E. J., Bakker, J. R., Myers, R. E., Oyesanmi, O., & Gomella, L. G. (2000). Biopsychosocial aspects of prostate cancer. *Psychosomatics*, 41(2), 85-94.

Lange, P. H., & Adamec, C. (2011). *Prostate cancer for dummies*. John Wiley & Sons.

Larsen, P. D., & Kramer-Kile, M. (2014). *The Illness Experience*. In *Chronic Illness in Canada: Impact and Intervention*. Jones & Bartlett Learning.

Laweh, V. N., & Manortey, S. (2021). Assessment of Knowledge and Practices of Prostate Cancer Screening Among Men in the Lower Manya Krobo Municipality in the Eastern Region of Ghana. *Cancer Research Journal*, 9(1), 41–52.

Lee, C., & Owens, R. (2002). *The Psychology of Men's Health*. Open University Press.

Lee, T. K., Handy, A. B., Kwan, W., Oliffe, J. L., Brotto, L. A., Wassersug, R. J., & Dowsett, G. W. (2015). Impact of Prostate Cancer Treatment on the Sexual Quality of Life for Men-Who-Have-Sex-with-Men. *Journal of Sexual Medicine*, 12(12), 2378–2386.

Lehto, U. S., Aromaa, A., & Tammela, T. L. (2018). Experiences and psychological distress of spouses of prostate cancer patients at time of diagnosis and primary treatment. *European Journal of Cancer Care*, 27(1), 1–11.

Longhurst, R. (2009). *International Encyclopedia of Human Geography // Interviews: In-Depth, Semi-Structured.*, 580–584.

Lilleby, W., Fosså, S. D., Wæhre, H. R., & Olsen, D. R. (1999). Long-term morbidity and quality of life in patients with localized prostate cancer

undergoing definitive radiotherapy or radical prostatectomy. *International Journal of Radiation Oncology* Biology* Physics*, 43(4), 735-743.

Lin, L.-M., Tung, T. H., & Yeh, M. Y. (2019). Examining determinants of sexual behavior among indigenous adolescents in Taiwan. *Medicine*, 98(19), e15562.

Lin, P. H., Aronson, W., & Freedland, S. J. (2015). Nutrition, dietary interventions and prostate cancer: the latest evidence. *BMC Medicine*, 13(1), 1-15.

Lucas, D., & Fox, J. (2021). The Psychology of Human Sexuality. In R. Biswas-Diener & E. Diener (Eds.), *Noba textbook series: Psychology*. Champaign, IL: DEF Publishers.

Lu-Yao, G. L., & Yao, S. L. (1997). Population-based study of long-term survival in patients with clinically localised prostate cancer. *The Lancet*, 349(9056), 906-910.

Macedo, F., Ladeira, K., Pinho, F., Saraiva, N., Bonito, N., Pinto, L., & Gonçalves, F. (2017). Bone metastases: an overview. *Oncology Reviews*, 11(1), 43-49.

Malu, I. N. (2019). *Factors Associated with Prostate Cancer Screening Intentions Among Adult Men in Nigeria* [Walden University]. <https://scholarworks.waldenu.edu/cgi/viewcontent.cgi?article=8680&context=dissertations>

Manier, K. K., Rowe, L. S., Welsh, J., & Armstrong, T. S. (2018). The impact and incidence of altered body image in patients with head and neck

tumors: A systematic review. *Neuro-Oncology Practice*, 5(4), 204–213.

Martins-Fonteyn, E., Loquiha, O., Baltazar, C., Thapa, S., Boothe, M., Raimundo, I., Hens, N., Aerts, M., Meulemans, H., Degomme, O., & Wouters, E. (2017). Factors influencing risky sexual behaviour among Mozambican miners: A socio-epidemiological contribution for HIV prevention framework in Mozambique. *International Journal for Equity in Health*, 16(1), 1-14.

Mason, M. (2010). Sample size and saturation in PhD studies using qualitative interviews. In *Forum qualitative Sozialforschung/Forum: qualitative social research*, 11(3), 1-19.

Masse, R. (2000). Qualitative and quantitative analyses of psychological distress: methodological complementarity and ontological incommensurability. *Quality Health Research*, 10, 411–23.

Matthew, A., Lutzky-Cohen, N., Jamnicky, L., Currie, K., Gentile, A., Santa Mina, D., Fleshner, N., Finelli, A., Hamilton, R., Kulkarni, G., Jewett, M., Zlotta, A., Trachtenberg, J., Yang, Z., & Elterman, D. (2018). The prostate cancer rehabilitation clinic: A biopsychosocial clinic for sexual dysfunction after radical prostatectomy. *Current Oncology*, 25(6), 393–402.

Mazhar, D., & Waxman, J. (2002). Prostate cancer. *Postgraduate Medical Journal*. 78, 590–595.

Mccaffery, K., Nickel, B., Pickles, K., Moynihan, R., Kramer, B., Barratt, A., & Hersch, J. (2019). Resisting recommended treatment for prostate

cancer: A qualitative analysis of the lived experience of possible overdiagnosis. *BMJ Open*, 9(5), 1–10.

Mehnert, A., Lehmann, C., Graefen, M., Huland, H., & Koch, U. (2010). Depression, anxiety, post- traumatic stress disorder and health- related quality of life and its association with social support in ambulatory prostate cancer patients. *European Journal of Cancer Care*, 19(6), 736-745.

Mehta, A., & Chan, L. S. (2008). Understanding of the Concept of “Total Pain.” *Journal of Hospice & Palliative Nursing*, 10(1), 26–32.

Melzack, R., & Wall, P. D. (1965). Pain Mechanisms: A New Theory: A gate control system modulates sensory input from the skin before it evokes pain perception and response. *Science*, 150(3699), 971-979.

Michael, Y. L., Kawachi, I., Berkman, L. F., Holmes, M. D. & Colditz, G. A. (2000). The persistent impact of breast carcinoma on functional health status: prospective evidence from the Nurses' Health Study. *Cancer: Interdisciplinary International Journal of the American Cancer Society*, 89(11), 2176-2186.

Moayed, M., & Davis, K. D. (2013). Theories of pain: from specificity to gate control. *Journal of Neurophysiology*, 109(1), 5-12.

Ministry of Health. (2016). *National Strategy for Cancer*. [https://www.iccp-portal.org/system/files/plans/Cancer Plan Ghana Ministry of Health.pdf](https://www.iccp-portal.org/system/files/plans/Cancer%20Plan%20Ghana%20Ministry%20of%20Health.pdf)

Myers, C. J. (2021). New Approaches and Considerations to Cancer and Suicide. *Psychiatric Times*, 38(6), 23-36.

Nabisubi, P., Nanyingi, M., & Okeny, P. K. (2020). Lived experiences of prostate cancer patients below 55 years of age: A phenomenological study of outpatients receiving treatment at the Uganda Cancer Institute. *East and Central African Journal of Surgery*, 1–13.

Naderifar, M. (2019). Lived Experiences of Iranian Cancer Patients After Survival: A Phenomenological Research. *Journal of Patient Experience*, 6(2), 164–168.

National Cancer Institute. (2011). *Understanding Prostate Changes: A Health Guide for Men* (No. 11–4303; Understanding Prostate Cancer). <https://www.cancer.gov/types/prostate/understanding-prostate-changes/prostate-booklet.pdf>

Nayeri, K., Pitaro, G., & Feldman, J. G. (1992). Marital status and stage at diagnosis in cancer. *New York State Journal of Medicine*, 92(1), 8–11.

Necku, J. G., Anaba, E. A., & Abuosi, A. A. (2019). Prostate cancer awareness and attitude toward early detection among male soldiers in Ghana: a cross-sectional study. *African Journal of Urology*, 25(1), 1–6.

Nelson, K., Bennett, P., & Rance, J. (2019). The experiences of giving and receiving social support for men with localised prostate cancer and their partners. *Ecancermedicalscience*, 13, 1–11.

Nettina, S. M., Msn, A. B., & Nettina, S. M. (2013). *Lippincott manual of nursing practice*. Lippincott Williams & Wilkins.

Nuhu, F. T., Odejide, O. A., Adebayo, K. O., & Yusuf, A. J. (2009). Psychological and physical effects of pain on cancer patients in Ibadan, Nigeria. *African Journal of Psychiatry (South Africa)*, 12(1), 64–70.

Oba, A., Nakaya, N., Saito-nakaya, K., Hasumi, M., Takechi, H., Arai, S., & Shimizu, N. (2017). Psychological distress in men with prostate cancer and their partners before and after cancer diagnosis: a longitudinal study. *Japanese Journal of Clinical Oncology*, 47(8), 735–742.

Occhipinti, S., Dunglison, N., Zajdlewicz, L., Coughlin, G. D., Yaxley, J. W., Gardiner, R. A., & Chambers, S. K. (2019). A prospective study of psychological distress after prostate cancer surgery. *Psychol-Oncology*, 28, 2389–2395.

Okuku, F., Orem, J., Holoya, G., De Boer, C., Thompson, C. L., & Cooney, M. M. (2016). Prostate Cancer Burden at the Uganda Cancer Institute. *Journal of Global Oncology*, 2(4), 181–185.

Oliffe, J. (2005). Constructions of masculinity following prostatectomy-induced impotence. *Social Science & Medicine*, 60(10), 2249–2259.

Ozoemena, O. F., Ugonabo, M., Ugwumba, F. O., Udeh, E. I., Nnabugwu, I. I., Amu, O. C., & Ayogu, B. O. (2015). Awareness of prostate cancer and the use of PSA as a screening test among the Black race: South-South and South-East Nigeria, Nigerian experience. *IOSR Journal of Dental and Medical Sciences (IOSRJDMS)*, 1(14), 25–29.

Paller, C. J., & Antonarakis, E. S. (2013). Management of biochemically recurrent prostate cancer after local therapy: Evolving standards of care and new directions. *Clinical Advances in Hematology and Oncology*, 11(1), 14–23.

Parra, J. P., Crulhas, B. P., Basso, C. R., Delella, F. K., Castro, G. R., & Pedrosa, V. A. (2018). Using an electrochemical aptasensor to early

detect prostate specific and free prostate specific antigens released by cancer cells. *Electroanalysis*, 30(12), 2869-2877.

PCFA. (2014). PCFA Information Guide: *Understanding Sexual Issues Following Prostate Cancer*. Prostate Cancer Foundation of Australia. [https://www.prostate.org.au/media/468674/understanding-sexual-](https://www.prostate.org.au/media/468674/understanding-sexual-issues.pdf)

[issues.pdf](#)

Pietkiewicz, I., & Smith, J. A. (2012). Praktyczny przewodnik interpretacyjnej analizy fenomenologicznej w badaniach jakościowych w psychologii. *Czasopismo Psychologiczne*, 18(2), 361-369.

Pinheiro, P. S., Callahan, K. E., Koru-Sengul, T., Ransdell, J., Bouzoubaa, L., Brown, C. P., & Kobetz, E. (2019). Peer Reviewed: Risk of Cancer Death Among White, Black, and Hispanic Populations in South Florida. *Preventing Chronic Disease*, 16(63), 1-10.

Pinski, J., & Dorff, T. B. (2005). Prostate cancer metastases to bone: pathophysiology, pain management, and the promise of targeted therapy. *European Journal of Cancer*, 41, 932-940.

Poole, G., Poon, C., Achille, M., White, K., Franz, N., Jittler, S. & Doll, R. (2001). Social support for patients with prostate cancer: The effect of support groups. *Journal of Psychosocial Oncology*, 19(2), 1-16.

Porcelli, P., & Todarello, O. (2007). Psychological factors affecting functional gastrointestinal disorders. *Psychological Factors affecting Medical Conditions*, 28, 34-56.

Portenoy, R. K., Foley, K. M., & Inturrisi, C. E. (1990). The nature of opioid responsiveness and its implications for neuropathic pain: new

hypotheses derived from studies of opioid infusions. *Pain*, 43(3), 273-286.

Prostate Cancer UK. (2017). Prostate cancer and your sex life. *Prostate Cancer UK*. <https://shop.prostatecanceruk.org/pdf/publication/prostate-cancer-and-your-sex-life-ifm.pdf>

Raja, S. N., Carr, D. B., Cohen, M., Finnerup, N. B., Flor, H., Gibson, S., ... & Vader, K. (2020). The revised International Association for the Study of Pain definition of pain: concepts, challenges, and compromises. *Pain*, 161(9), 1976-1982.

Rebbeck, T. R., Devesa, S. S., Chang, B. L., Bunker, C. H., Cheng, I., Cooney, K., & Haiman, C. A. (2013). Global patterns of prostate cancer incidence, aggressiveness, and mortality in men of african descent. *Prostate Cancer*, 2013. <https://doi.org/10.1155/2013/560857>

Regan, P. C., & Atkins, L. (2006). Sex differences and similarities in frequency and intensity of sexual desire. *Social Behavior and Personality: An International Journal*, 34(1), 95-102.

Richman, E. L., Kenfield, S. A., Stampfer, M. J., Giovannucci, E. L., & Chan, J. M. (2011). Egg, red meat, and poultry intake and risk of lethal prostate cancer in the prostate-specific antigen-era: incidence and survival. *Cancer Prevention Research*, 4(12), 2110-2121.

Rider, J. R., Wilson, K. M., Sinnott, J. A., Kelly, R. S., Mucci, L. A., & Giovannucci, E. L. (2016). Ejaculation frequency and risk of prostate cancer: updated results with an additional decade of follow-up. *European Urology*, 70(6), 974-982.

Ridner, S. H. (2004). Psychological distress: concept analysis. *Journal of Advanced Nursing*, 45(5), 536-545.

Ritchie, J., Lewis, J., Nicholls, C. M., & Ormston, R. (2003). *Qualitative research practice: A guide for social science students and researchers*. Sage.

Rojj, J. Van, Brom, L., Soud, M. Y., & Poll-franse, L. Van De. (2019). Social consequences of advanced cancer in patients and their informal caregivers: a qualitative study. *Supportive Care in Cancer*, 27, 1187–1195.

Rönningås, U., Fransson, P., Holm, M., & Wennman-larsen, A. (2019). Prostate-specific antigen (PSA) and distress: - a cross-sectional nationwide survey in men with prostate cancer in Sweden. *BMC Urology*, 19(66), 1–8.

Roth, A. J., Weinberger, M. I., & Nelson, C. J. (2008). Prostate cancer: Psychosocial implications and management. *Future Oncology*, 4(4), 561–568. <https://doi.org/10.2217/14796694.4.4.561>

Saad, F., Clarke, N., & Colombel, M. (2006). Natural history and treatment of bone complications in prostate cancer. *European Journal of Urology*, 49, 429-440.

SAGA. (2013). *Is the health message getting through to older men?* Saga. <https://www.saga.co.uk/newsroom/press-releases/2013/october/is-the-health-message-getting-through-to-older-men.aspx>

Saitz, T. R., Serefoglu, E. C., Trost, L. W., Thomas, R., & Hellstrom, W. J. G. (2013). The pre- treatment prevalence and types of sexual dysfunction

among patients diagnosed with prostate cancer. *Andrology*, 1(6), 859-863.

Santos, M., & Stepleman, L. (2015). Sexual Behavior. *Emerging Trends in the Social and Behavioral Sciences*, 1–15.

Santos-Iglesias, P., Rana, M., & Walker, L. M. (2020). A Systematic Review of Sexual Satisfaction in Prostate Cancer Patients. *Sexual Medicine Reviews*, 8(3), 450–465.

Saunders, M., Lewis, P., & Thornhill, A. (2009). *Research methods for business students*. Pearson education.

Schantz, L. B. (2017). Sexuality in men after prostate cancer surgery: a qualitative interview study. *Scandinavian Journal of Caring Sciences*, 31(1), 120–127.

Sekse, R.J., Raaheim, M., Blaaka, G., & Gjengedal, E. (2010). Life beyond cancer: women`s experiences 5 years after treatment for gynaecological cancer. *Scandinavian Journal of Caring Sciences*, 24(4), 799-807.

Sfanos, K. S., & De Marzo, A. M. (2012). Prostate cancer and inflammation: the evidence. *Histopathology*, 60(1), 199-215.

Sharpley, C. F., Bitsika, V., & Christie, D. R. (2018). “The worst thing was...”: prostate cancer patients’ evaluations of their diagnosis and treatment experiences. *American Journal of Men's Health*, 12(5), 1503-1509.

Shegog, R., Baumler, E., Addy, R. C., Peskin, M., & Thiel, M. A. (2017). Sexual Health Education for Behavior Change: How Much Is Enough?

Journal of Applied Research on Children: Informing Policy for Children at Risk, 8(1), 1-15.

Shelley, M., Bennett, C. L., Nathan, D., & Sartor, O. (2008). Hormone Therapy for Prostate Cancer. In *Metastasis of Prostate Cancer*. Springer.

Shiridzinomwa, C., & Harding, S. (2020). The role of body image in treatment decision-making and post-treatment regret following prostatectomy. *British Journal of Nursing*, 29(18), 8–16.

Siegel, R. L., Miller, K. D., & Jemal, A. (2016). Cancer statistics, 2016. *CA: A Cancer Journal for Clinicians*, 66(1), 7-30.

Sigler, K. J. (2011). CEO Compensation and Company Performance. *Business and Economics Journal*, 2011, 1–8.

Smith, J. A., & Osborn, M. (2007). Pain as an assault on the self: An interpretative phenomenological analysis of the psychological impact of chronic benign low back pain. *Psychology and Health*, 22(5), 517-534.

Sodergren, S. C., Husson, O., & Robinson, J. (2017). Systematic review of the health-related quality of life issues facing adolescents and young adults with cancer. *Quality of Life Research*, 26(7), 1659–1672.

Solbraekke, K. N., & Lorem, G. (2016). Breast-cancer-isation explored: Social experiences of gynaecological cancer in a Norwegian context. *Sociology of Health & Illness*, 38(8), 1258–1271.

Song, T., Kim, T. J., Cho, J., Kim, I. R., Kang, P. N., Lee, J. W., & Kim, B. G. (2012). Cosmesis and body image after single port access surgery for

gynaecologic conditions. *Australian and New Zealand Journal of Obstetrics and Gynaecology*, 52(5), 465-469.

Spence, A. R., Rousseau, M. C., & Parent, M. É. (2014). Sexual partners, sexually transmitted infections, and prostate cancer risk. *Cancer Epidemiology*, 38(6), 700-707.

Stafford, L., Berk, M. & Jackson, H. L. (2009). Are illness perceptions about coronary artery disease predictive of depression and quality of life outcomes? *Journal of Psychosomatic Research*, 66, 211–220.

Steginga, S. K., Occhipinti, S., Gardiner, R. F., Yaxley, J., & Heathcote, P. (2004). A prospective study of the use of alternative therapies by men with localized prostate cancer. *Patient Education and Counseling*, 55(1), 70-77.

Stensvold, A., Dahl, A. A., Brennhovd, B., Småstuen, M. C., Fosså, S. D., Lilleby, W., & Smeland, S. (2013). Bother problems in prostate cancer patients after curative treatment. In *Urologic Oncology: Seminars and Original Investigations*, 31(7), 1067-1078.

Stinesen Kollberg, K., Wilderäng, U., Thorsteinsdottir, T., Hugosson, J., Wiklund, P., Bjartell, A., ... & Steineck, G. (2017). How badly did it hit? Self-assessed emotional shock upon prostate cancer diagnosis and psychological well-being: a follow-up at 3, 12, and 24 months after surgery. *Acta Oncologica*, 56(7), 984-990.

Takeuchi, T., Ichikura, K., Amano, K., Takeshita, W., & Hisamura, K. (2018). The degree of social difficulties experienced by cancer patients and their spouses. *BMC Palliative Care*, 1–9.

Tat, D., Kenfield, S. A., Cowan, J. E., Broering, J. M., Carroll, P. R., Van Blarigan, E. L., & Chan, J. M. (2018). Milk and other dairy foods in relation to prostate cancer recurrence: data from the cancer of the prostate strategic urologic research endeavor (CaPSURE). *The Prostate*, 78(1), 32-39.

Tavoli, A., Montazeri, A., Roshan, R., Tavoli, Z., & Melyani, M. (2008). Depression and quality of life in cancer patients with and without pain: the role of pain beliefs. *BioMed Central Cancer*, 8(1), 1-6.

Temi, A. P., Usman, D. M., Ademola, I., Emmanuel, O. A., Olutoyin, O. L., & Adetunji, O. (2021). Pre-treatment Depression and Anxiety Disorder in Men with Cancer of the Prostate in South Western Nigeria. *International Neuropsychiatric Disease Journal*, 46–53.

Terwase, J. M. (2014). Knowledge, Attitude and Screening Behaviour of Benue State University Male Students towards Prostate Cancer Awareness. *International Journal of Cancer and Clinical Research*, 1(1), 1–4.

Thompson, J. C., Wood, J., & Feuer, D. (2007). Prostate cancer: palliative care and pain relief. *British Medical Bulletin*, 83, 341–354.

Tindall, L. (2009). JA Smith, P. Flower and M. Larkin (2009), *Interpretative Phenomenological Analysis: Theory, Method and Research*. Sage.

Tourinho-Barbosa, R. R., Srougi, V., Nunes-Silva, I., Baghdadi, M., Rembeyo, G., Eiffel, S. S., Barret, E., Rozet, F., Galiano, M., Cathelineau, X., & Sanchez-Salas, R. (2018). Biochemical recurrence after radical prostatectomy: What does it mean? *International Brazilian Journal of Urology*, 44(1), 14–21.

Trachsel, L.A., Cascella, M. (2021). *Pain theory*. StatPearls Publishing.

Tuohimaa, P., Tenkanen, L., Ahonen, M., Lumme, S., Jellum, E., Hallmans, G., & Hakama, M. (2004). Both high and low levels of blood vitamin D are associated with a higher prostate cancer risk: a longitudinal, nested case control study in the Nordic countries. *International Journal of Cancer*, *108*(1), 104-108.

Twitchell, D. K., Wittmann, D. A., Hotaling, J. M., & Pastuszak, A. W. (2019). Psychological Impacts of Male Sexual Dysfunction in Pelvic Cancer Survivorship. *Sexual Medicine Reviews*, *7*(4), 614–626.

Tylka, T. L., & Wood-Barcalow, N. L. (2015). What is and what is not positive body image? Conceptual foundations and construct definition. *Body Image*, *14*, 118-129.

Ullrich, A., Rath, H. M., Otto, U., Kerschgens, C., Raida, M., Hagen-Aukamp, C., & Bergelt, C. (2018). Return to work in prostate cancer survivors - findings from a prospective study on occupational reintegration following a cancer rehabilitation program. *BMC Cancer*, *18*(1), 1–12.

Ussher, J. M., Perz, J., & Gilbert, E. (2015). Perceived causes and consequences of sexual changes after cancer for women and men: A mixed method study. *BMC Cancer*, *15*(1), 1–18.

Vamos, M. (1993). Body image in chronic illness - A reconceptualization. *International Journal of Psychiatry in Medicine*, *23*(2), 163–178.

Vartolomei, L., Shariat, S. F., & Vartolomei, M. D. (2018). Psychotherapeutic interventions targeting prostate cancer patients: a systematic review of the literature. *European Urology Oncology*, *1*(4), 283-291.

Venkatesan, A. M., Mudairu-Dawodu, E., Duran, C., Stafford, R. J., Yan, Y., Wei, W., & Kundra, V. (2021). Detecting recurrent prostate Cancer using multiparametric MRI, influence of PSA and Gleason grade. *Cancer Imaging, 21*(1), 1–9.

Vrontaras, N. (2018). Cancer Patients' Views on the Family Changes and the Family Social Support. *Journal of European Psychology Students, 9*(1), 16–27.

Wassersug, R. J., Westle, A., & Dowsett, G. W. (2017). Men's Sexual and Relational Adaptations to Erectile Dysfunction After Prostate Cancer Treatment. *International Journal of Sexual Health, 29*(1), 69–79.

World Health Organization. (1975). *Education and treatment in human sexuality: the training of health professionals, report of a WHO meeting [held in Geneva from 6 to 12 February 1974]*. World Health Organization.

World Health Organization. (2018). *Assessing national capacity for the prevention and control of noncommunicable diseases: report of the 2017 global survey*. <https://apps.who.int/iris/bitstream/handle/10665/276609/9789241514781-eng.pdf>

Wright, P., Smith, A., Booth, L., Winterbottom, A., Kiely, M., Velikova, G., & Selby, P. (2005). Psychosocial difficulties, deprivation, and cancer: three questionnaire studies involving 609 cancer patients. *British Journal of Cancer, 93*(6), 622–626.

Wright, P., Wilding, S., Watson, E., Downing, A., Selby, P., Hounsome, L., Wagland, R., Brewster, D. H., Huws, D., Butcher, H., Mottram, R., Kearney, T., Allen, M., Gavin, A., & Glaser, A. (2019). Key factors

associated with social distress after prostate cancer: Results from the United Kingdom Life after Prostate Cancer diagnosis study. *Cancer Epidemiology*, 60, 201–207.

Yeboah, E. D., Hsing, A. W., Mante, S., Mensah, J. E., Kyei, M. Y., Yarney, J., & Adjei, A. A. (2016). Management of prostate cancer in Accra, Ghana. *Journal of the West African College of Surgeons*, 6(4), 31-65.

Yeboah-Asiamah, B. (2015). *Perceptions and Attitudes About Prostate Cancer Among Male Teachers in the Sunyani Municipality*. University of Ghana, Legon. http://ugspace.ug.edu.gh/bitstream/handle/123456789/8195/bernard_yeboah-asiamah_perceptions_and_attitudes_about_prostate_cancer_amongmale_teachers_in_the_sunyani_municipality_2015.pdf?sequence=1&isAllowed=y

Yu Ko, W. F., Oliffe, J. L., & Bottorff, J. L. (2020). Prostate Cancer Treatment and Work: A Scoping Review. *American Journal of Men's Health*, 14(6), 1–15.

Yu Ko, W. F., Oliffe, J. L., Johnson, J. L., & Bottorff, J. L. (2018). The Connections Between Work, Prostate Cancer Screening, Diagnosis, and the Decision to Undergo Radical Prostatectomy. *In American Journal of Men's Health*, 12(5), 1670–1680.

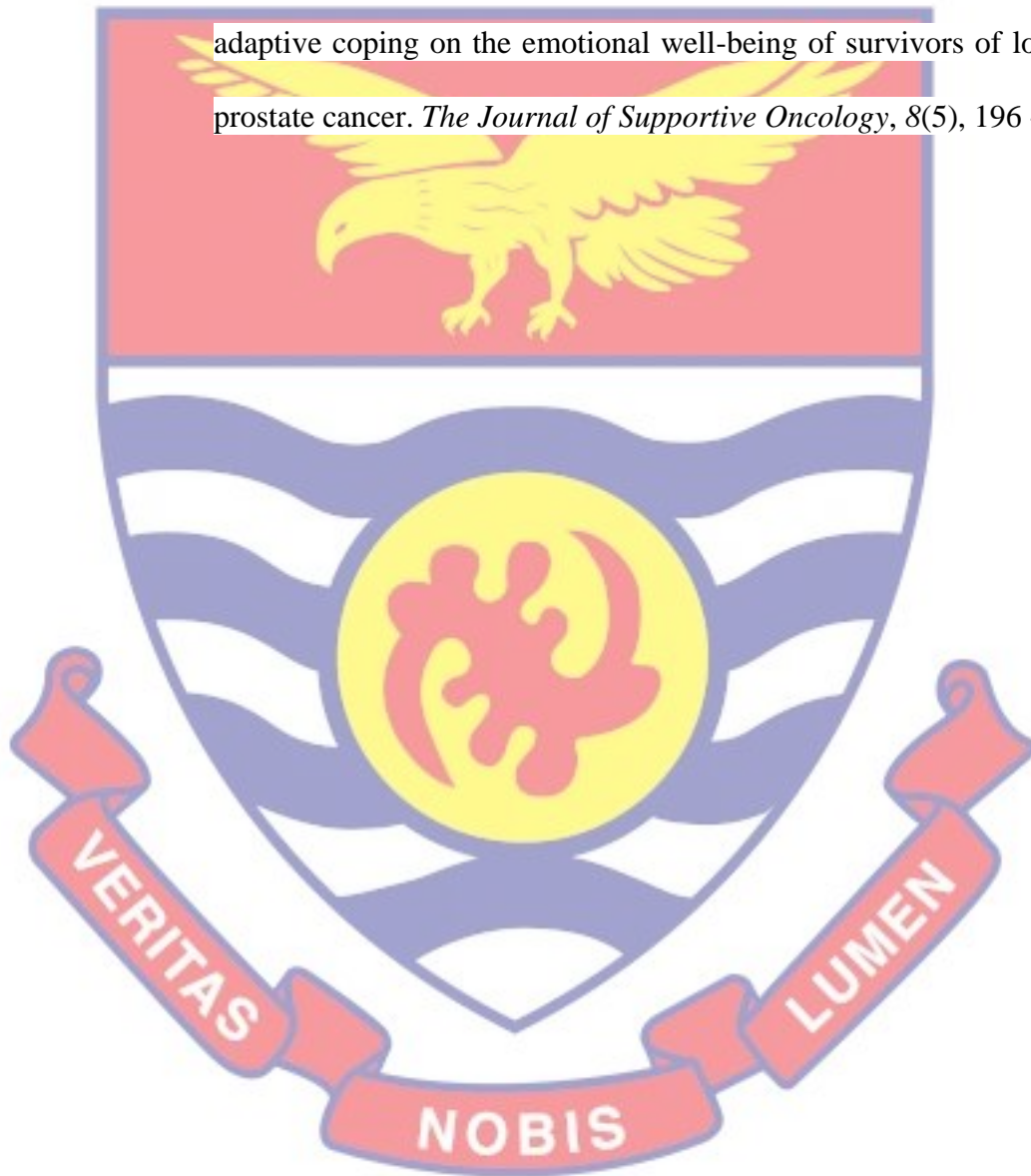
Zaorsky, N. G., Zhang, Y., Tuanquin, L., Bluethmann, S. M., Park, H. S., & Chinchilli, V. M. (2019). Suicide among cancer patients. *Nature Communications*, 10(1), 1–7.

Zaza, C., & Baine, N. (2002). Cancer pain and psychosocial factors: a critical review of the literature. *Journal of Pain and Symptom Management*, 24(5), 526-542.

Zhao, G., Li, C., Li, J., & Balluz, L.S. (2013). Physical activity, psychological distress, and receipt of mental healthcare services among cancer survivors. *Journal of Cancer Survivorship*, 7, 131–139.

Zhou, E. S., Penedo, F. J., Bustillo, N. E., Benedict, C., Rasheed, M., Lechner, S., & Antoni, M. H. (2010). Longitudinal effects of social support and

adaptive coping on the emotional well-being of survivors of localized prostate cancer. *The Journal of Supportive Oncology*, 8(5), 196 - 201.



APPENDICES

APPENDIX A

Semi-structured interview guide

INTERVIEW GUIDE

BIOPSYCHOSOCIAL EXPERIENCES OF INDIVIDUALS LIVING WITH PROSTATE CANCER.

SEMI-STRUCTURED INTERVIEW GUIDE

SOCIO-DEMOGRAPHIC

- A. Age
- B. Level of Education
- C. Marital Status
- D. Religious Affiliation

PSYCHOLOGICAL

1. How do you feel when the doctor diagnosed you of prostate cancer?

PAIN

1. Can you tell me how you are feeling due to treatment? Probe did u have any pain.
2. Which words will you choose to define your pain if any?
3. What are some the factors worsening or relieving the pain?
5. How do you feel emotionally? (psychological)

SOCIAL SUPPORT

1. What kinds of support have you been receiving e.g., financial, washing, cooking, cleaning, assistance with shopping, conversation with friends, seeing a psychologist.
2. Who has been supporting you- wife, children, friends, church ,mosque etc.?
4. How do you think the social support is helping treatment? (psychological)

SEX LIFE

1. How would you describe your sex life before diagnosis?
2. What kinds of changes have you noticed in your sex life after your cancer diagnosis and treatment?

APPENDIX B

INTRODUCTORY LETTER

UNIVERSITY OF CAPE COAST
COLLEGE OF EDUCATION STUDIES
FACULTY OF EDUCATIONAL FOUNDATIONS
DEPARTMENT OF EDUCATION AND PSYCHOLOGY

Telephone: 0332091697
Email: dep@ucc.edu.gh



UNIVERSITY POST OFFICE
CAPE COAST, GHANA

25th January, 2021

Our Ref:

Your Ref:

TO WHOM IT MAY CONCERN

Dear Sir/Madam,

THESIS WORK
LETTER OF INTRODUCTION
MR. KAKRABA KAITOO

We introduce to you Mr. Kaitoo, a student from the University of Cape Coast, Department of Education and Psychology. He is pursuing a Master of Philosophy degree in Clinical Health Psychology and he is currently at the thesis stage.

Mr. Kaitoo is researching on the topic:


"BIOPSYCHOSOCIAL EXPERIENCES OF INDIVIDUALS LIVING WITH PROSTATE CANCER.

He has opted to collect or gather data at your institution/establishment for his Thesis work. We would be most grateful if you could provide him the opportunity and assistance for the study. Any information provided would be treated strictly as confidential.

We sincerely appreciate your co-operation and assistance in this direction.

Thank you.

Yours faithfully,


Ama A. Ocran (Ms.)
Principal Administrative Assistant
For: HEAD

APPENDIX C

ETHICAL REVIEW BOARD CLEARANCE LETTER

UNIVERSITY OF CAPE COAST
COLLEGE OF EDUCATION STUDIES
ETHICAL REVIEW BOARD

UNIVERSITY POST OFFICE
CAPE COAST, GHANA



Our Ref: CES-ERB/ucc.edu/05/21-09
Your Ref:

Date: 5th January 2021

Dear Sir/Madam,

ETHICAL REQUIREMENTS CLEARANCE FOR RESEARCH STUDY

Chairman, CES-ERB
Prof. J. A. Omotosho
jomotosho@ucc.edu.gh
0243784739

Vice-Chairman, CES-ERB
Prof. K. Edjah
kedjah@ucc.edu.gh
0244742357

Secretary, CES-ERB
Prof. Linda Dzama Forde
lforde@ucc.edu.gh
0244786680

The bearer, Derrick Kakraba Kaito Reg. No. EF/CTP/19/0008 is an M.Phil. / Ph.D. student in the Department of Education and Psychology in the College of Education Studies, University of Cape Coast, Cape Coast, Ghana. He / She wishes to undertake a research study on the topic:

Biopsychosocial experiences of individuals living with prostate cancer.

The Ethical Review Board (ERB) of the College of Education Studies (CES) has assessed his/her proposal and confirm that the proposal satisfies the College's ethical requirements for the conduct of the study.

In view of the above, the researcher has been cleared and given approval to commence his/her study. The ERB would be grateful if you would give him/her the necessary assistance to facilitate the conduct of the said research.

Thank you.
Yours faithfully,

Prof. Linda Dzama Forde
(Secretary, CES-ERB)

APPENDIX D

ETHICAL CLEARANCE



Institutional Review Board

37 Military Hospital

Neghelli Barracks

ACCRA

Tel: 059 1759506

Email: irbmilhosp@gmail.com

08 September 2021

ETHICAL CLEARANCE

37MH-IRB/MAS/IPN/535/21

On 07 September 2021 the 37 Military Hospital (37MH) Institutional Review Board (IRB) approved your protocol.

TITLE OF PROTOCOL: Biopsychosocial Experiences of Individuals Living with Prostate Cancer

PRINCIPAL INVESTIGATOR: Derrick Kakraba Kaitoo

Please note that a final review report must be submitted to the Board at the completion of the study.

Please report all serious adverse events related to this study to 37MH-IRB within seven (7) days verbally and fourteen (14) days in writing.

This certificate is valid till 06 September 2022.



DR EDWARD ASUMANU
(37MH-IRB, Vice Chairman)

Cc: Brig Gen NA Obodai
Commander, 37 Military Hospital

NOBIS