

UNIVERSITY OF EDUCATION, WINNEBA

**Psychosocial experience and coping strategies of individuals living with cervical
and prostate cancer in the cape coast teaching hospital**

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**PSYCHOSOCIAL EXPERIENCE AND COPING STRATEGIES OF
INDIVIDUALS LIVING WITH CERVICAL AND PROSTATE CANCER IN
THE CAPE COAST TEACHING HOSPITAL**

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**A thesis in the Department of Counselling Psychology,
Faculty of Educational Studies, submitted to the school of
Graduate Studies in partial fulfilment**

**of the requirements for the award of the degree of
Master of Philosophy
(Guidance and Counselling)
in the University of Education, Winneba**

JULY, 2023

DECLARATION

Student's Declaration

I, Adwoa Pobiaa Addae, declare that this dissertation, with the exception of quotations and references contained in published works, which have all been identified and duly acknowledged, is entirely my original work, and it has not been submitted, either in part or whole, for another degree elsewhere.

Signature:

Date:

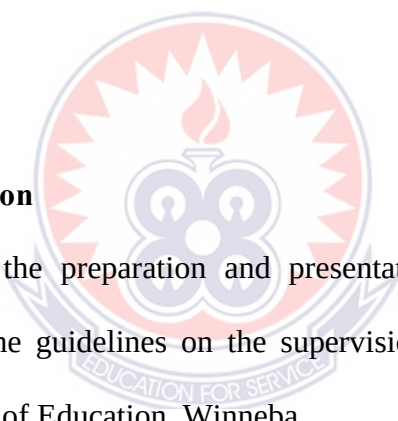
Supervisor's Declaration

I hereby declare that the preparation and presentation of this dissertation were supervised following the guidelines on the supervision of the thesis report as laid down by the University of Education, Winneba.

Name of Supervisor: Dr. Nyuiemedi Agordzo Edoh-Torgah

Signature:

Date:



DEDICATION

I dedicate this project work to my lovely husband Mr. Richard Asare and children
Bruce Nana Yaw Asare, Kelvin Asare and Kennedy Kweku Asare.



ACKNOWLEDGEMENTS

I wish to express my profound gratitude to my supervisor Dr. (Mrs.) Nyuiemedi Agordzo Edoh-Torgah for the support, correction and friendly supervision she gave me in this project. I cherish her efforts and contributions to the completion of this project.

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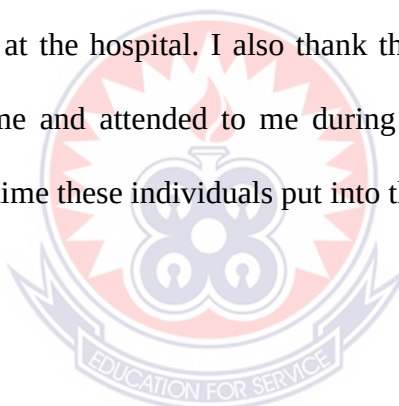


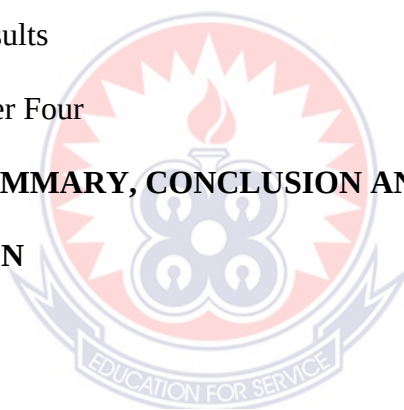
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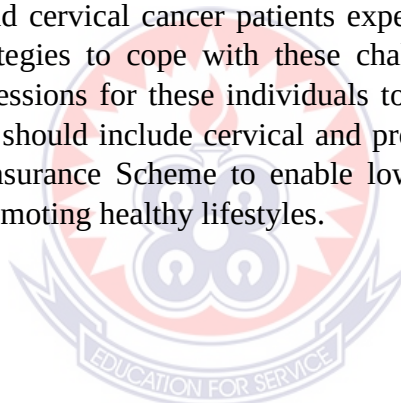
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ABSTRACT

Cervical cancer is the fourth most common cancer in women, with over half a million cases annually worldwide. Prostate cancer is the second most common cancer in men globally. In Ghana, prostate and cervical cancer account for 16.4% and 14.8% of all male and female cancers respectively. This study explored the social and psychological experiences, and the coping styles, of patients with cervical and prostate cancer at Cape Coast Hospital (CCTH) according to a phenomenological study design. The study population comprised individuals diagnosed with cervical and prostate cancers who are being treated in the study setting. Purposive sampling recruited 12 participants (6 males and 8 females) aged 38-76 years. Information were collected through individual interviews during hospital visits and coded thematically. A number of the psychosocial effects of prostate and cervical cancers for the participants, including inability to engage in sexual intercourse, insomnia, stress, depression, and anxiety due to fear of dying and constant pain, were unveiled in the study. Additionally, it identified coping mechanisms such as playing indoor games with family and walking around their neighbourhoods in the evening. Participants also demonstrated an understanding of the causes and risk factors of these cancers. In conclusion, prostate and cervical cancer patients experience significant psychosocial effects and adopt strategies to cope with these challenges. It is recommended to organize counselling sessions for these individuals to reduce stress and anxiety and Government of Ghana should include cervical and prostate cancer treatment costs in the National Health Insurance Scheme to enable low income earners benefit from these cancers while promoting healthy lifestyles.



CHAPTER ONE

INTRODUCTION

1.0 Background to the Study

Cervical cancer is often regarded as the fourth most common form of cancer in women, with more than half a million cases recorded annually in the world (Antoni & Goodkin, 2009). According to these two authors, the incidence of cervical cancer varies in terms of geographical regions with most of them occurring in developing countries. According to the World Health Organization (2023), cervix cancer ranks as the fourth most common cancer in women globally with an estimated 604 000 new cases and 342 000 deaths in 2020. Low- and middle-income countries have the highest number of incidence and mortality of cervical cancer. According to Arbyn, Castellsague, Sanjose, Bruni, Saraiya & Bray (2011), it is a longer time before cervical cancer arises from precancerous lesions that ultimately provide opportunity for early detection by screening the cervix. According to Gross, Gallo & Eaton (2012), the traditional cytology that is Papanicolaou test (otherwise known as Pap Smear), and liquid-based monolayer cytology have been proven to be the standard screening methods of the cervix for a possible risk of cervical cancer. Human Papillomavirus (HPV) infection is proven to be an adequate but required cause of cervical carcinogenesis.

HPV is a multiclonal group of viruses and contains over 170 types, and it is mostly spread by sexual intercourse (Arbyn et al, 2011). Most women (75%-80%) become infected by HPV at some point in life, and almost 90% of the infections clear up on their own within 1-2 years and very few of them ever become cervical cancer. Among many types of HPV, there were only 13 identified as oncogenic types, known as high-

risk HPV. More importantly, HPV16 and HPV18 are implicated in the causation of about 70% of all cervical cancers (Chen, Kao, Lin, Lee, Huang & Chung, 2012). More and more evidence also points toward persistent infection having a major role in malignant transformation. Up to now, however, natural history of HPV infections is not clearly explained. For instance, based on the study of Moberg, Gustavsson & Gyllensten (2013) that, it still has not been explained whether the "persistent" infection which has been proven is due to continuous active HPV infection, re-occurrence following a phase of viral latency with undetectability of virus, or due to re-infection. Some additional factors have been involved in HPV infection development, including high-risk HPV types, viral load, and integration of oncogenes. Some risk factors like smoking, use of hormonal contraceptives, and risky sexual behavior can also be involved in cervical carcinogenesis (Moberg et al, 2013). Moberg et al also describe that, tobacco smoking has 60% increased risk of cervical squamous cell carcinoma (in situ and invasive) than never-smokers, and that the risk is increased with increased cigarettes per day. The use of long-term hormonal contraceptives (>5 years) has been associated with double the risk of cervical cancer. Following controversy, early age initiation of sex (typically younger than 14 years) has been reported to increase the risk of cervical cancer. Women who have six or more partners are three times at risk of having cervical cancer compared to women who have one partner (Arbyn et al, 2011). High parity is postulated to be a risk factor for cervical cancer, particularly in developing nations (Zhang et al., 2020). In its early course, cervical cancer is asymptomatic. Symptoms such as vaginal bleeding, painful coitus, and pelvic pain will present in the terminal phase of the disease if preventive care is not available (Moberg et al, 2013).

The therapy for carcinoma cervix is excision of the lesion (e.g., cervical conization) and destructive therapies such as laser vaporization. For invasive cervix cancer, surgery in the form of hysterectomy (removal of the whole uterus and a portion of the vagina) or trachelectomy (removal of the cervix and a part of the vagina, but leaves the rest of the uterus) is conducted for the patient of preference. Chemotherapy and radiation are referred to in later stages.

Prostate cancer on the other hand is seen as the second most common form of cancer in men across the globe (Pettersson, Graff, Bauer, Pitt, Lis & Stack, 2012). The World Health Organization states that over one million cases of prostate cancer were diagnosed worldwide in 2012 alone. There were 307,000 prostate cancer deaths globally in 2012, and prostate cancer was the fifth most common cause of cancer death in men. In the WHO 2012 report, it was observed that close to all prostate cancers in the world are found in men aged over 50 years. Prasad, Eggener, Lipsitz, Irwin, Ganz & Hu (2014) indicate that, the pathogenesis of prostate cancer is still mysterious and not well understood. Genetics, dietary habits, and lifestyle have been identified to be the significant risk contributors to prostate cancer. Other risk factors that have been identified to cause prostate cancer are age and androgens (Prasad et al, 2014). Familial clustering of prostate cancer was first observed in 1956. The Nordic twin cohort established in 2000 that 42% of liability variation to develop prostate cancer is attributed to genetic factors (Bostwick, 2008). Subsequently, the large Nordic twin cohort, using new statistical methods, realized even higher genetic contribution to the risk of the disease (58%). Genome-wide association studies detected more than 90 common single-nucleotide polymorphisms (SNPs) in prostate cancer susceptibility that account for about 30% of familial risk of prostate cancer (Kassi & Moutsatsou, 2011). Kassi & Moutsatsou (2011) comment that the apparent

geographic heterogeneity of prostate cancer incidence and the strikingly high risk of prostate cancer among migrants from low-risk to high-risk nations are evidence for environmental determinants in prostate cancer etiology.

Pettersson et al, (2012) further report that certain food agents like fat, red and processed meat, and vitamin E have been linked to prostate carcinogenesis. But few of the findings have been replicated in large trials of chemoprevention. Increased physical activity is said to be linked with 10% lowered risk of prostate cancer, and increased body mass index is correlated with increased risk of advanced prostate cancer.

According to Bostwick (2008), early prostate cancer has no symptoms. According to Bostwick, initial symptoms in advanced stages of the disease include more than one trip to the bathroom to urinate during the day, difficulty urinating in a normal stream, painful urination, and blood in the urine. Late symptoms such as bone pain can result when the cancer has spread outside of the prostate, most frequently to the spine, hips, and ribs. Prostate cancer develops slowly and one can live with prostate cancer for several years without having any symptoms (Prasad et al, 2014). Men newly diagnosed with prostate cancer will likely die of another disease, i.e., cardiovascular disease instead of prostate cancer. It is crucially important to differentiate lethal or aggressive prostate cancer from relatively harmless ones at the time of diagnosis because some low-risk cases can be effectively managed by active surveillance or watchful waiting. Clinicians evaluate tumour characteristics, calculated prognosis, life expectancy, and patient preferences in accordance with clinical guidelines before individualizing prostate cancer treatment plans (Prasad et al, 2014). Treatment options

are currently, but not necessarily limited to, surgery, radiation, hormone therapy, and chemotherapy.

Psychological stress has been considered common in the everyday life of man. This stress occurs when one is emotionally challenged by assumed life-threatening situations and circumstances. While stress comes about as a result of the daily activities of man, several other distortions in the mental, social and psychological health of many people come about as a result of the physical pains they experience in times of the disease. Eze, Emeka-Irem & Edegbe (2013) mention that one of such impairments is cancer. Rowland (2008) is also of the view that some life experiences can be dreadful and among such experiences include receiving cancer treatment. Such existential threats as suggested by Rowland include pain, death, social exclusion and even the breakdown of family bonds.

Eze et al (2013) record that, people diagnosed with or under treatment for cervical and prostate cancers encounter several life-threatening challenges. These include severe treatment pains, unpleasant vaginal discharge, bleeding, difficulties in urinating, psychological distress, social isolation and ultimately death. According to Eze et al., (2013) prostate and cervical cancers are the most common forms of cancer that have resulted in several deaths among men and women across the world. Consequently, while most people also survive these two life-threatening impairments, the experiential ordeals of the people living in such conditions have not extensively been studied. Several empirical studies have recorded the implications of prostate and cervical cancer on the physical well-being of victims. Research shows that most people who survive these two cancers often experience significant depletions in their quality of life. In a surprising way, all research has been concentrated on physical

problems and side-effects of treatment and relatively little on such psychological traits as psychiatric morbidity, coping, and distress. Psychological experience is one of complexity, given the possible trajectory of the disease from the point of diagnosis, with its immediacy of impact, through the time of palliative care, with its accompanying existential concerns.

Routine accounts of life with cancer are vivid, casting the image of an old disease that has long been invited as a final challenge to medical science with the emotional and psychological needs of patients and their families and post-treatment survivorship issues, far-off thoughts that in fact are (Hoffman, 2013). In many ways, competition for the discovery of improved biomedical interventions has appear to have gotten ahead of efforts towards measures addressing the psychosocial well-being of patients (Hoffman, 2013). The prevailing metaphor of the day has been that of fighting cervical and prostate cancers with neglect of the research into the effect these two gender diseases have on men's and women's psychological and social well-being. Therefore, qualitative study is necessary to provide in-depth evidence regarding the social and psychological experiences of women and men with prostate and cervical cancers in the Ghana context.

1.2 Statement of the Problem

Cervical and prostate cancers represent critical public health challenges in Ghana, significantly impacting affected individuals and their families. Prostate cancer is the most prevalent cancer among men, accounting for 16.4% of all male cancer cases, while cervical cancer ranks second among women at 14.8% (Adanu et al., 2010). Alarming, the incidence rates of both cancers are on the rise, as highlighted by

Adjei-Mensah (2013), who reported that in 2008, 1,748 women and 1,290 men were diagnosed with these diseases, leading to an estimated 2,006 deaths.

At the Cape Coast Teaching Hospital, the growing number of cases reflects this national trend, presenting an urgent public health concern. Despite the prevalence of cervical and prostate cancers, there is a notable lack of qualitative research documenting the experiences of patients. Individuals confronting these conditions endure not only the physical challenges of their illnesses but also profound psycho-social difficulties, including anxiety, depression, and social isolation. The impact of these cancers on personal relationships can lead to significant turmoil, sometimes resulting in separation or divorce, a phenomenon that is particularly pronounced in the African context where cultural perceptions of sexuality play a critical role (Ussher et al., 2015).

Existing literature demonstrates that psychological distress is common among cancer patients, with Brown (2010) noting that those with cervical cancer often experience heightened anxiety and depression, contributing to a greater risk of suicidal thoughts. Similarly, Van Roij et al. (2019) found that the lifestyle changes necessitated by these illnesses can adversely affect relationships and daily functioning. However, while studies outside Ghana have documented these psycho-social impacts, local research has primarily focused on cancer risk factors, screening, and prevention (Edwin, 2017), underscoring a significant gap in understanding the lived experiences of affected individuals.

The urgent need for research is highlighted by the rising incidence rates of these cancers (Adanu et al., 2010), particularly among women, which necessitates an exploration of their comprehensive effects beyond the physical realm. Current literature predominantly adopts quantitative methodologies, focusing primarily on

prevalence rather than the qualitative experiences of those grappling with prostate and cervical cancers. This study intends to fill that gap by examining the psycho-social experiences and coping strategies of individuals living with these diseases.

While bringing forth the psycho-social factors of prostate and cervical cancers, the study attempts to create balanced plans of care that reflect physical and psychological needs. Identification of such coping strategies might possibly result in improved treatment outcome and better quality of life for the patients. Furthermore, the study results can inform policy initiatives to reduce the burden of cancer in Ghana through advocating for incorporation of psychosocial care services in the health system, extending comprehensive care that addresses the complex needs of patients with such terminal illnesses.

1.3 Purpose of Study

The primary purpose of the study is to explore the psychosocial experiences as well as coping mechanisms of people receiving prostate and cervical cancer treatment at the Cape Coast Teaching Hospital in the Central Region of Ghana.

1.3.1 Research Objectives

The main objectives that guided the research are to:

1. Obtain participants' knowledge on what cervical and prostate cancer is about.
2. Examine the causes of prostate and cervical cancers from the participants' perspective
3. Unearth the psycho-social effects of prostate and cervical cancers of participants.
4. Unleashed the coping strategies of participants with prostate and cervical cancer

1.4 Research Questions

In order to achieve the specific objectives of the study the following research questions were posed.

1. How do the participants view cervical and prostate cancers?
2. What are the perceived causes of prostate and cervical cancer by participants?
3. What are the psycho-social effects of prostate and cervical cancers on the participants?
4. Are there coping strategies used by participants with prostate and cervical cancer?

1.5 Significance of the Study

Although the literature on cervical and prostate cancer exists, data remains scanty in the context of Ghana. Firstly, the findings of this study would provide a basis through which the academic and institutional bodies would come to the knowledge of the social and psychological experiences and needs of people living with prostate and cervical cancers.

Secondly, this study has contributed to the methodological strength of the research areas. The existing literature is replete with a quantitative approach to the study of cancer patients where the emphasis is on the prevalence of prostate and cervical cancers. This study, however, fills the gap by studying the people who actually have life experiences of prostate and cervical cancers and how these affect their psychosocial life. It is reported from their own perspective and not how the researcher wants it to be.

Thirdly, it is expected that findings of this study will give healthcare professionals valuable information that will guide the formulation of the social and psychological

care required by prostate and cervical cancer patients. The findings are also expected to attract the attention of health practitioners, counsellors, and the general public to the concerns of individuals who survive prostate and cervical cancers so that interventions are instituted to allow them live a quality life. In particular, policymakers in the health ministry can utilize the findings to make policies that will help Ghanaian men and women with prostate and cervical cancers. These findings may be used for the development of training modules of counseling professionals so as to bring better mental and psychological well-being among people with such disabilities.

1.6 Delimitations

The confines of this study were to explore the experiences of women and men with cervical and prostate cancers. The researches carried out in this study only included the physical, social, and psychological well-being of the subjects. Only men and women who are taking medical treatment for prostate cancer and cervical cancer at the Cape Coast Teaching Hospital were involved in the study.

1.7 Operational Definition of Terms

Cervical Cancer: abnormal body cell growth in the cervix of the uterus.

Prostate Cancer: Prostate cancer refers to a kind of abnormal cell growth in the prostate gland in males.

Prostate Cancer: Prostate cancer is a kind of abnormal cell growth in the prostate gland in males.

Experiences: are the events that a woman living with cervical cancer experiences on a daily basis.

Physical Well-being: is contentment with life as one experiences the signs and symptoms of cervical cancer and the side effects of treatment.

Psychological Well-being: is an individual's contentment with his/her mind, the ability to communicate anxiety, fear, and emotions as he/she perceives the symptoms and signs and also the side effects of cervical cancer treatment or a positive state of mind.

Social Well-being: is an individual's contentment with her connection to other people around her and her financial issues as she perceives the symptoms and receives treatment of cervical cancer.

Coping strategies: are individually learned behaviors employed by women and men with cervical and prostate cancer respectively in trying to lead a purposeful life as they suffer from the symptoms and side effects of treatment.

1.8 Organization of the Study

This study is organized into five chapters. Chapter One introduces the topical issues surrounding the study, highlighting the problem it aims to investigate. It outlines the study's objectives and research questions while emphasizing its significance for practice and contribution to existing literature. Additionally, this chapter includes the delimitations and operational definitions of key terminologies. Chapter Two presents a review of relevant literature related to the topics raised in the study. It examines models and theories that align with the study's context. Chapter Three details the research methodology and approach adopted to achieve the study's objectives. Chapter Four focuses on the analysis of raw data, presenting the findings and discussing the results in relation to existing literature. Chapter Five concludes the study and offers recommendations for practice.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

The foundation of this chapter was to begin a review of the literature of the provided literature on the subjects of research of concern in the study. The first half of the review considers the general picture of the two infirmities (cervical and prostate cancers) in concern. The review then considers the effect of the two cancers to patients' physical, social and psychological well-being. The review also considers the coping of cervical and prostate cancer patients by exercising a concern for their patients' stress and psychological relief needs.

2.1 Theoretical Framework

This section of the chapter discusses the theoretical underpinning of the study. the theoretical basis of the study is underpinned by three major theories which are discussed below.

2.1.1 The Quality of Life Model as Applied to Cancer Survivors

Quality of life has been defined in numerous words by many authors. The quintessence of all the definitions is one's health role in one's ability to lead an acceptable life (Bullinger, Anderson, Cella & Aaronson, 1993). Others define QoL as one's general satisfaction with life and overall sense of personal well-being (Schumacher, Olschewski & Schulgen, 1991). Again, QoL is a measure of well-being that has two aspects: the ability to perform daily functioning that reflects physical, psychological, and social well-being; and patient satisfaction with levels of functioning and disease control (Ferrans & Powers, 1992). And yet another school of thought defines the definition of QoL as "the subjective and personally derived

judgment of overall well-being that arises from the synthesis of satisfaction across an aggregate of personally or clinically significant domains" (Bishop, 2005). For Carr, Gibson & Robinson (2001), Quality of Life (QoL) is a catch-all term and the effect of impairment or disease on an individual's typical way of life. Thus, QoL is a measure of the degree to which the patient lives now in comparison with some standard (Cella & Tulsky, 1990). Ferrell et al (1995) and subsequently modified in 1999 developed the Quality of Life Model Applied to Cancer Survivors. The model as observed from figure 2.1 consists of four core areas/dimensions of physical, psychological, social and spiritual well-being.

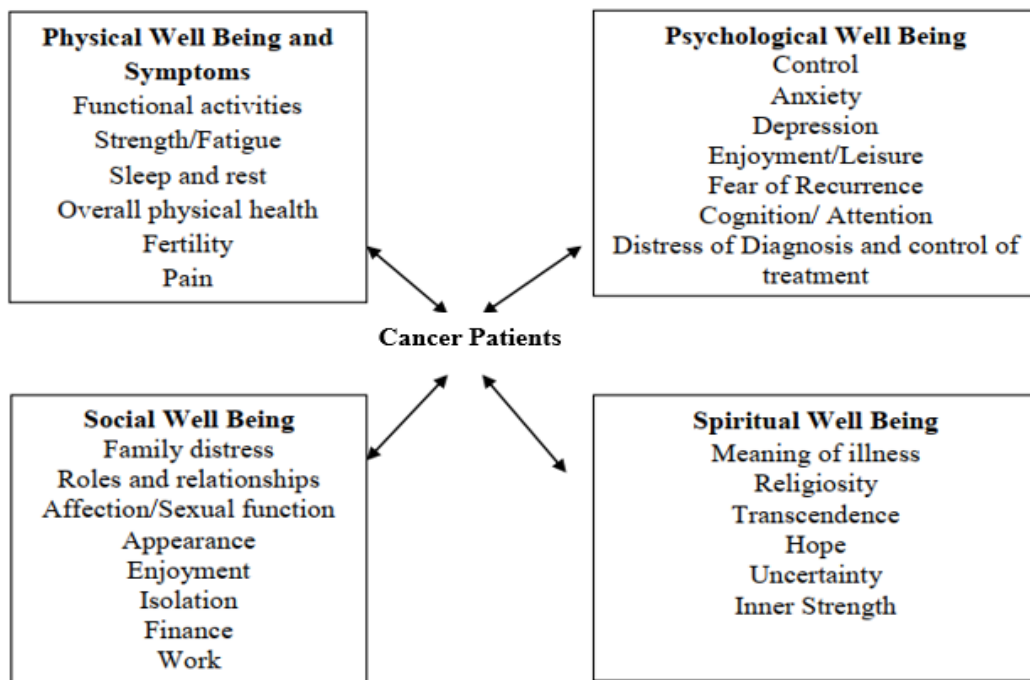


Fig 2.1: Quality of Life Model applied to cancer patients (Ferrell, 1999)

The most significant features of this QoL are multidimensionality and subjectivity. Multidimensionality is the standard according to which working with the areas (physical, functional/role, emotional/psychological and social well-being) is feasible. Subjectivity is the patients' subjective experience of disease and treatment, self-concept and estimation of harm or risk (Cella, 1994). Objective observation may also

be included in QoL when conducting health research. However, choice between objective or subjective QoL is largely premised on appropriateness, significance and quality of research issues to be answered. In health care in medicine, QoL forms a cornerstone of healthcare decision-making. In cancer, quality of life has been defined as an individual judgment of being good or best achievable well-being sustained by more than one dimension and typically encompassing the physical, psychological, social, and spiritual dimensions or domains (Dow, 1992). Survivors' QoL and how these are to be measured is a necessity with advances in cancer care and supportive care that have resulted in more people living longer (ACS, 1995). Further, the creation of a national forum for presentation of concerns of cancer survivors brought debate to the political and health policy agendas (ACS, 1995).

Embedding the Quality of Life Model within this study of the psycho-social experiences and coping strategies of survivors provides a structured approach to the capturing of the inter-connected, multi-faceted experiences of surviving cervical and prostate cancer. It emphasizes the necessity to respond to the physical as well as the psychological, social, and spiritual needs of survivors in order to improve their overall quality of life. Through focusing on these interconnected dimensions, researchers will be able to design more effective and integrated interventions to help individuals throughout their cancer journey.

In examining the personality of prostate and cervical cancers, physical health component of the model identifies the clinical characteristics of the cancers and how the participants deal or alleviate the symptoms of prostate and cervical cancers and their ability to exercise physical independence and capable of performing all the activity of daily living. Psychological well-being is being in control in the midst of

life in the midst of disease characterized by altered life priorities, emotional suffering, fear of the unknown, and constructive life change. The social well-being under the model also accounts for the impact of cancer on individuals, their role and relationship and the extent to which they can manage those elements. Cancer affects not only the physical health of the patient but also the social and psychological lives. The field of psychological and social well-being makes it possible to assess the effect of cervical and prostate cancer on the psychological well-being of participants and on their relationship with near relatives and others.

The religiosity varies depending on how well one copes with uncertainty brought about by hope and as per the experience of cancer under the quality of life framework. This informs how cervical and prostate cancer participants cope with their sickness in religiosity and spirituality.

The entire model allows researchers to understand the specific challenges faced in each QoL domain and assess the different coping strategies for improving QoL. It helps to design targeted psycho-social support programs that address the holistic needs of persons diagnosed with cancer, leading to better patient-centered care.

2.1.2 Psychosocial Adaptation Model

The Psychosocial Adaptation Model provides a framework to understand how individuals adapt to chronic illnesses such as cervical and prostate cancer. This model considers the emotional, cognitive, and behavioral adjustments that individuals undergo in response to their diagnosis and treatment. Applying this model to the study of psycho-social experiences and coping strategies offers insights into the adaptive processes and mechanisms used by these individuals. The Psychosocial Adaptation Model typically includes the following components:

Cognitive Appraisal: How individuals perceive and interpret their illness.

Emotional Response: The emotional reactions to the illness and its impact.

Coping Strategies: The methods and techniques used to manage stress and adapt to the illness.

Adaptive Tasks: The specific tasks individuals must accomplish to adapt to their illness.

Outcome Indicators: Measures of successful adaptation, such as quality of life and psychological well-being.

Psychosocial adjustment or adjustment to cancer is a continuous process in which the patient attempts to adapt to emotional distress, solves puzzles that are specific to the consequences of this disease, and comes in charge or achieves mastery over incidents that are linked with this illness (Holland, 2002). Cancer adaptation is not a single and standalone event, but a cyclical process of response allowing the person to perform the various activity related to everyday living with cancer. Successful or normal adaptation follows a patient who has managed to reduce the changes of the various domains of functioning and maintained emotional stress under control but continued to engage in the aspects of life that still have meaning and value.

Psycho-oncology works with the emotional, social, spiritual, and existential suffering provoked by cancer, according to Holland (2002). The aim is to allow the patient to attribute a tolerable meaning to the existence of an obtrusive and unwanted disease that jeopardizes the future and life in general. There is still no overall model with all the components that create this suffering concerning cancer, at least up to the moment. It has been used in cancer, providing a theoretical model through which one can think about the processing of coping for an end-stage disease, the psychological

distress with which it is associated, and the losses that are incurred. The indicators of this model are two processes, hence they are indebted to Folkman and Greer (2002). Appraisal refers to the individual's subjective opinion regarding personal relevance of a specific event and reorientation of the individual's resources in coping with it. Appraisal is based on the assumption that individuals constantly evaluate their encounter with the world. Appraisal of a specific event will affect subsequent emotions and coping. The process of stress starts with the individual being aware that surviving cancer is a very likely fact, or already is. The individual comprehends then an adjustment, or potential adjustment, in his/her goals and worries assumed so far. Assessment of this actual or potential change produced by cancer involves assessment of its personal meaning (it may have a meaning of harm or actual loss, of actual or potential harm or loss, or it will represent a personal challenge), and assessment of the potentials of coping, or secondary appraisal.

The first appraisal relies upon the patient's own assumptions and principles.

Secondary appraisals pertain to how much the individual believes he or she can do to control or change the situation created by the cancer. For example, colon cancer recurrence will lead to assessment of a combination of harm (to his/her mood, hope, trust, family), threat (to short-term health, to short or middle-term life, to independence, to the financial welfare of his/her family) and losses (of control, physical health, future plans, etc.). On the other hand, coping describes the tangible cognitions and actions that a person uses in his/her struggle to cope with the cancer. Patients use three major coping styles: emotion-focused strategies; problem-focused strategies, and meaning-focused strategies. The first ones help oncology patients to adjust to their degree of emotional distress (e.g., avoidance, escape, seeking social support, distancing); the second ones help them to adjust to distressing states, trying

to alter directly the distressing condition that leads to this distress (e.g., through search for information, problem-solving of deferred problems); and the last one helps to get insight in the pathogenesis of the disease and how it will transform their life. People differ differentially in their attempts at coping, depending on how intense the emotional response and coping ability of the person are, on the problem-solving competence specific to the situation, and on the changing alterations in the person, environment, and relationship as the situation unfolds.

Integrating the Psychosocial Adaptation Model into research on psycho-social experiences and coping strategies provides a structured approach to understanding how individuals living with cervical and prostate cancer adapt to their illness. It highlights the importance of cognitive appraisals, emotional responses, coping strategies, adaptive tasks, and outcome indicators in the adaptation process. By focusing on these components, researchers can develop more effective and comprehensive interventions to support individuals in their adaptation journey, ultimately aiming to improve their overall quality of life and well-being.

In cognitive appraisal, individuals with cervical or prostate cancer may have varying perceptions of their illness, influenced by factors such as the stage of cancer, prognosis, and personal beliefs. These perceptions affect their overall adaptation process (Badr & Acitelli, 2020). Cognitive reappraisal techniques, such as reframing the illness in a more positive light or focusing on aspects within their control, can help individuals manage their stress and improve adaptation (Garland et al., 2017).

Emotional responses to cancer can include fear, anxiety, depression, and anger. These emotions are a natural part of the adaptation process and can fluctuate throughout the illness trajectory (Pitman et al., 2018). Emotional coping strategies might involve

seeking emotional support from loved ones, participating in therapy or counselling, and engaging in activities that promote emotional well-being, such as hobbies or relaxation techniques (Stanton et al., 2015). Coping strategies can be problem-focused (e.g., seeking information, making treatment decisions) or emotion-focused (e.g., managing emotional distress, seeking social support). The effectiveness of these strategies can vary based on individual circumstances and resources (Hulbert-Williams et al., 2015). Effective coping strategies for managing cancer might include active problem-solving, utilizing healthcare resources, engaging in support groups, practicing mindfulness, and maintaining a positive outlook (Mosher et al., 2017).

Adaptive tasks for cancer survivors might include managing symptoms and treatment side effects, maintaining normalcy in daily life, adjusting to changes in self-identity and body image, and navigating healthcare systems (Langston et al., 2018). Addressing these tasks often involves setting realistic goals, prioritizing self-care, seeking information and resources, and establishing routines that accommodate treatment schedules and physical limitations (Brandão et al., 2019).

Successful adaptation is indicated by improved quality of life, psychological well-being, and the ability to maintain social roles and relationships. These outcomes can vary widely among individuals based on their adaptive processes and resources (Paterson et al., 2020). Monitoring progress through regular assessments, seeking feedback from healthcare providers, and adjusting coping strategies as needed can help individuals achieve better adaptation outcomes (Park et al., 2018).

Using the Psychosocial Adaptation Model to study the psycho-social experiences and coping strategies of individuals living with cervical and prostate cancer allows researchers to identify key adaptation processes including specific cognitive, emotional, and behavioral adjustments required for effective adaptation. Also, the

theory supports evaluating coping abilities in adaptation and quality of life enhancement; in intervention development, including the cognitive, emotional, and instrumental needs of survivors of cancer and training the health professionals about the issues of adaptation among survivors, leading to more adapted and supportive care policy.

2.1.5 Restorative Model of Well-Being

The Restorative Model of Well-Being focuses on the holistic recovery of individuals by addressing their physical, emotional, social, and spiritual needs. This model is particularly relevant to individuals living with cervical and prostate cancer, as it emphasizes the importance of comprehensive care and support to improve their quality of life (Dickey & Ogunsanya, 2018). Applying this model to study psychosocial experiences and coping strategies can provide valuable insights into how these individuals restore their well-being amidst the challenges posed by cancer. The Restorative Model of Well-Being includes the following components:

Physical Well-Being: Managing physical symptoms and promoting overall health.

Emotional Well-Being: Addressing emotional distress and enhancing psychological resilience.

Social Well-Being: Strengthening social connections and support systems.

Spiritual Well-Being: Finding meaning and purpose in life and fostering spiritual growth.

Restorative model assumes that the process through which people are able to maintain a sense of well-being can become impaired as they confront pathogenic external occurrences (e.g., threat to health) or internal circumstances (e.g., states of mood, and existential concerns). The encounter with adverse occurrences triggers a coping process whereby threat appraisal against health and coping strategies (e.g., problem-

focused and emotion-focused coping, meaning-making, life goal and role modification) are employed to protect and promote one's wellbeing in the face of threats to health. When confronted with a cancer diagnosis, they will likely engage in the mental exercise of evaluating the type of stressor (i.e., threat, actual harm or loss) and whether or not they have the resources or ability to cope with it.

The assessment could involve looking for information about potential treatments and opportunities for success. Second, resources in the form of financial, social support, and access to treatment could be assessed to see if they exist and are adequate enough to overcome the threat. Assessment of what cancer would be like once treated in regards to goals (e.g., having a biologic child), roles in life, self-worth, and world beliefs regarding one's existence may also occur. Such an assessment is sometimes referred to as meaning-making.

People apply strategies to cope with appraised stressors. Dispositional factors and personality are key predictors of individuals' reactions to adverse events and traumas. Certain traits such as dispositional optimism, for example, affect individuals' appraisal of life situations, judgments about coping effectiveness, and coping regulation. Environmental resources and supports deliver vital support to physical and emotional coping. They come in many different forms and are used for a variety of purposes, such as emotional support, cognitive coaching, provision of coping models, learning new coping skills, and social persuasion of coping capacity (Hoffman et al, 2013). Connecting the Restorative Model of Well-Being to this study on the Psycho-Social Experiences and Coping Mechanisms of individuals living with prostate and cervical cancer, on the nature of prostate and cervical cancers, the physical wellbeing aspect demonstrates that individuals with cervical or prostate cancer typically suffer from physical issues such as pain, fatigue, and treatment side effects. These somatic

symptoms significantly affect their general well-being (Morrison et al., 2018). Effective coping strategies observed include adhering to medical treatment, engaging in regular exercise, healthy eating, and the incorporation of alternative therapies such as yoga or acupuncture in addressing the symptoms (Thomson et al., 2019).

Cancer diagnosis and treatment can lead to emotional distress which impacts the psychological state of the individual, including anxiety, depression, and fear. Emotional well-being is important for overall quality of life (Pitman et al., 2018). Hence it is crucial to identify the psychological effects of prostate and cervical cancer on participants. Strategies to enhance emotional well-being include seeking psychological counselling, practicing mindfulness and relaxation techniques, and participating in support groups to share experiences and reduce feelings of isolation (Faller et al., 2016).

Also, social support is vital for individuals coping with cancer. Positive social interactions can provide emotional comfort, practical assistance, and a sense of belonging (Paterson et al., 2020). This dimension is to measure the social effects of prostate and cervical cancer on participants. Building and maintaining strong social networks, engaging in community activities, and relying on family and friends for support can enhance social well-being. Online support groups and social media can also offer valuable connections (Hulbert-Williams et al., 2015).

Spiritual well-being involves finding meaning and purpose in life, which can be especially important for individuals facing a life-threatening illness. It can provide a sense of peace and acceptance (Balboni et al., 2017). Practices such as meditation, prayer, engaging in religious or spiritual communities, and exploring personal beliefs

can help individuals cultivate spiritual well-being. Life review and legacy projects can also provide a sense of purpose (Sherman et al., 2020).

Using the Restorative Model of Well-Being to study the psycho-social experiences and coping strategies of individuals living with cervical and prostate cancer allows researchers to understand the multifaceted needs of cancer survivors, including physical, emotional, social, and spiritual dimensions and design integrative care programs that address all aspects of well-being and provide tailored support to individuals.

2.2 Overview of Cervical Cancer

Cervical cancer is the 4th most common female cancer, and new cases occur with a frequency of half a million per year all over the world (Okumura et al, 2017). Cervical cancer incidence is geographically uneven and considerably higher in less developed regions. In 2015, with 563 new cases and 163 deaths, cervical cancer was the 4th most common female cancer in the globe (Okumura et al, 2017). Cervical cancer can develop from precancerous lesions over several years and thus early detection is possible with cervical screening. The conventional cytology Papanicolaou test, or Pap smear and liquid-based monolayer cytology are the most common cervical screening methods used (Smith et al, 2003). Cervical screening detected cytological abnormality is typically followed by investigation with colposcopy – macroscopic examination of the cervix on gynaecological examination, occasionally with biopsy. Histological findings are as follows: cervical intraepithelial neoplasia grade 1-3 (CIN 1-3), or invasive squamous cervical carcinoma, if the lesion is of squamous epithelium (representing 90% cervical carcinoma); cervical adenocarcinoma in situ or invasive cervical adenocarcinoma, if the lesion is glandular; or normalcy.

Cervical cancer does not have any symptoms when it arises in early stages. Symptoms such as abnormal bleeding from the cervix, pain on intercourse, or pelvic pain usually occur later in the disease (Smith et, 2003). Treatment for CINs involves removal of the lesion (e.g., cervical conization) and destructive procedures such as laser vaporization. For invasive cervical cancer, surgery comprises hysterectomy (removal of the whole uterus and part of the vagina) or trachelectomy (removal of the cervix and part of the vagina but leaves the rest of the uterus intact) for appropriate patients (Ben-Zur, 2011). Chemotherapy and radiation treatment are required in advanced stages. In a 2022 study on Survival times for Cervical cancer in Africa, the five-year overall survival rate was 40.9% while the five-year OS rate varied between a low of 3.9% in Malawi and a high of 76.1% in Ghana (Drokow et al., 2022)

2.2.1 Risk Factors of Cervical Cancer

HPV infection has been proven to be an insufficient but causally sufficient cause in the development of cervical cancerous tumour growth (Releigh, 2007). HPV is a very heterogeneous virus family with over 170 different types, and its primary mode of transmission is sexual intercourse. Most women (75%-80%) get infected with HPV at some point in their lifetime, and almost 90% of the infections clear by themselves within 1-2 years and only a very small minority go on to develop cervical cancer (Releigh, 2007). Of all HPV types, as low as 13 oncogenic types are known and are called high-risk HPV. Surprisingly, HPV16 and HPV18 account for up to 70% of all cervical cancer. There is also growing evidence of the causative nature of persistent HPV infection in malignant transformation. The natural history of HPV infections is still unclear. For instance, whether the "persistent" infection that is being detected represents a continuous active infection with HPV, re-expression after viral latency of unknown duration, or by re-infection is not known. Other factors which have also

been proven to induce the onset of HPV infection are high-risk types of HPV, viral load, and oncogene integration (Hoskin, 2007). The remaining risk factors, including smoking, hormonal contraceptive usage, and risky sexual behavior, contribute to cervical carcinogenesis.

Cigarette smoking has been associated with a 60% increased risk of invasive and in situ cervical squamous cell carcinoma compared with never-smokers, and risk continues to increase as a function of the quantity of cigarettes smoked 6 per day. Long-term usage of hormonal contraceptives (>5 years) has been associated with twice the risk of cervical cancer. Of contentious nature as it is, early sexual initiation (typically <14 years) has been speculated to increase cervical cancer susceptibility (Holden, 2008). Women with six or more sex partners are three times at risk of cervical cancer than women with one partner.

Heightened parity is in this regard suggested as a risk factor for cervical cancer, especially in the developing world (Holland, 2003). The augmented risk, however, applies only to women who have had greater than 7 term pregnancies. Of concern is that most of the risk factors may have the capacity to interact with HPV infection and cause a modification of the risk for cervical cancer, but they might not be responsible for the carcinogenesis by themselves. For example, instead of being carcinogenic to the cervix per se, oral contraceptives may make the cervical mucosa more vulnerable to infection with HPV by hormonal action and hence be a causative agent of cervical cancer (Holland, 2003).

2.2.2 Prognostic Factors

Clinical characteristics, such as stage of tumor and pathological features, are the most important cervical cancer prognostic factors to date. Clinical stage of cervical cancer

is established at initial diagnosis on the basis mainly of tumor size and its potential spread to the pelvis. The International Federation of Gynecology and Obstetrics staging system is the most used (Lewis, 2001). Five-year survival approaches 100% for microinvasive and 70-85% for local cervical cancer. Surgical staging may further improve the prediction by examining adverse pathological characteristics, such as lymph node metastasis, cervical invasion depth, and lymph-vascular space invasion. Certain histological forms, such as adenosquamous carcinoma and small-cell carcinoma with neuroendocrine differentiation, seen in approximately 5% of cervical cancers, have a poorer prognosis (Lewis, 2001). HPV status and infection activity are potential predictors for cervical cancer survival. HPV infection tends to predict favorable prognosis in patients with cervical cancer, even with clinical adjustment. Inconsistent results do remain, however, between infections with different types of HPV. Some studies have found that HPV18-positive cervical cancer had poorer prognosis after primary treatment than did HPV16-positive cancer, whereas others discovered that HPV16 positivity was associated with poorer outcomes than HPV18 positivity (Lewis, 2003). Viral oncoproteins, expressed by E6 and E7 genes of high-risk HPVs, may inactivate the tumor suppressor gene and thus be causative for variable clinical courses. Though less extensively documented, overexpression of vascular endothelial growth factor, epidermal growth factor receptor, cyclooxygenase-2, and tumor hypoxia have also been theorized to be potentially able to predict cervical cancer outcomes (Lewis, 2003).

2.2.3 Medical Treatment and Therapy

Treatment for cervical cancer is determined by the tumour stage (de Sousa, 2017). The tumour stage determines whether and to what extent the cancer has spread to

other parts of the body. The treatments available are the following: Surgery, Radiation Therapy, Chemotherapy and Targeted Therapy.

Surgery:

For Stage 0 or pre-cancerous disease, patients typically receive one of the following treatments. These treatments allow women to become pregnant in the future:

Cryosurgery: In this procedure, gas is used to cool a metal probe. The probe is applied directly on the cervix where it kills abnormally growing cells through freezing.

Laser Surgery: This therapy uses a focused laser beam that destroys abnormal cervical cells by evaporating them. It can also be used to excise a tiny portion of the cervix for additional laboratory examination. LEEP (loop electrosurgical excision procedure).

Conization: A heated electric wire loop is used to remove abnormally growing cells on the cervix. While undergoing conization, the physician cuts out a cone-shaped sample of the abnormal tissue with a scalpel. Cervical cancer patients who intend to become pregnant in the future are provided with conization under exceptional situations

Radical trachelectomy: The cervix and the top of the vagina are removed, but not the uterus. The lymph nodes in the pelvis are also excised. Where the cervix once was, the surgeon closes with a "purse string" stitch. This does leave an avenue for the patient to possibly be able to have a baby and carry to term. That pregnancy would likely be high-risk (de Sousa, 2017).

Simple hysterectomy: This is achieved by the removal of the uterus and cervix but without disturbing the surrounding tissues of the uterus. There is no excision of lymph

nodes. It blocks any future pregnancy in those patients with advanced cancer of the cervix who do not want to be pregnant.

Radical hysterectomy: This is a surgery that, according to Wills and Fegan (2001), involves the removal of the uterus, cervix, apex of the vagina and some ligaments and tissue surrounding the uterus. The pelvic lymph nodes are also removed. Ovaries and fallopian tubes are not removed in the majority of cases. This eliminates any possibility of a future pregnancy. Hysterectomies can be performed through: the vagina (vaginal hysterectomy) large abdominal cut (abdominal hysterectomy) or small abdominal cut (laparoscopic hysterectomy, e.g., robotic-assisted). Any method of removal of the uterus renders a woman incapable of becoming pregnant in the future.

Radiation therapy: Radiation therapy uses X-rays or other forms of high-energy radiation to kill cancer cells or keep them from growing (Cimprich, 2009). Two types of radiation therapy that are external beam therapy (EBT), brachytherapy, or both combined are typically used to treat cervical cancer. Radiation therapies are typically used in combination or concurrently with surgery.

External Beam Therapy (EBT): EBT involves the treatment of the tumor using high-energy x-ray or electron beams. Beams are usually generated by a linear accelerator and shaped to destroy cancer cells without damaging surrounding normal tissue. The majority of patients receive a type of EBT called Intensity-Modulated Radiation Therapy (IMRT). IMRT is a type of 3-D radiation that provides a highly conformal dose of radiation painlessly and safely to a tumor with minimal dose to surrounding normal tissue. EBT is typically a four to six-week once-daily treatment. Refer to the External Beam Therapy page and the Intensity-Modulated Radiation Therapy page for further details (Cimprich, 2009).

Brachytherapy or internal radiation therapy:

Brachytherapy uses a delivery device to place radioactive material inside the patient permanently or temporarily (Gray et al, 2007). This radiation goes only a short distance versus EBT. This allows your doctor to give a higher dose of total radiation to a smaller location over a short period of time versus EBT.

Brachytherapy in cervical cancer is known as intracavitary brachytherapy. A radioactive applicator is inserted into the cervix, vagina, and sometimes into the tissue outside the cervix. Intracavitary brachytherapy has two forms:

Low-dose rate (LDR) brachytherapy: LDR is performed in the hospital and takes a few nights of hospitalization by the patient. Medicine is usually given to make the patient comfortable for the procedure, which is performed in the operating room under general anesthesia typically. In women who still have a uterus, the equipment to insert the radiation is referred to as the tandem and ovoid applicators. Tandem is inserted through the cervix into the uterus, whereas the ovoid is inserted near the cervix. The radioactive material is loaded into the tandem and ovoid. To protect healthy tissue, sterile material is typically wrapped around the applicator to push the bladder and rectum aside from where the treatment is to be administered. The device is then inserted, and radiation material loaded into it, after which the patient is rolled into a shielded hospital room for the administration of the radiation over two or three days. During this time, the patient will receive medication to make them comfortable. The patient will be cared for by experienced doctors and nurses who take steps to reduce exposure to radiation.

High-dose-rate (HDR) brachytherapy: Treatment is often conducted on an outpatient basis, but occasionally the implanted device will be left in overnight and may require a brief hospital stay. HDR brachytherapy is given in several treatments,

usually with periods of days or as much as a week between them. HDR brachytherapy equipment (typically a tandem and ovoid applicator) can be inserted under general anesthetic or moderate sedation. The patient is then scanned with a CT or MRI so the radiation oncologist can determine where the radiation needs to go. The tandem is inserted through the cervix into the uterus, and the ovoid is put near the cervix. The patient is then taken to a shielded room and connected to the radiation source, which is supplied through the applicator and pulled out after a couple of minutes (Gray et al, 2007). A course of treatment can be given often, with an interval of a day or two between treatments.

The radiation applicator does not contain any radioactivity between treatments. The patient is kept in a standard (unshielded) hospital room outside of treatments. The patients are prescribed medication to relax them during treatment. Intracavitary brachytherapy is utilized in women who have undergone a radical hysterectomy and no longer have a cervix and uterus. Instead of placing a tandem and ovoid, a smaller device called a cylinder is placed in the vagina. A radioactive substance-filled tube is then placed inside the cylinder to apply radiation directly. More information is on the

Brachytherapy page. Chemotherapy:

Chemotherapy administers drugs intravenously (in a vein) or orally to kill cancer cells or stop them from growing.

Benign tumors are treated with chemotherapy to remove the risk of the disease returning in another part of the body.

As with radiation, chemotherapy can also palliate symptoms and extend life in cancer patients whose tumors have metastasized. Chemotherapy is typically given to patients over a period of weeks or months with breaks in between to minimize side effects. These side effects can vary from abnormal blood counts, tiredness, diarrhea, sores in

the mouth and an impaired immune system. More advanced, modern chemotherapy regimens leave the healthy tissue alone but suppress cancer cells from dividing and proliferating. Targeted therapy/monoclonal antibodies and immunotherapy: Targeted therapy infuses small amounts of synthetic "monoclonal" antibodies into patients intravenously (IV).

Monoclonal antibodies mimic the natural body-produced antibodies that can recognize and attack foreign invaders such as viruses and bacteria.

Once they enter the body, monoclonal antibodies bind to something on cancer cells' surfaces.

It kills the cancer or stops it from multiplying. Bevacizumab (Avastin) is one of the older monoclonal antibodies that are applied in cervical cancer. Once they enter the body, they bind to a protein called vascular endothelial growth factor and block new blood vessel formation that feeds cancer cells. This is primarily used in cancers that have extended beyond the cervix and the region around it. It is also utilized in recurrent cervical cancer therapy. New research has found that Pembrolizumab (Keytruda), an immunotherapy, can be used in cervical cancers that overexpress the protein PDL-1. PDL-1 binds to the protein PD-1, hindering your body from destroying cancer cells. Pembrolizumab prevents this binding from occurring. It is used to treat cancer that has failed to respond to chemotherapy, cannot be removed surgically, or returns.

2.3 Overview of Prostate Cancer

Prostate cancer is the most prevalent cancer in men in Europe and the US and the second most prevalent cancer in men globally (Hoffman, 2013). Over one million men were diagnosed with prostate cancer in the year 2012 globally. Almost all

prostate cancers are over 50 years old (99.9%) and are adenocarcinomas of prostatic epithelial cell origin (95%).

Early prostate cancer is not very likely to be accompanied by symptoms. Symptoms later in the disease can include frequent urination, weak stream, trouble urinating, painful urination, and hematuria. Late-stage symptoms, including bone pain, result from spread of the cancer from the prostate most commonly to the spine, hips, and ribs (Hoffman, 2013).

Prostate cancer grows slowly and one may live for many years with prostate cancer and have no symptoms. Individuals with newly diagnosed prostate cancer are more likely to die of a different disease, i.e., cardiovascular disease, than of prostate cancer. One-third of the Swedish patients and 11% of the US patients died from their prostate cancer within 5 years of follow-up for the periods 1961/1973 to 2008.

Ledderberg (2008) believes that it is of paramount importance to distinguish between lethal or aggressive prostate cancer and relatively harmless ones at diagnosis because most of the low-risk ones can be risk-free treated with active surveillance or watchful waiting. Tumor characteristics, estimated prognosis, life expectancy, and patient's personal preferences are utilized by clinicians in tailoring treatment according to clinical guidelines for prostate cancer.

2.3.1 Risk Factors

The etiology of prostate cancer is unclear and remains unknown. Genetics, diet, and lifestyle have been cited as the major risk factors for prostate cancer. Androgens and age are the primary risk factors that have been proven. Familial clustering of prostate cancer has been described as early as 1956. The Nordic twin cohort in 2000 revealed that genetic effects accounted for 42% of the variance in susceptibility to prostate cancer (Lewis, 2001). Later, through sophisticated statistical methodologies, the

larger Nordic twin cohort estimated even greater genetic contribution to risk (58%). Grant and Hennick, (2016) identified more than 90 common single-nucleotide polymorphisms (SNPs) related to prostate cancer susceptibility, which are estimated to account for around 30% of familial prostate cancer risk. Geographic variation in the occurrence of prostate cancer and the very high risk of prostate cancer in migrants from low-risk to high-risk nations are proof of environmental risk factors in the development of prostate cancer. Various dietary factors, such as fat, red meat, and processed meat, and vitamin E, have been implicated in prostate carcinogenesis. None of these observations have been confirmed in large chemoprevention trials. High physical activity has been associated with a 10% decrease in prostate cancer incidence and high body mass index has been associated with elevated risk for advanced prostate cancer (Grant & Hennick, 2016).

2.3.2 Prognostic Factors

The majority of the locally advanced cancers are slow-growing irrespective of treatment while others metastasize irrespective of surgical therapy (Hoskin, 2007). Prognostic nomograms incorporating Gleason scores, tumor stage, and pretreatment prostate-specific antigen (PSA) levels have been developed for the prediction of prognosis. They cannot fully account for the biological heterogeneity of prostate cancer for survival. Although the potential roles of variation in genes and gene expression are much less clear in terms of lethal outcomes several biomarkers have been found for prostate cancer progression (Hoskin, 2007).

Gleason Score

Gleason score is a traditional way of evaluating prostate tumour grade. It varies from 1 to 5 based on the histological pattern of differentiation and pattern of tumour cells in hematoxylin and eosin stained sections (Ben-Zur, 2011). Gleason patterns 4 and 5 are

considered to have poor prognosis. The two most dominant patterns are combined and graded to obtain the 2 to 10 Gleason score. Gleason grade has been shown to be strongly associated with the prognosis of prostate cancer and is one of the most powerful predictors.

Tumor Stage

The prognostic and treatment staging are determined primarily by the stage of the tumour, and either the clinical stage or the pathological stage is utilized for this. Both clinical and pathological stages have been shown to be good predictors of prostate cancer survival after radical prostatectomy and that the vast majority of localised cancers have a relatively indolent course even if no treatment is administered initially.

Biological Markers

Prostate Specific Antigen (PSA), a glycoprotein enzyme produced by prostatic epithelial cells, occurs in low concentrations in the blood of healthy men but increases with cancer and other prostatic disorders. PSA can provide information on screening (controversial), diagnosis, monitoring response to therapy, and recurrence of prostate cancer. However, it is not yet certain whether PSA is predictive of long-term survival independently of tumour stage and grade. Ki-67 is one of the proteins controlling the cell cycle and is present in all cell cycle phases, but not in resting cells. The Ki-67 index (percentage of positive nuclei in immunohistochemistry staining) was used as a useful marker to measure cell proliferation. Consistent evidence has found Ki-67 to be associated with disease progression and survival in prostate cancer. However, since it is relatively low in expression in preoperative biopsies, Ki-67 might not be as good as the other so-called classic factors at predicting prognosis.

Angiogenesis is an essential aspect of carcinogenesis since it provides oxygen and nutrients for the growth of tumors, along with direct vascular access for metastasis.

Micro vessel density was found by some but not all studies to be a prognostic factor for prostate cancer survival. Other morphologic features of angiogenesis like reduced vessel diameter and vessel lumen irregularity can also predict death from prostate cancer.

Apoptosis, or programmed cell death, is demonstrated by terminal deoxynucleotidyl transferase dUTP nick end labelling (TUNEL) assays to detect DNA fragmentation. The rate of tumour growth is established by the equilibrium between proliferation and apoptosis. Decreased apoptosis has been implicated in prostate cancer recurrence. Perineural invasion, the encirclement of nerve fibers by cancer cells, is a negative pathologic finding on prostate biopsy samples. The perineural space has been hypothesized to be a pathway of decreased resistance for the invading tumor cells. Perineural invasion on prostate biopsies has been demonstrated by good evidence to be a useful predictor for prostate cancer.

2.3.3 Medical Treatment

Surgery is also an effective choice to try and cure prostate cancer if it is not thought to have spread from the prostate gland (Hoffman, 2013). Radical prostatectomy is the most common type of surgery for prostate cancer. In this procedure, the physician removes the prostate gland and some of the tissue surrounding it, including the seminal vesicles

Radical Prostatectomy

With the more traditional type of prostatectomy, or radical prostatectomy, the prostatic surgeon makes a median long incision (cut-in) in the skin to excise the prostate and overlying tissues (Hoffman, 2013). It is now done less often than before. With a radical prostatectomy, the surgeon uses several tiny incisions and specialized long surgery instruments to excise the prostate. The instruments are gripped directly

by the surgeon or maneuvered with a control panel to control robotic arms that grip the instruments. This type of prostatectomy is now more popular in recent years. When performed by very skilled surgeons, the laparoscopic radical prostatectomy can yield results similar to the open method.

Radical retropubic prostatectomy

With this open procedure, the physician makes an incision in your lower abdomen, from belly button to pubic bone. The patient is either placed under general anesthesia (asleep) or given spinal or epidural anesthesia (numbness of the lower half of the body) and sedation for the procedure. If there is a reasonable chance the cancer might have moved to the surrounding lymph nodes (depending on his PSA level, prostate biopsy findings, etc.), the surgeon may also take out some of them at this time (a pelvic lymph node dissection). Those nodes are analyzed in the lab to see if they are filled with cancer cells. When there are cancer cells present in any of the nodes, the surgery might not be done by the surgeon (Hoffman, 2013). It is not possible that the surgery treats the cancer, and the removal of the prostate has dangerous side effects. After the prostate has been removed, while the patient remains under anesthesia, a catheter (soft, flexible tube) will be placed in his penis to help drain the bladder. The catheter will usually stay in for 1 to 2 weeks while the patient is recovering. The patient will be able to urinate normally once the catheter comes out. He will probably spend a few days in the hospital following surgery, and his activity will be limited for a few weeks.

Radical perineal prostatectomy

The physician creates (incision) an incision through the skin between the scrotum and anus (the perineum) in this open procedure (Hoffman, 2013). This operation is less common because it is more likely to create erectile difficulty and because lymph

nodes in the surrounding area cannot be removed. However, it is not as huge an operation and could be an option if the patient does not want erections and does not need lymph nodes removed. It could also be an option when he has some other conditions which will render him unable to undergo radical perineal surgery. It can be as effective as radical perineal prostatectomy if done properly. The perineal operation can be less painful and have faster recovery than the retropubic prostatectomy. When he is performing the operation, once he has finished, still anaesthetized, a catheter will be placed in your penis so that it irrigates the bladder. The catheter must stay inside for 1 to 2 weeks while he recovers. He can void on his own after removal of the catheter. He would probably stay in the hospital for several days after surgery, and his activity would be limited for weeks.

Laparoscopic prostatectomy

If the patient is considering treatment by laparoscopic surgery, it is necessary to know what is already known and what remains unknown about this technique (Wilkson, 2008). Most likely to be the most significant factors are the experience and expertise of the surgeon. If the surgeon concludes that laparoscopic surgery is appropriate for the patient, then it is advised to look for a surgeon who has ample experience.

Laparoscopic radical prostatectomy

For a laparoscopic radical prostatectomy (LRP), the physician makes small incisions in the wall of the abdomen through which he inserts specially long surgical instruments to take out the prostate. One of these instruments has a small video camera at the end through which the surgeon is able to see inside the body.

Laparoscopic prostatectomy, on the other hand, has some benefits over the open radical prostatectomy, such as less pain and blood loss, shorter hospital stay (typically no more than a day), quicker recoveries, and the catheter will only need to be left in

the bladder for a shorter amount of time (Pirl, et al, 2008). Incidence of important side effects of LRP, such as erection problems and inability to retain urine (incontinence) seems equal to open prostatectomies. Urinary control will take a bit longer to achieve with this technique. While more long-term studies are needed for a comparison of recurrence risk and side effects in LRP and open prostatectomy, success in either procedure seems to be most largely dependent upon the experience and ability of the surgeon (Pirl et al, 2008).

Robotic-assisted laparoscopic radical prostatectomy

This method, which is also known as robotic prostatectomy, is a method where a robotic system is used to allow the laparoscopic procedure.

The doctor sits at a console in the operating room as he performs via robot arms through multiple small incisions within the abdomen of the patient.

Robotic prostatectomy is better than the open surgery regarding the fact that it causes minimal pain, blood loss, and recovery time. Yet, in as far as men's side effects of concern, such as urinary or erectile dysfunction, are concerned, robot-assisted prostatectomy does not seem to make any difference from other techniques (Pirl et al, 2008). The robot system is more dexterous and more precise when handling instruments for the surgeon compared to open LRP. However, the most critical factor for the success of either type of laparoscopic surgery is the surgeon's skill and experience.

Transurethral resection of the prostate (TURP)

The treatment is increasingly becoming common in the treatment of men who come with benign enlargement of the prostate referred to as benign prostatic hyperplasia (BPH).

But at other times, it is also used with men suffering from advanced-stage prostate cancer in order to comfort them less, e.g., inability to urinate (Pirl, et al, 2008).

(It is not used for trying to treat the cancer.) As one does this operation, the physician takes out the middle section of the prostate gland that surrounds the urethra (the tube into which urine flows from the bladder). The skin is not cut open using this operation. A tool called a resectoscope is passed through the tip of the penis into the urethra to as far as the prostate. After it has been positioned, electricity is sent down a wire to heat it or a laser to burn or cut tissue. Spinal anaesthesia (to numb the lower half of the body) or general anaesthesia (when he is unconscious) is used. The operation will take around one hour. A soft tube known as a catheter is inserted through the penis into the bladder after surgery. It remains for around a day to let the urine pass while the prostate heals. The patient will be discharged home from the hospital within 1 to 2 days and resume normal activities in 1 to 2 weeks. He will most likely have blood in his urine after the operation. Infection and any danger from the type of anaesthesia given are other complications of TURP.

Side effects of prostate surgery:

The most important potential side effects of radical prostatectomy are impotence (erectile dysfunction; trouble getting or maintaining an erection) and urinary incontinence (loss of bladder control). These side effects also can be caused by other prostate cancer treatments.

Urinary incontinence:

The patient himself may not be capable of retaining his urine or leaking or dribbling. Incontinence is physically stressful on him but also psychologically (Lederberg, 2008). The following are the most important types of incontinence: Men with stress incontinence lose urine when they cough, laugh, sneeze, or exercise.

Stress incontinence is the most common after prostate surgery. It is usually due to trouble with the valve that keeps urine in the bladder (the bladder sphincter). Treatment for prostate cancer can weaken the valve or nerves that enable the valve to work correctly (Lederberg, 2006).

Men who have overflow incontinence have trouble emptying their bladder.

They leak slowly and have a decreased stream of urine.

Overflow incontinence most often results from a narrowing or blockage of the scar tissue by which the bladder exits the body. Men with urge incontinence develop a strong urge to urinate. This happens when the bladder becomes overly sensitive to stretching as it fills with urine. Sometimes after surgery, men are completely unable to control urine. This is known as continuous incontinence. Normal bladder control usually returns after surgery for prostate cancer in a few weeks or months. It usually comes back eventually. Doctors cannot really know how a man will be after surgery. Older men usually have more incontinence trouble than younger men. Surgery on the prostate is often done in major cancer centers, where doctors are very experienced, and usually there are fewer complications with incontinence.

Erectile dysfunction (impotence):

This means that the patient cannot attain an erection sufficient for sexual penetration. There are two small collections of nerves along with the prostate that govern erections. If erections are possible before surgery, the surgeon will try not to injure these nerves during the prostatectomy (Lederberg, 2008). This is called a nerve-sparing procedure.

But if the cancer is going into or around the nerves, the doctor will have to remove them.

He will not be able to have spontaneous erections if he removes both of them, but he might still be able to have erections with some of the following devices.

If just one set of sides nerves is removed, he may still be able to have erections, although chances are smaller than when neither was removed.

If neither nerve bundle is removed, he might be able to have normal erections some time following surgery.

Whether the individual's erection after surgery is successful or not relies on his age, ease of erection before surgery, and whether nerves were cut or not. All men will lose erectile function, but the sooner the man is treated, the greater the chances that he will be able to conserve this function. Surgeons performing a large volume of radical prostatectomies have lower rates of impotence than surgeons performing low volumes of such operations. There has been a great variety of rates of impotency published in the medical literature, but everyone is a case by himself, so the only way to gain some idea regarding his likelihood of recovery erections is to ask the doctor how successful he or she has been and what the likely outcome is going to be in the patient's case.

2.4 Psycho-Social Effects of Prostate and Cervical Cancer on Patients

2.4.1 Stress

Some but not all clinical trials have found a correlation between stress and cervical dysplasia. There is also unclear evidence regarding the risk of invasive cervical cancer, particularly regarding the associations of psychiatric disorder associated with stress. Poor evidence regarding stressful life events (e.g., close relative death and divorce) is mostly consistent. All six of the potential studies were Nordic and sampled the effect of a specific life event and none controlled for potential confounding lifestyle or behavioral exposures. The impact of different life events can vary, for instance; divorce appears to influence cervical cancer risk more than widowhood.

In addition, the impact may vary by different exposure ages, e.g., loss of parents was more likely to affect women during childhood for cervical cancer risk. For survival, evidence is relatively low. Three promising studies showed that life events were likely to be associated with a poor prognosis for cervical cancer, but none of the studies were sufficiently powered to conclude definitively. There is a need for additional studies of association between psychosocial variables and cervical cancer incidence and survival. Measurement of actual incidence of prostate cancer becomes operationally impossible in practice because of variable application of PSA screening.

To date, prospective studies or meta-analyses investigating the association of psychosocial variables with the incidence of prostate cancer have been few. The results are contradictory for example a large pooled meta-analysis had work stress most likely had reduced risk of prostate cancer whereas another cohort determined shift workers had 3-fold risk of prostate cancer. Although there was no significant statistical value, two further studies provided mostly opposite associations between everyday stress and risk of prostate cancer. Opposite significant associations also remained in depression and anxiety. The dissociation of pre- and post-PSA era results suggests a potential role of screening-seeking behavior in the identification of prostate cancer. For example, exposure to exceptionally stressful circumstances may entail differing health sensitivity and acceptability of medical guidance, followed by differing utilization of PSA screening and differing rates of prostate cancer. Conversely, to our knowledge, only three prospective studies have considered the possible effect of psychological stress on survival from prostate cancer. There is limited evidence, but the results are similar across varying stressors. Nonetheless, just a single study accounted for the effect of competing risks in these outcomes since, for

instance, psychological stress is fairly consistently associated with an increased risk of cardiovascular mortality in men with prostate cancer.

2.4.2 Depression

Smith et al, (2003) in a study to establish the independent contribution made by anxiety and depression to the quality of life in advanced prostate, cervical, and breast cancer patients found that 25 percent of the patients were demonstrating signs of anxiety on the Hospital Anxiety and Depression Scale (HADS) and 22 percent were demonstrating signs of depression on the same scale.

Following adjustment for the influence of pain and disease severity, depression and anxiety each made unique independent contributions to global health status, emotional and cognitive functioning, and fatigue. Anxiety alone made a unique contribution to social functioning, nausea, and vomiting. Pain, depression, and anxiety were therefore established to be associated with impairment of quality of life. Depression and anxiety were making independent contributions to every cancer patient's quality of life. In a research by Jayadevappa et al. (2011) on prostate cancer burden of depression, whose objective was to examine the prevalence and cumulative burden of depression in older men with prostate cancer, the results indicated that out of 50,147 men with new diagnosis of prostate cancer, 4285 (8.54 percent) were diagnosed with depression.

Depression diagnosis during treatment was associated with greater odds of emergency visits, hospitalization, outpatient visits, and excess risk of mortality over the follow-up. Healthcare costs associated with depression were sustained above those for men who did not have depression, across the follow-up. This study helped in coming up with the discovery that depression during treatment phase was associated with increased health resource use, cost, and mortality among men with prostate cancer.

Korfage et al. (2006) wrote the outcome of their study under the title: Anxiety and Depression after Cervical and Prostate Cancer Diagnosis and Treatment; 5-year Follow-up.

The study aimed to establish if baseline measures forecasted 1-year follow-up depression and anxiety. The subjects received four tests: pretreatment, 6 and 12 months, and 5-year follow-up on depression, anxiety, and mental health. The participants were stratified by therapy (radiotherapy or prostatectomy) and high and low anxiety. 28 percent of the pretreatment patients were 'high-anxiety'; the mean anxiety scores for these patients decreased significantly after treatment, ie in the direction of lower anxiety. High-anxiety men who received prostatectomy at all measurement points had lower depression scores than high-anxiety men who received radiotherapy. 27 percent of the men who received radiotherapy had clinically significant depression, compared with 20 percent in the general population estimated to have it. The change in mental health at 6-month follow-up was statistically significant and clinically important in all respondent groups. Baseline anxiety sensitivity as a screen was 71 percent for anxiety and 60 percent for depressive symptoms. It was recommended to clinicians by the researcher to identify early on those patients at risk for high depression and anxiety after diagnosis of prostate cancer since prevalence is high. Stommel et al, (2002) also undertook a study that gave strong rationale to the identification of depression and anxiety among cancer and prostate and cervical cancer patients for that matter.

The study found the extent to which functional impairment and depression account for deaths in newly diagnosed cancer patients.

The research compared survival time distinctions among cancer patients who have had new acquired depressive symptoms or functional impairments and patients who had such experience limitations prior to the study. The research established that, cancer patients who, after diagnosis, have new depressive symptoms or functional impairments only have the same survival chances as those with none. Cancer patients with pre-existing emotional or physical disabilities are, in the first 19 months after diagnosis, 2.6 times more likely to die compared to non-disabled patients. Patients with pre-existing emotional and physical disabilities before diagnosis have 7.6 times higher risk of death within the same period. This study led to cancer patients with a pre-existing disability and emotional problems having worse survival results than would be anticipated on the basis of the original cancer diagnosis alone.

While depressive symptoms and functional disability are anticipated transient responses to a cancer diagnosis and initial treatment, these appear not to influence individuals without prior history of such problems. Bennett and Badger, (2005) also investigated depression in men with prostate cancer. The objective of their research was to present an overview of the contemporary empirical literature base for depression in men with prostate cancer to guide psychosocial supportive care interventions and chart the future research direction. Their findings indicated that the men with prostate cancer most at risk for depressive symptoms were those with advanced disease, salient cancer and treatment side effects, and clinical histories of depression.

Prostate cancer pain was highly correlated with depressive symptoms, while radiation-induced or hormonal therapy-induced fatigue was correlated with worsening depression. Conversely, outcomes indicated that older age, marriage, high social

support, optimism, and fewer limitations in physical functioning were associated with lower depression risk.

Advanced-stage illness, characterized by prominent pain symptoms, treatment side effects, and history of depression are at risk for depression among cervical cancer patients (Cliff & McDonagh, 2000). Fear of cancer diagnosis, ignorance, subsequent medical complications that can arise, fear of death, and expenses are some of the factors that lead to depression in cervical cancer patients.

Diagnosis of this kind of depression is often late, hence ultimately lowering the chance of long-term survival of the cancer by 10-20 percent (Pasquini & Biondi, 2007).

Depression has been directly associated with pain and fatigue as symptoms of cervical prostate cancer (Pirl et al, 2008). Pain of the cancers can be established with direct association to depressive symptoms but radiation therapy or hormonal therapy-induced fatigue is not invariably related to increasing depression (Pirl & Mello, 2002). On the other hand, significant results from these studies reveal that age, marriage, greater levels of social support, optimism, and lower impairment in physical functioning are risk-reducing predictors for depression (Pirl & Mello, 2002). Literature for informational interventions and overall summary of psychosocial cancer intervention research in the case of prostate cancer indicates that supportive care interventions in the case of men with prostate cancer is not a well-developed science (Pirl et al, 2008).

Psychotherapy results in less depression and anxiety, and often reduction of pain despite it also resulting in more survival time in the case of patients (Carlson, et al, 2003). The neurobiological or physiological pathway through which the effects are

produced is unknown, although health maintenance behavior, use of healthcare, endocrine and hormonal changes, and beneficial immune function changes are the possible effects psychotherapy can have on patient physiology. Successful depression treatment thus means improved adjustment of patients, reduced symptoms, lower care cost, and may change disease course (Holden, 2008). A joint evaluation and treatment plan in which the urologist and the psychiatrist or psychotherapist concur on an acceptable treatment plan based on urological and psychological understanding of causation of depression is best for the patient (de Sousa, et al, 2012).

2.5 Coping and Adjustment Strategies

Adjustment is an adaptation process through which people adapt to disruptions in past ways of functioning (Bomar et al, 2004). Adjustment to cancer has typically been employed to characterize a term in explaining how one adapts to the illness and treatment and can be said to be performed on a continuum from normal to diagnosable mental disorders, such as anxiety disorder (Brennan, 2001). It is a very wide-ranging definition of psychosocial oncology that accounts for the ongoing process as the cancer patient struggles to live with distress (Brennan, 2001). Adjustment to cancer is the way in which Brennan (2001) operationalizes psychological processes over time through which people, and others within their world, come to terms with, learn from and adapt sheer numbers of changes which have been brought into being by the disease and its treatment. The adjustment factors are based on the disease, personal, and social (Holland, 2003).

Adjustment to cancer is therefore not the end result of adaptation to the common danger of cancer but, rather, an active psychosocial process that can have both beneficial and negative consequences for the patient, from personal growth to psychological disorder (Brennan, 2001). Prostate and cervical cancer adaptation has

also been operationalized as a process of stages including the disease and its treatment (Carver et al., 2008), pretreatment (Cimprich, 2009), treatment (Hoskins, 2007), post-treatment (Cohen et al., 2000), and during long-term survival (Tomich & Helgeson, 2002).

Cancer adjustment studies are heterogeneous and include various populations of cancers (Lewis, 2001; Northouse, 2016; Grant, & Hemmick, 2016). Cervical, prostate, and other cancer studies have shown that adjustment is linked to personal characteristics such as advanced age, education, income, and retirement (Mellon & Northouse, 2011) in terms of measuring adjustment in women and having more emotional distress than normative samples and more distress in women with recurrent compared to newly diagnosed cervical cancer. Adjustment problems were defined as having a lower educational level and being under treatment at the time, namely anxiety disorder (Brennan, 2001).

It has also been proven that couples with either cervical or prostate cancer revealed worse marital and family adjustment, uncertainty, and disease-related adjustment problems (Northouse et al., 2016) and 35% of patients who relapse have adjustment disorder (Okamura et al., 2017).

A longitudinal study that assessed women's adjustment and coping throughout the year following diagnosis in seventy patients with early-stage cervical cancer found that acceptance during diagnosis was shown to predict healthy long-term adjustment while avoidance coping predicted increased fear of recurrence (Stanton, et al, 2002).

2.5.1 Social and Care Giver Support

There is evidence that the awareness of available social support protects stressed individuals from psychological distress, depression, and anxiety (Wills and Fegan,

2001), in part by buffering them. Epidemiological studies of a variety of illnesses have found that individuals with low social support experience worse outcomes, including higher mortality (IOM, 2001). Consistent with this evidence, greater social integration has been related to reduced mortality in numerous prospective community-based studies (Wills & Fegan, 2001). Conversely, social isolation has been demonstrated through well-designed studies to be a robust risk factor for mortality due to all causes of death such as cancer, and for death from specific conditions such as heart disease and stroke (Naito et al., 2023). Indeed, the relative risk of mortality due to social isolation is comparable to that of high cholesterol, mild hypertension, and smoking (IOM, 2001). The pathways through which these effects take place are not well understood, although evidence suggests that stressful, weak, or nonexistent social relationships are associated with a reduced capacity to handle illness, adverse emotions like depression or anxiety, and immune and endocrine system dysfunction (Uchino, et al, 2006). The impact of social support on health outcomes has been observed especially in cancer patients (Patenaude & Kupst, 2005). A recent study which followed 2,800 cervical cancer patients for a median of 6 years, for example, found that women who were socially isolated before their diagnosis were at 66% higher risk of death from all causes during the study interval than socially integrated women. They were also twice as likely to die of cervical cancer during this period (Kroenke et al, 2006). A patient's perception of stiffer support from their relatives and friends can be attributed to greater psychological distress (Raleigh, 2007). Patients' adjustment to living with cancer can also be enabled or disabled through their family members and close others' reactions.

Descriptive evidence suggests that several ways of adapting in prostate cancer patients are brought about by family and partner support, (Morse and Fife, 2009), and

criticism and overprotectiveness by a spouse lead to stress and negative affect (Kuije et al, 2000). Both the quality of the support offered by the partner and the nature of their relationship as well as the couple as a whole are potent predictors of survival (Ben-Zur, 2011). Cancer-diagnosed men are shown to discuss cancer matters barely with their partners (Gray et al 2007) and difficulties in communicating about cancer with their spouses are among the contributory factors that can be unhelpful to men's adjustment (Gray et al, 2007). For instance, a study of prostate cancer patients and their wives has shown that the patients experience challenges in discussing issues related to concerns about their feelings, fears, anxieties, and responses to physical and sex functioning changes with their wives (Boehmer & Clark, 2001).

Another aspect that could influence the health of cervical and prostate cancer patients is the quality and type of care that they are able to receive from their careers. Care provided by oncologists and oncology nurses, hence medical practitioners who specialize in the treatment and management of cancer could be as significant as care provided by family and friends. High stress levels are reported among oncologists (Whippen & Canellos, 2011) and oncology ward nurses

Levels are higher among younger nurses and members who feel less supported within the ward and more newly graduated members (Wilkinson, 2008). Common to the sources of stress are; informing the patients of the cancer diagnosis, and emotional support for patients and families (Catalan et al., 2006) but these fields of training have been largely overlooked until recent years. The family members also have psychological needs (Lederberg, 2008).

The family fears a terminal illness diagnosis in a member that will cause him or her to lose him or her and suffer the pain he or she will endure. Also, psychological

impairment among family members can be as poor as that of the patient. Spouses, as primary caregivers of prostate cancer survivors, are also affected by their ill spouses' health status (Nijboer et al., 2012). In addition, caregivers' psychological impairment may be concomitant with, or even exceed, that of survivors. Couper et al. (2006) indicated that the clinical depression and anxiety symptom level in Spousal caregivers of Advanced Prostate Cancer (APC) patients was twice the population mean and slightly higher than that of APC survivors. Meta-analysis of studies by Hodges et al, (2005) of both patients' and informal carers' (more often spouses or partners) psychological distress showed that psychological distress in patients and their informal carers was similar over time, but during treatment, carers were more distressed than the patient. Thus, providing the family members with psychological interventions to deal with their distress would have a beneficial impact on the patients' distress level and on them because most of them become victims of the disease they want to help cure.

Studies have consistently shown that parents report more Post-Traumatic Stress Disorder and Post Traumatic Stress Syndrome than their children or adult cancer survivors, suggesting that the experience of having a child with cancer is more traumatic than the disease itself (Bruce, 2006). On the other hand, also at risk are child patients with cancer who develop typical psychological disturbance, acting-out behavior, and school difficulty (Lederberg, 2008). Furthermore, fears and anxieties are not typical symptoms for siblings of children with cancer and might get less attention from parents while their brother or sister receives treatment. The patients with cancer also receive sufficient emotional and organizational support and practical personal and nursing care from family members predominantly and also from friends (Kotkamp et al, 2005).

Counselling

In order to help patients with prostate and cervical cancer, as well as those who care for them, manage the disease, professional counselling is required. Cancer patients receive physical, psychological, informational, and social assistance from informal caregivers at great personal and financial cost (Molassiotis & Wang, 2022). It has been demonstrated that having access to psychological therapy and support services enhances mental health and aids in the development of useful coping mechanisms in patients. This can drastically reduce the incidence of depression and anxiety among cervical and prostate cancer patients. Pre-treatment counselling for chemotherapy patients has to be conducted to counsel them on treatment, their effects and treatment outcomes. Decisions on cancer treatment and care do not only involve the patient but also affect their families and caregivers. Counselling prior to treatment improves the patient's quality of life by addressing issues with their physical and mental health, social relationships, and surroundings (Periasamy, 2020). Patients who receive counselling have a better understanding of the side effects and treatment process, and their level of anxiety related to chemotherapy treatment is decreased (Avery & Williams, 2015).

Cognitive and Emotion-Focused Coping Strategies

In order to cultivate an optimistic view of oneself and cope with issues related to cervical and prostate cancer, cognitive coping strategies such as positive reappraisal, acceptance, self-distraction, self-soothing, perspective-taking and refocusing on planning, and avoidance are employed by patients (Ambikile, 2023; Osowiecka, 2022). To manage the stress of their sickness, many women turn to a cognitive method called positive reappraisal, which entails finding positive meaning in their experience with cancer. Another tactic that has been shown to lessen psychological

discomfort is accepting the diagnosis and the fact that you have cancer (Gallagher-Squires et al., 2021).

According to Karabulutlu (2014), active planning is one of the main coping strategy that is employed by family caregivers, while avoidance isolation was the coping strategy that they used the least, according to Karabulutlu (2014). The methods that aim to control the emotional fallout from stressful situations and achieve affective and emotional balance by managing emotions are known as emotion-focused methods (Fteiha & Awwad, 2020). Processing the cancer experience might be aided by expressing feelings and worries about the illness which also helps to reduce anxiety and depression related to the disease and treatment outcomes.

Behavioral Coping Strategies

Fatigue, a subjective feeling of exhaustion, sleepiness, or lack of energy that makes patients cut back on their regular physical activity while getting treatment, is the most common uncontrolled symptom in patients undergoing chemotherapy or radiation therapy (Lopez & Klainin-Yobas, 2021). It has been demonstrated that adopting behavioral coping strategies, such as regular and structured physical activities like exercising, can lessen fatigue, enhance mood, lessen the negative effects of treatment, and enhance both the physical and mental well-being of patients with prostate and cervical cancer (Esan et al., 2020). Exercises like yoga and tai chi have been shown to boost mood, lower stress, lessen symptoms, and improve quality of life all of which have an impact on cancer patients' survival (Rao, 2017).

Patients' eating habits can alter as a result of cancer and its therapies, which can also have an impact on how well the body absorbs nutrients and tolerates particular foods (Thomas et al., 2017). Eating well, which includes keeping a balanced diet full of fruits, vegetables, and whole grains, as well as adhering to dietary recommendations,

can help manage cancer symptoms by boosting immunity and enhancing general health. In order to strengthen themselves and survive the effects of both the illness and its therapy, patients diagnosed with cancer may need to alter their diets while undergoing cancer treatment (American Illness Society, 2023).

Problem-Focused Coping

Problem-Focused Coping strategy involves taking active steps to manage or alter the problem causing distress. For people with prostate cancer, this can mean becoming knowledgeable about the condition and its therapies. The professional care that they received from medical personnel and the possibility of recovery from their condition provided substantial comfort to women diagnosed with cervical cancer (Li et al., 2024). The medical professionals' expert support is a big consolation to women. Research has shown that when medical professionals educate women about cervical cancer, whatever misunderstandings they may have are dispelled (Ambikile et al., 2023; Dirar, 2022). Furthermore, by paying attention to the medical information Received from healthcare professionals, women with cervical cancer were able to lessen the amount of time they spent worrying about their health (Ambikile et al., 2023). A crucial aspect of cancer care is sensitive and effective communication with medical personnel (Maguire et al., 2015). In addition to bolstering survivors' self-care and self-efficacy and reducing pain, healthcare providers should give additional social support to help survivors manage life after cervical cancer.

Religious Coping

Individuals with chronic illnesses often deal with intense physical and psychological stressors as a consequence of living with an illness. According to research, the regularity with which cancer patients attend liturgy, prayer groups, and other religious activities is a good indicator of how involved they are in their religious spirituality

(Majda et al., 2022). According to Esan et al. (2020) and Khalili et al. (2013), cancer patients employed a variety of religious rituals, such as worshipping God, praying or requesting the Almighty God, listening to the word of God, believing God for healing, and praying, as forms of religious coping in managing their condition and generating hope. Increased religious coping has been shown to improve life satisfaction and quality of life while reducing anxiety and sadness and improving adaption to the illness process (Khalili et al., 2013). People with high spirituality also typically have more robust and varied coping mechanisms as well as a more optimistic perspective on life. Cancer patients' increased quality of life has been linked to spirituality, which has also been found to be an adaptive coping mechanism (Oliveira et al., 2021).

2.6 Summary of Literature Review

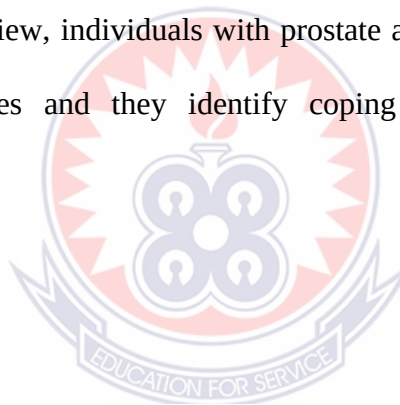
Cervical Cancer

Cervical cancer is the fourth most common cancer among women globally, with higher rates in developing areas. Five-year overall survival ranged from 3.9% to 76.1% in several countries in a 2022 report on African cervical cancer survival (Drokow et al., 2022). Prostate cancer's etiology is not fully understood, with genetics, diet, and lifestyle implicated as major risk factors. Age and androgens are established risk factors for prostate cancer.

The primary potential adverse outcomes associated with prostate cancer treatment, especially radical prostatectomy include urinary incontinence (loss of bladder control) and erectile dysfunction (difficulty achieving or maintaining erections). Psycho-social effects of prostate and cervical cancer on patients are stress and depression with the coping and adjustment strategies includes behavioral, problem-focused and cognitive . Esan et al. (2020) found that prostate and cervical cancer patients can alleviate fatigue, improve mood, lessen treatment side effects, and enhance overall physical

and mental well-being through regular and structured physical activities, such as exercising. Eating well, which includes keeping a balanced diet full of fruits, vegetables, and whole grains, as well as adhering to dietary recommendations, can help manage cancer symptoms by boosting immunity and enhancing general health. By paying attention to the medical information received from healthcare professionals, women with cervical cancer were able to lessen the amount of time they spent worrying about their health (Ambikile et al., 2023). Patients employed a variety of religious rituals, such as worshipping God, listening to the word of God, believing God for healing, and praying, as forms of religious coping in managing their condition and generating hope.

From the literature review, individuals with prostate and cervical cancers face varied psychosocial challenges and they identify coping strategies to adjust to their conditions.



CHAPTER THREE

RESEARCH METHODOLOGY

3.0 Introduction

The aim of this chapter was to elaborate, in depth, the methodology and research method used in the study. This included the research approach, research design, study population, sample and sampling procedure, research instrument, data analysis and presentation

3.1 Philosophical Assumptions and Paradigm

In research, paradigms play a very fundamental role. Ramlo and Neuman (2011), define a paradigm as the whole thought system. Paradigms are said to include, "theories, traditions, models, methodologies, and could even be said to be frameworks which affect the study. The research was done to study the psychosocial experiences and coping strategies of patients with prostate and cervical cancers.". Potrac et al., (2014) posit that interpretive paradigm is a research method that deals with understanding individuals and the world at large. It is hence the need to allow the participants in studies to speak freely about issues of their life. Under this paradigm, the researcher was able to get first-hand information from the respondents.

3.2 Research Approach

According to Sekaran and Bougie (2016), all research is theory underpinned which translates into the why or motivation behind the research. Sekaran and Bougie (2016), take the view that, theories in research are typically defined or tested in order to ascertain truth and fact through quantitative or qualitative research methods. Yates (2004) proposed two general methods of carrying out research which include quantitative and qualitative approaches to research. Quantitative research seeks to

achieve research objectives through the use of numerical statistics. According to Cooper et al., (2006), even though there are two broad research approaches, the researcher ought to be careful in selecting his or her research approach. According to Cooper et al., (2006), any research approach must fit the context of the study. The current research followed the qualitative approach.

Qualitative research, according to Groove (2005), is an inductive strategy for discovering or creating knowledge about life experience. It requires the involvement of the researcher in establishing the meaning or significance of a particular phenomenon to the individual or a group of people sharing common characteristics. The qualitative research design study examined the overall nature of the experience of people living with prostate and cervical cancers to gain an in-depth understanding of the daily pains and stress they experience. This choice also influenced the choice of research design, the type of sampling technique, data collection instrument, and also the method of data analysis and presentation that was used in the study.

3.3 Research Design

The research design for this study was phenomenology. The Phenomenological approach is a qualitative research methodology that focuses on exploring and understanding the lived experiences of individuals (Creswell, 2013). This approach aims to uncover the essence of a phenomenon through a deep exploration of participants' experiences, beliefs, and perspectives. In the context of a study on the psycho-social experiences of individuals living with prostate and cervical cancers, a phenomenological design was deemed appropriate. The Phenomenological approach provides a flexible and iterative process of data collection and analysis that enables researchers to refine their research questions and data collection techniques as the

study progresses (Creswell, 2013). This approach involves an ongoing process of data analysis and interpretation that can help researchers to identify key themes and patterns in the data.

In addition, the Phenomenological approach places a strong emphasis on the experiences of participants and their perspectives (Creswell, 2013). This approach helped to ensure the progress of the study by facilitating participant engagement and participation, which further helped me to gather rich and detailed data that reflected the experiences of study participants, which facilitated the progress of the study.

3.4 Sources of Data

The study on the psycho-social experiences of individuals living with prostate and cervical cancer using the Phenomenological Approach requires the collection of rich and detailed data that reflects the experiences of participants (Creswell, 2013). There are several sources of data that were used in this study:

In-depth interviews: these interviews are a primary source of data for the Phenomenological Approach. These interviews provided an opportunity for participants to share their experiences, beliefs, and perspectives in-depth, which can help researchers gain a deep understanding of the phenomenon under investigation (Moustakas, 1994). In this study, in-depth interviews were conducted with individuals living with prostate and cervical cancer to gather rich and detailed data on their psycho-social experiences.

Observation: Observation was used as a source of data to complement in-depth interviews. In this study, observations were used to capture participants' non-verbal behavior, which can provide insights into their emotions and experiences (Sandelowski, 2000).

Document Analysis: Document analysis was used as a source of data to supplement in-depth interviews and observations. Document analysis involves analyzing written documents such as medical records, patient diaries, and social media posts to gain insights into participants' experiences (Creswell, 2013). In this study, document analysis was used to gather data on participants' medical histories, treatment records, and online interactions.

3.5 Study Population

As Creswell (2015) defines, a study population is considered to be the potential study units that share characteristics of interest in the collection of data and information for a study. The study population therefore included 15 prostate and 25 cervical cancer patients who receive medical care from the Cape Coast Teaching Hospital.

Inclusion Criteria

Individuals suffering from prostate and cervical cancer at the time of the study.

Individuals who attended the Cancer Treatment Centre of the Cape Coast Teaching Hospital at the time of the study

Exclusion Criteria

1. Individuals suffering from prostate and cervical cancers who attended the Cancer Treatment Centre of the Cape Coast Teaching Hospital but refused to take part in the study.

3.6 Sample Size and Sampling Technique

A sample unit is considered to be the subset of the populations from which individuals are selected to participate in the data collection activity for a given study (Creswell, 2017). Participants were first identified at the Cancer Treatment Centre of the Cape Coast Teaching Hospital. The study did not set a predefined sample size but used

saturation to get the sample size. The sample size was determined when saturation was reached during the interview of participants who were purposively selected in the study. With participants with prostate cancer, saturation was reached with the sixth participant when the same responses were received. Also, saturation was met with the cervical cancer participants when the same responses were received with the eighth participant. This technique is used in qualitative research where it is difficult to determine the size of the sample.

Several sampling techniques exist in the world of research. In the context of this study, purposive sampling method was used to select the study participants. According to Monett, Sullivan, Dejong and Timothy (2016), purposive sampling technique is the conscious effort by a researcher to select a particular respondent based on his or her unique quality. Purposive sampling is a non-probability sampling method that involves selecting participants based on specific criteria, such as their experience with the phenomenon of interest (Baxter & Jack, 2008). In this case, purposive sampling was an appropriate sampling method for selecting participants who have been diagnosed with prostate or cervical cancer, meet the inclusion criteria and are willing to share their psycho-social experiences. The researcher identified potential participants by contacting cancer treatment center at Cape Coast Teaching Hospital.

3.7 Data Collection Instruments

Data collection refers to how the researcher obtains the needed information from the participants to respond to the research questions. This element addresses what information to collect, the way to collect information, who collects the information and when to collect the information (Hashem et al., 2015). Research instruments refer

to a designation of those things or devices that are being used in data collection in an attempt to simplify observation and measurement (Arafat et al., 2016). Because the study stemmed from a qualitative point of view, the data collection instrument for this study is a semi-structured interview guide, which is designed to gather in-depth information about the psycho-social experiences of individuals living with prostate and cervical cancer. Semi-structured interviews are a commonly used method in qualitative research as they allow for a flexible and conversational approach while still ensuring that key topics and themes are addressed (Kvale & Brinkmann, 2009).

The interview guide was structured around the research questions and objectives and was designed to elicit detailed responses from participants. The questions are open-ended to allow participants to share their experiences and perceptions in their own words. The use of a semi-structured interview guide ensures that all participants are asked the same basic questions while allowing for flexibility in the follow-up questions and probing (Smith, Flowers, & Larkin, 2009). The interview guide was designed to cover a range of topics, including the participants' experience of being diagnosed with cancer, their emotional and psychological responses to the diagnosis, their experience with receiving treatment, their coping strategies, social support networks, and overall quality of life. The guide was piloted with a small group of participants to ensure that the questions were clear, relevant, and appropriately structured.

During data collection, participants were identified at the Cancer Treatment Centre of the Cape Coast Teaching Hospital. During the interview process, I made use of active listening skills, such as reflective listening and paraphrasing, to ensure that the participant felt heard and understood (Hycner, 1985). Questions were asked based on the research objectives using the interview guide and the interviews were audio-

recorded and transcribed verbatim for analysis. Participants were given adequate time to express themselves. The interviews were ended after saturation was reached with the fourteenth participant (the sixth prostate cancer and eighth cervical cancer participants) where similar responses were given. Overall, the semi-structured interview guide is a valuable data collection instrument for this study, as it allows for a rich and detailed exploration of the psycho-social experiences of individuals living with prostate and cervical cancers.

3.8 Data Analysis

A common technique in qualitative research is thematic content analysis, which includes finding, analyzing, and interpreting patterns or themes in the data (Braun & Clarke, 2006). In the case of this study on the psycho-social experiences of individuals living with prostate and cervical cancer, thematic content analysis was used to analyze the data collected through the semi-structured interviews.

The first step in thematic content analysis is data familiarization, where the researcher reads and re-reads the transcripts to gain a comprehensive understanding of the data (Braun & Clarke, 2006). In this study, the researcher listened to the audio recordings and read through the transcribed interviews to become familiar with the participants' experiences and responses.

The second step is coding, where the researcher identifies and labels the key ideas, concepts, and themes in the data (Braun & Clarke, 2006). A deductive approach was used for coding, using the research questions and objectives as a guide to identify relevant themes. However, the researcher also remained open to any emergent themes that may arise from the data.

The third step is theme development, where the researcher collates the coded data into themes and sub-themes, and begins to analyze the patterns and relationships between

them (Braun & Clarke, 2006). A combination of inductive and deductive approaches was used to develop themes, allowing them to emerge from the data while still remaining true to the research questions and objectives.

The fourth and final step is the interpretation of the themes, where the researcher considers the broader implications of the findings and reflects on their relevance to the research questions and objectives (Braun & Clarke, 2006). In this study, the researcher interpreted the themes in light of the psycho-social experiences of individuals living with prostate and cervical cancer, and considered the implications for healthcare professionals, policymakers, and future research.

Thematic content analysis is a valuable data analysis method for this study, as it allowed for rigorous and systematic exploration of the psycho-social experiences of individuals living with prostate and cervical cancer.

3.9 Trustworthiness of Data and Data Source

In qualitative research, trustworthiness refers to the credibility, dependability, transferability, and confirmability of the data and data source. In this study, the trustworthiness of the data and data source were ensured through the use of several strategies.

Dependability: To ensure dependability, a detailed data collection instrument and standardized procedures for data collection and analysis were used. The semi-structured interview guide was pilot-tested before the actual study to ensure that the questions are clear and relevant. I also kept a detailed audit trail of the research process, including decisions made and changes implemented, to ensure that the study's findings are trustworthy and dependable (Lincoln & Guba, 1985).

Credibility: In order to respond that I am credible, I employed self-evident techniques such as member checking, peer debriefing, and triangulation. Member checking

involves presenting the findings to the participants to ascertain that the data gathered were accurate and pertinent. Peer debriefing involves seeking the opinions of other researchers or specialists to validate the findings. Triangulation involves the use of more than one source of data, for instance, interviews and observation, to validate that the data gathered were true (Lincoln & Guba, 1985).

Transferability: To ensure transferability, I provided a detailed description of the study's context, sample, and methods, which allowed other colleague researchers and supervisors to determine the applicability of the findings to other contexts or populations. I then strived to ensure that the sample is diverse and representative of the target population to increase the study's transferability (Guba & Lincoln, 1994).

3.10 Ethical Consideration

It is a requirement that researchers adhere to the research ethics and professional norms. Ethical issues tend to be centered on confidentiality, anonymity, trust and integrity. Important considerations were given to these ethical issues in the wake of this study. I obtained informed consent from the participants before collecting data. The informed consent form was explained in addition to the purpose, procedures, risks, and benefits, and participants were informed of their right, that they can withdraw from the study at any time. I ensured that the participants understood the study's implications and obtained their signature or verbal consent before proceeding with the data collection process.

I ensured that the participants' personal information were kept confidential and not shared with others. The participants' identities were protected by assigning pseudonyms, and all data were stored securely in password-protected computers. I used data encryption to ensure that the data was not accessed by unauthorized persons.

I took measures to ensure that the participants were not subjected to any harm or discomfort during the study. The study was designed to minimize the physical and psychological discomfort of the participants. If any adverse events occurred, I took appropriate measures to address them and ensured that the participants received adequate support.

I honored all the participants and treated them with equality without discriminating against their age, gender, race, or any other aspect. I provided the participants with a voice, and their experiences were adequately represented in the study findings according to Polit and Beck (2017). As research requires, all the materials that were used for the purposes of this study in the literature review forms were credited to dispel any fear of plagiarism.

3.11 Summary of Research Methodology

The research employed the qualitative approach to allow study participants to freely-express themselves on issues that affect their lives. The research design focused on explaining and understanding the lived experiences of individual through a deep exploration of participants' experiences, beliefs, and perspectives.

The sources of data that were used in this study include in-depth interviews, observation, document Analysis and focus groups. The study population consisted of 15 prostate and 25 cervical cancer individuals making up 40 individuals who seek medical therapy from the Cape Coast Teaching Hospital. The study employed inclusive and exclusive criterion in data collection. Purposive sampling method was used to select the study participants who have been diagnosed with prostate or cervical cancer, meet the inclusion criteria and are willing to share their psycho-social experiences. The interview guide was structured around the research questions and

objectives. Questions were asked based on the research objectives using the interview guide and the interviews were audio-recorded and transcribed verbatim for analysis.

The data collected was coded, where the researcher identified and labeled the key ideas, concepts, and themes in the data based on the research questions. The researcher interpreted the themes in light of the psycho-social experiences of individuals living with prostate and cervical cancer. Trustworthiness of Data and Data Source was enhanced through credibility, dependability, transferability, and confirmability of the data and data source.

In relation to the ethical consideration, informed consent was sought from participants before collecting data through informed consent. The participants were informed of the purpose, procedures, risks, and benefits, and their right to withdraw from the study at any time. Participants' personal information was kept confidential and not shared with others and their identities were protected by assigning pseudonyms. All data were stored securely in password-protected computers encrypted to ensure that the data was not accessed by unauthorized persons.

CHAPTER FOUR

PRESENTATION OF RESULTS

4.0 Introduction

This chapter presents the analysis of the most important data that were gathered in the field while conducting one-to-one interviews. The presentation in the initial half of the work considers the most important demographic features of the Participants, Cancer treatment types and participants' recovery status that were considered suitable for the study. Presentation of results is shown in the following sections.

Thematic content analysis was used to analyze the data collected through in-depth interviews (semi-structured) using the interview guide. Also, document analysis was used to gather data on participants' medical histories, treatment records, and online interactions; and observation was used to capture participants' non-verbal behavior, which can provide insights into their emotions and experiences.

During data familiarization after the interviews, the researcher listened to the audio recordings of participants and read through the transcribed interviews to become familiar with the participants' experiences and responses. The data was then coded by labeling the key ideas, concepts, and themes using a deductive approach and guided by the research questions and objectives. The coded data was collated into themes and sub-themes and the patterns and relationships between them analyzed. The themes were interpreted in light of the psycho-social experiences of individuals living with prostate and cervical cancer.

The initial analysis considered the investigation of the views/knowledge of participants on prostate and cervical cancers. The second section examined the perceived causes of prostate and cervical cancer. The third section explored the

psychosocial needs of the participants while the fourth section examined participants' coping strategies.

4.1 Brief Profile of Each Participants

This section provides general information on the 14 participants' background;

Joe Paty is 50 years old, a Christian with a basic education certificate and works as an auto mechanic. He has prostate cancer and has been treating it for the past six months. He is married with two children all alive. Both children and other family members support him financially.

Nkwanta is a trader with a secondary school education background. He is 53 years old. He has been battling with prostate cancer for the past one year. He has one child who works with a renowned company in the country. The wife is a petty trader who does not earn much. His joy is that when he was in active work he looked after two other family members who now support him financially.

Kojo Peepe is a trader who used to sell watches but is currently in the house because of the condition (prostate cancer). He is 60 years old and a Christian who fellowship with the Methodist church of Ghana. He has been on treatment for eight months now. He was blessed with three children and two are working.

Papawonsem is 53 years of age, a Christian and a veteran shoemaker who has worked for the past 30 years. He has prostate cancer and has been treating it for one year now. He has also been receiving help from some family members.

Wonesika is a retired receptionist who is a Christian and 70 years old and holds a Higher National Diploma (HND) in building and construction. He has been battling with prostate cancer for the past 9 months. The number of children he has is four and two are actively working and supporting their father financially.

Yempe is 73 years old, a retired teacher and a Christian and has been treating prostate cancer for 2 years now. He has five children who are all working. None of his family members support him financially.

Antie Vee is 38 years old, a Christian and a nurse by profession. She holds a diploma in General Nursing and has cervical cancer. She has been treating it for the past 3 years. The husband has left her because of her cervical cancer condition. Although divorced the husband support in taking care of the children

Yabs is a police officer, 40 years old and a degree holder. She has been treating cervical cancer for the past 3 years. The children are two. All are in school and so the parents help her in financing her treatment.

Yaabee is 42 years old, a Christian and a banker. She has cervical cancer and has been treating it for one (1) year now. She is not married but has four children from different men. Her parents sometimes help her in buying her treatments.

Skinpain is a lecturer by profession and is 45 years old. She has cervical cancer and has been treating it for one and a half ($1\frac{1}{2}$) years now. The children are two and still in school. Her primary caregivers are the family.

Donko is 48 years old, a Muslim and a yam seller. She has cervical cancer and has been treated for 3 years now. She didn't attend formal education. During her youthful stage, she used to change men as something. The children are not working and so a sibling is helping her with the payment of her treatment.

Connie is 50 years old, a Muslim and a koko seller. She has been battling with cervical cancer for the past 2 years. She has no formal education. Connie has three children of which two are working and one is schooling.

Weso is a dressmaker, 52 years of age and a Muslim. She has cervical cancer and has been treating it for 3 years now. She lost her husband about four years ago. The

children are working but are not minding her because they claim she didn't look after them.

Yaataa is 53 years old, a Christian and a shopkeeper. She has been treating cervical cancer for the past 5 years now.

4.2 Demographic Data of Participants

Table 4.1 presents the summary of the results on these demographic variables.



Table 4.1: Demographic Data of Participant.

S/N	Name	Gender	Pre-Diagnosis Age (years)	Current Age (years)	Marital Status	Household Size	Religion	Average Income (GHS)	Educational Background	Duration of Treatment	Occupation	Primary Care Giver	Other Supporting Person(s)
1	Joe Paty	M	50	53	*M	4	Christian	500	Ba/Sec	6 months	Auto Mechanic	Ch	Yes
2	Nkwanta	M	53	56	*M	3	Christian	500	Ba/Sec	1 year	Trader	Ch	Yes
3	Kojopepe	M	60	63	*M	5	Christian	500	Ba/Sec	1 year	Trader	Ch	Yes
4	Papawonsem	M	64	67	*M	4	Christian	500	Ba/Sec	1 year	Shoemaker	Ch	Yes
5	Wonesika	M	70	73	*M	6	Christian	500	Dip/HND	1 year	Receptionist	Ch	Yes
6	Yempe	M	73	76	*M	7	Christian	500	Dip/HND	3 years	Teacher	Ch	No
7	Antie vee	F	38	41	D	4	Christian	2100	Dip/HND	3 years	Nurse	P	No
8	Yabs	F	40	43	D	4	Christian	2700	Bach.Deg.	3 years	Police Officer	P	No
9	Yaabee	F	42	45	S	5	Christian	1700	Bach.Deg.	3 years	Banker	P	No
10	Skinpain	F	45	48	S	3	Christian	3500	Post Grad.Deg.	3 years	Lecturer	A	No
11	Donko	F	48	51	S	6	Muslim	700	NFE	3 years	Yam Seller	A	No
12	Connie	F	50	53	W	4	Muslim	600	NFE	3 years	Koko Seller	*S	No
13	Weso	F	52	55	W	4	Muslim	500	NFE	3 years	Dressmaker	*S	No
14	Yaataa	F	53	56	W	5	Christian	800	NFE	6 years	Shop Keeper	*S	No

Source (Field Data, 2021)**KEYS**

M=Male; F=Female; *M=Married; D=Divorced; S=Single; W=Widow; Ba=Basic/Secondary Education; Dip=Diploma; Bach. Deg. =Bachelors Degree; Post Grad. Deg. =Graduate Degree; NFE=No Formal Education; Ch=Children; P=Parent; Auntie=A; *S=Sibling

The information in Table 4.1 indicates that, 8 out of the 14 participants who participated in the study were females with cervical cancer and 6 were males with prostate cancer. Table 4.1 further indicates that, 7 out of the 14 participants aged between 51-75 years at the time the study was carried out while 7 aged between 38 to 50 years. 6 of the participants were married while 3 were either single or not married but with partners. The data further shows that 2 of the participants were divorced while 3 had lost their spouses. The data on the household size of participants in the study showed that 11 of the 14 participants had household sizes between 3 to 5 while 3 had household sizes of between 6 to 7. From Table 4.1, participants who were Christians were 11 while 3 were Muslims. Table 4.1 again shows that participants earn an average monthly income of GHS 500.00-3,500.00. It can also be inferred from Table 4.1 that, 4 out of the 14 participants had at least basic or secondary education while 3 had also attained either Diploma or HND certificates. The Table also presented that, 2 participants had attained their bachelor's degree while only one had a post-graduate degree. Four (4) of the participants had no formal education.

Data in Table 4.1 shows that 8 of the participants have been on treatment for at least between 1-3 years, while 4 have also been on treatment for at least between 7-1 year. The data also showed that one of the participants have been on treatment for at least between 4-6 years. Another participant has also been on treatment for at least between 1- 6 months as indicated in Table 4.1. The data in Table 4.1 shows that 6 of the participants cited their children as their primary giver and support givers. Another 3 cited their parents as their primary care and support givers. It can also be inferred from Table 4.1 that 3 of the participants cited their siblings are their primary caregivers while 2 also cited their extended family members as their primary caregivers. It can be seen from Table 4.1 that 9 of the participants indicated that they

do not have any other person(s) that give them support apart from their primary caregivers. The remaining 5 that is responded that they have other person(s) who give that support aside their primary care givers.

4.2.1 Age Categorization of Participants

This section of the analysis examined the age variations to ascertain the age categories of men who were affected with prostate cancer as well as the category of women who were more at risk of cervical cancer. The information obtained shows that 6 male participants were engaged in the study were all between the ages of 50 to 73 years. This suggests that, men who are above the ages of 50 years have higher risks of prostate cancer and it affirms DerSarkissian's (2021) assertion that men at 50 and above have their odds go up with regards to prostate cancer whilst the females who were in the study, majority, that is 6 (75%) were clustered between the ages of 38 and 50 years while 2 representing 25% were between the ages of 51 to 55 years. The data suggests that the categorization of women by age are highly at risk of cervical cancer is from the late 30s to 50 years. It confirms what Vegunta, Files & Wasson (2017) postulate that women at the age of 21 and older are at higher risk of cervical cancer.

4.2.2 Age of Participants diagnosed of prostrate and cervical cancer (PCC).

The information obtained by the researcher indicates that as many as 9 out of the 14 participants were sampled for the study had been diagnosed with either cervical or prostate cancer for 1 to 3 years. The data also shows that 3 of the participants had been diagnosed of the illness for at least 4 to 6 years. Only one of the participant's diagnosed was less than 1 year while another's was also more than 6 years.

4.2.3 Treatment Type of Cancer

Analysis from the data reveals that 7 of the participants were undergoing radiation therapy. Another 4 were also receiving chemotherapy while 3 were receiving radical prostatectomy. The data continues to show that 4 participants (prostate cancer) were on catheter support. Eleven participants were also using alternative medicine in support of their primary therapies.

4.2.4 Recovery Status of Participants

The records attained from the field work in 2021 depicted that majority (6) represented 43% of the 14 participants were recovering from treatment. The data further shows that the condition of 4 also representing 29% had significantly improved while another 3 representing 21% were nearing recovery. The data also shows that the condition of one of the participants was deteriorating.

4.2.5 Themes Generated from Emerging Data

The results in Table 4.2.5 are based on the following research questions

1. How do the participants view cervical and prostate cancers?
2. What are the perceived causes of prostate and cervical cancer by participants?
3. What are the psycho-social effects of prostate and cervical cancers on the participants?
4. What are the coping strategies used by participants with prostate and cervical cancer?

Main Themes	Sub Themes	Sub-sub Themes	Verbatim Quotation from Participants
1 Understanding the nature of cervical and prostate cancer	i. Participants' knowledge on prostate cancer		‘Based on the information I have received from the doctors and radio, I can say that prostate cancer makes my prostate gland big’ (Joe Paty)
	ii. Participant knowledge on cervical cancer		‘I know that cervical cancer is the cancer of the cervix which becomes bigger and sores at the entrance of the vagina making it difficult to engage in sexual intercourse’ (Nkwanta)
2. Causes of cervical cancer from participant's point of view	i. Causative factors of prostate cancer	i. Age	‘The doctor told me that I got prostate cancer because of my age. I got mine when I was 52. Although the doctor explained to me that some men get prostate cancer because of unhealthy dietary practices such as excess intake of meat and fat’ (Yempe)
		ii. Unhealthy reproductive health lifestyle	‘I know that an unhealthy sexual lifestyle exposes the vagina to several forms of viruses and germs that cause cervical cancer. I can say that the unhealthy sexual lifestyle between me and my husband exposed me to cervical cancer’ (Donko)
Main Themes	Sub Themes	Sub-sub Themes	Verbatim Quotation from Participants
1. Psychological effects of prostate and cervical cancer on participants	i. Impact on sexual behavior	a. Desire to engage in sexual activities	‘Since I was diagnosed of cervical cancer, my desire for sexual intercourse has declined. I can say that I have not felt any emotional triggers for sex ever since cervical cancer struck me’ (Auntie Vee)
	ii. Ability to engage in sex		‘I have not been able to engage in sexual intercourse with my partner since I was diagnosed of prostate cancer. I am not able to erect to the required level

			that I will even allow penetration' (Kojo Pepe)
	iii. Sleeping disturbance		'I often encounter sleepless night because of my condition. Sometimes I go through many pains during the night. Sometimes I encounter frequent urination, which disturbs my sleep in the night more often' (Joe Party)
	iv. Stress among prostate and cervical cancer participants		'As for me I can say that I go through what you have taught us every day. This is because I sometimes feel some acute pains especially in the afternoon also I go through stress because I mostly feel lonely when my children and husband are not at home' (Yaataa)
	v. Depression among the participants		'My husband left me because of my condition. He was uncomfortable with the unpleasant odour and we could not engage in any sexual activities. I always feel so sad when thoughts of my husband cross my mind' (Weso)
Main Themes	Sub Themes	Sub-sub Themes	Verbatim Quotation from Participants
2. Coping strategy of prostate and cervical cancer participants	i. Engaging in physical activities		'I mostly play indoor games such as ludo with my husband and children when I am stress up. At first I did not like such games but my condition has exposed me to a lot of stress. Ludo has been a very helpful games that take away a lot of stress from me. I enjoy it with my husband and children to the point that sometimes it takes my mind away from my condition' (Yaabee)
	ii. Watching television		'as for me I always watch television. My favourite channels are crystal television, Agoo television and family television. This is because they show a lot of interesting movies. I become happy when I watch the television' (Yabs)

4.3.0 Analysis of Data

This part analyzed the interview data and documentary evidence of participants.

There are four themes established

4.3 Understanding the nature of Prostrate and Cervical Cancer(PCC)

This section of the analysis sought to obtain the knowledge base of the participant on the nature, cause and risk factors of prostate and cervical cancer. The qualitative analysis under this section is presented in the subsections below.

4.3.1 Theme 1: Participants' Knowledge of Prostate Cancer

Research Objective 1: To obtain participants' knowledge on what cervical and prostate Cancer is about.

Generally, the participant with prostate cancer who were engaged in the study cited their basic understanding of prostate cancer as “enlargement of the prostate” which affects men’s ability to urinate. Excerpts from participants’ views are presented in the narrations below.

“Based on the information I have received from doctors and on the radio, I can say that prostate cancer makes my prostate glands big” (Joe Paty)

“I know that my sickness is the increase of the prostate gland that prevents you to urinate as normal men would do. I know this because the doctor told me that one of my prostate glands had enlarged beyond the normal size and that my inability to urinate was as a result of that” (Kojo pepe).

“I know of prostate cancer as the enlargement of the prostate glands that blocks urine flows from the urinary tract” (Wonesika).

4.3.2 Participants' Knowledge of Cervical Cancer

Research Objective 1: To obtain participants' knowledge on what cervical and prostate cancer is about.

Generally, the participant with cervical cancer who were engaged in the study cited their basic understanding of cervical cancer as “cancer of the cervix” which is a tumor that affects the cervix and entrance of the vagina of women which affects women's ability to engage in sexual intercourse. Excerpts from participants' views are presented in the narrations below.

“I know that cervical cancer is the cancer of the cervix which becomes bigger and sores at the entrance of the vagina making it difficult to engage in sexual intercourse” (Nkanta)

“The doctors explained cervical cancer to me as the cancer of the cervix that turns into sores at the entrance of the vagina. Personally, to me, I will explain cervical cancer as sores that develop in the entrances of the vagina that brings bad odour which make it difficult to enjoy sex” (Papawosem)

“Based on my experience, I would explain cervical cancer as painful sores that develop at the entrance of the vagina that makes it difficult for affected women to engage in sexual intercourse with their spouses” (Auntie Vee)

4.4 Causes of Prostate and Cervical Cancer from the Participant's Point of View

4.4.1 Theme 2: Causative Factors of Prostate Cancer

Research Objective 2: To examine the perceived causes of prostate cancers from the participants' perspective.

Generally, the prostate cancer participant cited age, unhealthy dietary practices, lack of engagement in physical activities, excessive intake of fat, excess intake of alcohol and

excess weight as the risk factors and causative agents of their current conditions. Some of the excerpts from the interviews under this section are captured in the narrations below.

4.4.1.1 Age as a risk factor

“The doctor told me that I got prostate cancer because of my age. Got prostate cancer when I was at the age of 52. Although the doctor explained to me that some men get prostate cancer because of unhealthy dietary practices such as excess intake of meat and fat” (Yempe).

“The doctors said I got prostate cancer because of my age. They explained that as a man grows old, the prostate glands are put at risk of enlargement especially if the person does not practice a healthy lifestyle such as avoidance of alcohol, regular exercise, and reduction in fatty food intake” (Papawonsem).

4.4.1.2 Excessive intake of fat as a risk factor

Kojopepe said that,

“The doctors told me that age is the primary factor that puts men at risk of prostate cancer but, for me, you can see that I am relatively younger but the doctors’ examination showed that I got prostate cancer because of excess consumption of fatty foods and late-night eating”.

4.4.2 Causative and Risk Factors of Cervical Cancer

Research Objective 2: To examine the perceived causes of prostate and cervical cancers from the participants’ perspective

Generally, the participants with cervical cancer from the Cape Coast Teaching Hospital cited age, unhealthy sexual lifestyle, and unhealthy reproductive health lifestyle as the causative and risk factors of cervical cancer. Some of the key narrations that emerged from the interviews are presented below.

4.4.2.1 Unhealthy Reproductive Health Lifestyle as a risk factor

“The doctors explained to me that some of the factors that put a woman at risk of cervical cancer include unhealthy reproductive health practices. It is true based on my experience. Because, before my condition, I was a fishmonger. The way and manner used to treat my reproductive health system was very poor. Because of the nature of the work, I hardly got time for my reproductive health. I am very sure that I was exposed to germs and bacteria that cause the disease” (Yaabee).

4.4.2.2 Unhealthy Sexual Lifestyle as a risk factor

“I know that an unhealthy sexual lifestyle exposes the vagina to several forms of viruses and germs that cause cervical cancer. I can say that the unhealthy sexual lifestyle between me and my husband exposed me to cervical cancer” (Donko).

“The doctors also explained that age can put a woman at risk of cervical cancer but they said that age does not put one at higher risk than an unhealthy sexual and reproductive lifestyle. I agree with what the doctors said, this is because I am just 29 years but I have cervical cancer. To me, age is not the causative factor of cervical cancer but unhealthy sexual reproductive practices. I developed the condition from viral infection from my partner” (Woso).

Comparing the narrations above on the causative and risk factors of cervical cancer to the medical point of view, it can be said that, the cervical cancer participant had relatively good knowledge on the causative and risk factors of cervical cancer (Yeboah-Asiamah et al, 2021).

4.5 Theme 3: Psychosocial Effects of Prostate and Cervical Cancer (PCC) on Participants

Research Objective 3: To unearth the psycho-social effects of prostate and cervical cancers of participants.

This section of the chapter sought to unveil the negative consequences of cervical and prostate cancer to the general prognosis and bodily well-being of the participants involved in the study. The analysis sought to explore the participant's ability to sleep and engage in sexual activities as well as the ability to urinate. The analysis of this subject is revealed in the succeeding sections.

4.5.1 Impact on Sexual Behavior

One of the largest problems that cervical and prostate cancer patient experience is an unexpected loss of their desire and ability to engage in sexual activities. Literature shows that, as both of these diseases are related to men's and women's reproductive wellbeing and health, the behaviors that affected individuals would encounter sexual problems will be greater. The impact of prostate and cervical cancer on sexual behaviour in the context of this study was assessed in two strands. That is the desire of the participant to engage in sexual activities and the ability to engage in sexual activities.

4.5.1.1 Desire to Engage in Sexual Activities

Desire to engage in sex was defined in the context of this study as the emotional drive that sparkles an individual's need for sexual intercourse. Sex was contextually defined with a focus on intercourse that is penetration. While various forms of sexual activities are identified, the study considered the desire of participants to engage in sex as their

emotional triggers for penetration. Out of the 14 participants, 3 women indicated that their desire for sexual intercourse had sharply declined while 5 men also cited the same. The findings therefore suggest that cervical and prostate cancer negatively affected the desire of 8 participants to engage in sexual intercourse. Some of the narrations of these 8 participants are quoted below.

“Since I was diagnosed with cervical cancer, my desire for sexual intercourse has declined. I can say that I have not felt any emotional triggers for sex ever since cervical cancer struck me” (Auntie Vee).

“I have never felt for sexual intercourse ever since I became a cervical cancer Patient. Because of the pains associated with the disease, thoughts of sex do not even come across my mind. Although I am married but my condition does not even trigger any need for sexual intercourse. My husband and I barely foreplay” (Yaabee).

“The challenges especially the pains associated with my condition (prostate cancer) does not even allow me to think about sex. I do not feel for sex in any way although I am married. As for me, I have never had any sexual feelings for the past 2 years” (Kojopepe)

“Thoughts of sex do not come across my mind because of the condition. My situation has graduated and my wife is aware of that. There is no desire of sex among us. Our focus is the treatment I am on. Although during the first year of my condition, I could think about sex, but because I delayed my treatment, the condition worsened. Now I do not think about sex” (Yempe)

4.5.1.2 Ability to Engage in Sex

The ability to engage in sex was contextually defined as the ability of the penis and vagina to penetrate and receive penetration respectively. As it has been mentioned in the previous section of this analysis, cervical and prostate cancers have been outlined as one of the infirmities that affect the reproductive and sexual health of both men and women.

It became imperative to also put into perspective the ability of the affected men to maintain the required erection for penetration as well as the ability of the affected women to accept penetration amidst the perceived pains associated with prostate and cervical cancers. The initial section of the analysis under this subject matter considered the frequency at which the affected men and women engage in sex. Analysis from the field work in 2021 on the frequencies at which the participant engages in sexual intercourse implies that majority of the participants that is 10 representing 71.42% of participants are not able to engage in sexual intercourse. That is these participants are not able to maintain the required erection for penetration (men) or not able to accept penetration (women). The records further winks that three (3) of the participants are able to engage in sexual intercourse occasionally. Only one participant per the field work in 2021 was able to engage in sexual intercourse as often as possible. The study further probes the 10 participants who are not able to engage in sexual intercourse to ascertain the reasons or challenges that confront them. Findings on this subject matter are presented in the narrations below.

“I have not been able to engage in sexual intercourse with my partner ever since I was diagnosed of prostate cancer. I am not able to erect to the required level that will even allow penetration” (Kojopepe)

“The pains I go through have reduced my ability to erect for penetration. I have not been able to even maintain the needed erection for penetration. I cannot even do it because of the pains” (Yempe)

“Prostate cancer has affected my ability to erect. I have not engaged in sexual intercourse with my wife for the past two years. That is when I started my treatment of prostate cancer. Although my condition is improving but erection is painful” (Joe Paty).

“In the early stages of my condition, I could have intimacy with my husband although it was a little painful. However, as the condition graduated, it became difficult for me to enjoy sexual intercourse with my husband because of extreme pains. For the past two years, I have not been able to accept penetration. It is not that I do not feel for sex but the situation will not allow me to accept penetration from my husband” (Donko)

“I have not been able to enjoy intimacy with my husband for the past three years. The condition is so painful that even if I have the emotional feeling for sex, I cannot accept penetration. I remember when the condition started (that is before diagnosis) sex was a little painful. Sometimes I develop sores and unpleasant odour. When the situation is improving after my therapy but I cannot accept penetration because of the pain” (Yabs)

“The condition is very painful and very unpleasant. The unpleasant odour alone put us off. I have not been able to engage in sexual intercourse for the past one year” (Yaataa)

4.5.2.1 Impact on Ability to Urinate

It is assumed that prostate cancer impedes the ability of affected men to urinate with ease. This is the major reason why most of the men who are diagnosed of prostate cancer are put on catheter support. The catheter devices provide support to affect persons to urinate with some comfort. The study revealed that none of the cervical cancer participants had difficulties in urinating. The findings also showed that, 4 out of the prostate cancer participants had difficulties in urinating which are discussed below.

“I have encountered difficulties in urinating since I was diagnosed of prostate cancer for the past 3 years. The doctors even recommended catheter support for me. I have been on a catheter for the past 6 months because of the difficulties in urinating” (Nkanta).

“Sometimes I encounter difficulties in urinating that is why I am on catheter support. I can say that one of the major challenges that prostate cancer

participants face is difficulty in urinating. It was very difficult for me because the urine was not flowing as expected. Before I was put on catheter support, I could spend about three to five minutes to urinate because the urine flow was not regular” (Wonesika).

This finding is in line with Schmitz & Paul (2021) that prostate and cervical cancer causes frequent urination.

4.5.2.2 Sleep disturbance

While cervical and prostate cancer participants encounter pains, it is assumed that the pains would interfere with the sleeping and resting behaviour of the participant who were engaged in the study. The initial analysis on this subject matter considered that analysis of the frequency with the participants engaged in the study experienced disturbed or interrupted sleep.

Feedback obtained from the field work in 2021 denotes that, 4 out of the 14 participants who were engaged in the study often experience interrupted or disturbed sleep whilst 6 also occasionally experience the same. The report on this subject matter indicates that 2 out of the 14 participants barely encounter disturbed sleep while another 2 participants do not encounter same at all.

The study further probes the participant who encounters interruption in their sleep and the reason for the condition. Some of the key narrations are presented below.

“I often encounter sleepless nights because of my condition. Sometimes I go through many pains during the night. Sometimes I encounter frequent urination, which disturbs my sleep in the night more often” (Joe Paty).

“The pains associated with my condition disturb my sleep a lot. I have had several sleepless nights in recent times. I also urinate very often in the night due to my condition” (Papawonsem)

“I sometimes go through some pains in the night although it is not so often. The pains were so severe that I could barely sleep at the early stages of my condition. My medication has improved the condition but a sometime feel the pains in the night” (Yaabee).

Findings of the study on this subject matter revealed that, the major reasons that interrupt the sleeping behaviour of cervical and prostate cancer participants include a higher frequency of urination that primarily affects men in the night as well as the pains associated with these two infirmities. This finding confirms Tian, Chen & Zhang (2014) claim that cervical cancer affects the quality of sleep and Thomas, Bower, Hoyt, & Sepah's (2010) assertion that prostate cancer participants have sleeping problems.



4.5.3 Stress among Cervical and Prostate Cancer Participants

This section of the analysis seeks to assess the occurrence of stress among the participant that were sampled for the study. The interviews with the children who were engaged in the study showed that, the incidence of stress among them seems to be higher. During the interviews, the researcher dedicated adequate time to expose the participants to the operational definition of stress in the local dialect. They were also exposed to the various factors that could lead to stress among them and the resulting effects of stress on their emotional, mental and physical wellbeing.

At the initial stage of the interviews on this subject matter, after the participants had gained adequate knowledge on the subject of stress, they were asked to indicate whether they go through stressful moments or not. Some of the key responses to this question are presented in the narrations below.

“Based on what you have taught me about stress, I can say that I go through stress occasionally due to pains associated with my condition. At the early stages of cancer when the pains were very served, I could the issues of stress was very often” (Joe Paty).

“At first, I did not know what stress was but the little education you have given me tells me that I go through stress every day because of the pains I go through, especially at night. The frequent urination coupled with the pains stresses me every day” (Kojopepe)

“As for me, I can say that I go through what you have taught us every day. This is because I sometimes feel some acute pains, especially in the afternoon I also go through stress because I mostly feel lonely when my children and husband are not at home” (Yaataa)

The narrations presented above gives an indication that, the conditions of the participants engaged in the study such as pains and frequent urination exposed them to some levels of stress, which affected their mental wellbeing (Thomas et al, 2010)

4.5.4 Depression among the Participants

Depression in the context of this study was defined by the participants engaged in the study as the forms of thoughts that generate sadness because of their condition. The findings of the study on this subject matter revealed that, the occurrence of depression among the participants seems to be very high. Most of the participants who were engaged in the study affirmed that, the thought of their previous life as compared to their current state often makes them sad hence a higher prevalence of depression among them. The

findings of the study showed that, depression mostly occurs among the participants who are divorced because of their condition as well as those whose partners are demised.

Narrations on the occurrence of depression among the participants are presented below.

“I feel so sad when I begin to think about my previous state that is before I got stuck with cervical cancer. My husband left me because of my condition (because I cannot satisfy his sexual desire). The pain associated with my condition is nothing compared to when my husband decided to leave me. He said he was tired of my condition because we could not engage in sexual intercourse. He started going out with another woman although they are not married. I have lived with this situation for the past two years. Although my mother and children comfort me but my husband could not have left me because of my condition, it saddens me a lot” (Skinpain).

“The thought of my wife makes me sad. Although I am old but if my wife is around she would at least offer some comfort to me. Although my children and sisters are supporting me but my wife could do more. I sleep alone and sometimes I go through some pains in the night especially when I want to urinate. It is always depressing when I am alone that is when my children and sisters are not around me” (Wonesika).

“My husband left me because of my condition. He was uncomfortable with the unpleasant odour and we could not engage in any sexual activity. I always feel so sad when thoughts of my husband cross my mind” (Weso).

“I sometime feel ashamed of myself because of my condition. I am not able to perform my sexual duties because of the prostate cancer. I am on catheter support so it becomes very difficult to even realize stronger erection for penetration. I feel so ashamed and sad about this condition” (Nkwanta)

The narrations presented above signifies that, the incidence of depression among the participants is relatively higher (Tian et al, 2014; Thomas et al, 2010). The narrations also suggest that, participants who are highly hit by depression are those who have been

divorced as well as those who have lost their spouse. The findings also suggest that the primary cause of depression among the participants is derived from thoughts about the separation between them and their spouses. The emotional gap between the participant and their spouses is seen as the primary causative factor of loneliness and sadness, which eventually cause depression in them.

4.5.5 Anxiety among the participants

Similar to what was done in the previous section; the researcher took ample time to expose the participants engaged in the study to the concept of anxiety. The researcher explained the operational meaning of anxiety to the participants as their exposure to fear because of their experiences and living conditions. This explanation further exposed the children to factor that cause fear in them as a results of their infirmities. More emphasis was placed on the fear of death that is often perceived to be associated with both cervical and prostate cancers.

The findings of the study through the interviews with the participants who were engaged in the study revealed that, while the incidence of stress among them is higher (Lu, 2017), not same can be said of anxiety. Per the operational explanation given to the participants, it can be said only a few of them go through anxiety occasionally. Some of the key narrations on this subject matter are presented below.

“From what you have told me about anxiety, I would say that I do not become anxious often. This is because nothing put fear in me. Although I know that people die out of prostate cancer but I am not afraid of these things I hear” (Kojopepe)

“At first, I would be afraid all the time because of the thoughts of death, but now I am ok because my condition is improving. The doctors gave me the

assurance that my condition is curable and I have seen significant improvement in my condition so I am not afraid” (Wonesika)

“I was always afraid that the cancer was going to kill me in the early stages of the disease. The assurance that the doctors gave to me assisted me a lot. Because my situation has improved, I am not afraid any longer as compared to when I visited the hospital” (Donko)

4.6 Theme 4: Coping Strategies of Prostate and Cervical Participants

Research Objective 4: To unleashed the coping strategies of participants with prostate and cervical cancer

Among the focuses of interest in this study was to release the coping strategies that cervical and prostate cancer participants utilize to change their behavioural reactions to stress, anxiety and depression. Coping mechanism in this context is seen as the long and short-term relationship between the psychological states of participants with cervical and prostate cancer as against their lifestyle. It lays emphasis on the changes in the cognitive behavior of the participant to the stressful, anxious and depressing challenges they face as a result of the living conditions of the home. Studies have provided the basis for the need for cervical and prostate cancer participants to adjust themselves to such psychological situations. Several coping strategies have been identified among cervical and prostate cancer patients. These include engagement in physical activities, wishful thinking, cognitive restructuring, and information seeking among others. In the context of this study, psychological coping strategies was explained to the participant sampled for the study as the kinds of things (activities) that they engage themselves in when they encounter depressing, stressful and anxious moments. The discussion on this subject matter per the results of the study is presented in the sub-sections below.

4.6.1 Engagement in Physical Activities

The findings revealed that some key coping strategies that the cervical and prostate cancer participant adopt in depressing and stressful times is engagement in physical activities such as walking around their vicinity and playing indoor games. Some of the key narrations gathered from the interviews with participants are presented below.

“I most take some walks around my area to relieve myself of the long stay at home. The doctors advised me to do that. It has become a routine thing that I do every day between the hours of 4:00 pm and 5:00 pm. Because I am able to walk and do little things on my own, my children and wife mostly go to school and the market so I am most left alone in the house. I must say the routine walk around has helped me a lot both psychologically and physically” (Yempe)

“I mostly play indoor games such as Ludo with my husband and children when I am stress up. At first I did not like such games but my condition has exposed me to a lot of stress. Ludo has been a very helpful game that takes away a lot of stress from me. I enjoy it with my husband and children to the point that sometimes it takes my mind away from my condition” (Yaabee)

“Sometimes my wife invites my friends to the house for us to play draught. They come of every Sunday after church. We play the game until evening while we also eat together. This has been very helpful to me because it mostly takes my mind away from my condition. It has shaped my mental wellbeing” (Weso)

4.6.2 Watching Television

Television has been identified as one of the major source of entertainment among people who are recovering from sickening conditions in contemporary times. Contents such as films, and short funny series among others have been identified as primary television production that provides some source of happiness for people recovering from sickness.

The findings of this current study also identified that, while cervical and prostate cancer participants encounter depressing moments, television content (Lorencetti & Simonetti, 2005) such as African movies and films have been a major source of entertainment to them when they are stressed and depressed. Some of the key narrations from the interviews with the participants are presented below.

“The television has been very helpful in these difficult moments. I mostly watch television during the day. My television is glued to Crystal TV Xtra because they show interesting and nice African movies which serve as relieving moments for me. Now that my condition is improving, I am most left in the house while my children go their work. I watch television from 10:00 am when I wake up till the time they come back from work” (Papawonsem)

“As for me, I always watch Television. My favorite channels are Crystal TV, Agoo TV and Family TV. This is because they show a lot of interesting movies. I become happy when I watch the television” (Yabs)

“I like watching GN Junior TV because they show a lot of cartoons and animation at that channel. I also like watching Crystal TV because they also show a lot of interesting movies. I mostly watch the TV in the afternoon especially when I am stressed. I do not mostly do anything in the afternoon except I watch TV or sleep. But I prefer to watch television” (Weso)

The deductions from the narration presented above is that, the participants engaged in watching of television as a primary activity to balance their psychological wellbeing in their depressing, anxious and stressful moments.

4.6.3 Discussion of Results

Knowledge of Participants on Prostate and Cervical Cancers

The findings of the study on participants' knowledge of the nature and causative as well as risk factors of both cervical and prostate cancers show that the participants of both infirmities had relatively good knowledge of prostate and cervical cancer regarding their literal meaning and risk factors from the medical point of view. The definitions given by the participants on prostate cancer as the enlargement of the prostate glands that blocks urine flow as well as definition of cervical cancer as cancer of the cervix that causes unpleasant sores at the entrance of the vagina is not contrary to the medical definition of these two reproductive health infirmities. The medical definition of prostate cancer as given by the American Cancer Association (2020) is that it is one of the reproductive health issues that occur in men when the prostate glands are inflamed or enlarged to the point that, the affected man finds it difficult to experience normal flow or urine. According to the American Medical Association (2020), prostate cancer puts affected men at distress when it comes to urinating due to the pains and burning sensations associated with the condition. This knowledge is not far from what the prostate cancer participants who were engaged in the study shared. The definition given by the cervical cancer participants were also not far from what the American Medical Association (2020) gave. The American Medical Association explained cervical cancer as the cancer of the cervix that develops into unpleasant sores at the entrance of the vagina thereby causing pains during sexual intercourse.

Causes of Prostate and Cervical Cancers from the Participants' Perspective

Regarding the causative and risk factors, the participants' were able to explain the various factors that caused their conditions which were not contrary to what is outlined in literature. According to Releigh (2007), one of the key risk factors of prostate cancer is age. Releigh (2007) explained that as men grow older, their level of risk to prostate cancer also increases. Holden (2008) also identified some of the risk factors of prostate cancer to include excess intake of fatty foods, excess intake of alcohol, and lack of physical exercise. These risk and causative factors as identified in the literature were not contrary to what the participant shared. Holland (2013) identified the causative factors of cervical cancer to include an unhealthy sexual lifestyle that exposes the vagina to several germs, viruses, bacteria and other disease-causing pathogens, unhygienic reproductive health practices among women etc. These causative factors were not different from what the cervical cancer participants who were engaged in this study shared.

Psychosocial effects of Prostate and Cervical Cancer on Participants.

The outcome of this study agrees with that of Stommel et al., (2012) on the psycho-social effects of prostate and cervical cancer on participants. In the study of Stommel et al., (2012) it was identified that prostate cancer participants go through a lot of pain when urinating due to the blockages in the urinary tract as a result of the enlargement of the prostate glands. The prostate cancer participants also affirmed that they go through severe pains when urinating which has also affected the frequency at which they urinate during day and night. The study by Jayadevappa et al., (2011) also validated that prostate cancer affects the ability of participant to sleep at night due to disruption of their sleep due to the condition-related pains or nocturia. This study's findings also verify that the prostate

cancer subjects experienced sleepless nights due to aches and nocturia. The current study also agrees with Holden (2008) when he stipulated that prostate cancer affects the sexual activity ability of respondents. The study of Holden (2008) showed that prostate cancer reduces the participant's desire for sex while it also reduces the sexual performance of affected persons.

The findings of this study agree with Brennan (2011) when she affirmed that cervical cancer affects the ability of women to engage in sexual activities due to the pains and unpleasant odour associated with the condition. The outcome of this current study is also not far from the findings of Brennan (2011) since the cervical cancer participants engaged in this current study indicated that, the condition has affected their desire and ability to engage in sexual intercourse with their spouses.

Psychologically, the findings of this current study concurred that participants with prostate and cervical cancer are exposed to increased stress, depression, and anxiety. The research found that the reasons for stress are because of the severe pains associated with the conditions whereas depression and anxiety are because of fear of death and not being able to have sex.

Coping Strategies of Prostate and Cervical Participants

While the prostate and cervical cancer participant are exposed to higher incidences of stress and depression, anxiety and physical challenges, it was equally imperative to assess the coping mechanisms that they adopt to adjust themselves to cause significant balances in their emotional, mental and socio-psychological wellbeing. Studies have provided the basis for the need for prostate and cervical cancer participants to adjust themselves to such depressing, anxious and stressful events. Several coping strategies have been

identified among prostate and cervical. While studies such as Donaldson et al (2009) identified distancing, wishful thinking, self-restructuring and drug abuse as the coping strategies for depression and stress among cervical and prostate cancer, the findings of this current study in agreement to Compas et al (2011) identifies engagement in physical activities such as playing indoor games and walking as the primary coping strategy to stressful and depressing events among the participants sampled for the study. According to Holen et al (2012), television is considered as one of the primary sources of entertainment among cervical and prostate cancer participants. Their study indicated that, watching television as one of the primary forms of activity that mitigates the occurrence of stress and depression of stress and depression among the sampled participants.

4.7 Summary of Chapter Four

This chapter presents the analysis of primary data that were gathered in the field through individual interviews. The first part of the presentation is for the significant demographic features of participants, Cancer treatment types and participants' recovery status, which were considered important to the study. The presentation of the results takes place in the subsequent sections.

There were fourteen (14) participants, out of them 8 were females with cervical cancer and 6 were males with prostate cancer. 7 among the 14 participants were aged between 51 to 75 years during the study while 7 were between 38 to 50 years. In addition, 6 of them were married, 3 single or unmarried but living together, 2 divorced and 3 whose husbands had died.

Thematic content analysis was utilized to label the data collected from the semi-structured interviews. Audio recordings of the participants were read through transcribed

interviews to become acquainted with participants' experience and responses. Data were labeled by assigning the major ideas, concepts, and themes during a deductive process, guided by the research question and research objectives. The information that was encoded was categorized into themes and sub-themes and the associations and trends among them were analyzed in relation to the objectives of the research.

The initial analysis considered the investigation of the views/knowledge of participants on prostate and cervical cancers. The second section examined the perceived causes of prostate and cervical cancer. The third section unearth the psychosocial effects of the participants while the fourth section unleashed participants' coping strategies.

From the findings on the nature of prostate and cervical cancers from the participants' perspective, the cervical and prostate cancer participants understood the nature, risk and causative factors of prostate cancers as the affected men were able to explain prostate cancer as enlargement of the prostate gland thereby causing difficulties in urinating while the affected women were also able to explain cervical cancer as cancer of the cervix that develops into sores at the entrances of the vagina thereby causing displeasure and unpleasant odour.

Pertaining to the perceived causes of prostate and cervical cancers, the prostate cancer participants indicated the risk and causative factors of prostate cancer to include age, excessive intake of meat, excessive intake of fatty foods, excessive intake of alcohol and lack of physical exercise. Cervical cancer participants were able to indicate the causative and risk factors of cervical cancer to include unhealthy sexual practices that expose the vagina to disease-causing pathogens as well as unhealthy and unhygienic reproductive health lifestyle.

The findings from the third objective on the psycho-social effects of prostate and cervical cancers showed effects that include the inability to engage in sexual intercourse which affects both men and women who are affected, the inability to walk which affects the women and men whose cases are very severe, inability to urinate that affect the men, sleepless night due to pain that affect men and women who are affected, stress, depression and anxiety due the fear of death and prolonged pains.

In understanding coping strategies of participants with prostate and cervical cancers. They discussed coping strategies such as engaging in indoor games with family members and visitors who visit them and strolling around their compounds in the evening. Others also view humorous programs such as African films on television to receive relief from stress and depression.



CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATION

5.0 Introduction

The main aim of this study was to assess the psycho-social experiences and coping strategies of cervical and prostate cancer participants who seek medical treatment at the Cape Coast Teaching Hospital. In light of this, the study assessed the knowledge of the participants on the nature, risk and causative factors of cervical cancers. This study also assessed the psycho-social effects of cervical and prostate cancers on the participants. The study further assessed the coping strategies of the participant in relation to their condition. This chapter presents the conclusions and recommendations drawn from the findings of the study.

5.1 Summary

Prostate and cervical cancers were found to be common among men and women globally and also in sub-Saharan Africa and in Ghana. To address the research topic, research objectives and questions were formed that guided the data analysis and reporting of results. Objective one of the study explored the nature of prostate and cervical cancers from the participants' perspective. From the findings, the cervical and prostate cancer participants understood the nature, risk and causative factors of prostate cancers as the affected men were able to explain prostate cancer as enlargement of the prostate gland thereby causing difficulties in urinating while the affected women were also able to explain cervical cancer as cancer of the cervix that develops into sores at the entrances of the vagina thereby causing displeasure and unpleasant odour.

The second objective examined the causes of prostate and cervical cancers from the participants' perspective. The prostate cancer participants were also able to indicate the risk and causative factors of prostate cancer to include age, excessive intake of meat, excessive intake of fatty foods, excessive intake of alcohol and lack of physical exercise. Cervical cancer participants were able to indicate the causative and risk factors of cervical cancer to include unhealthy sexual practices that expose the vagina to disease-causing pathogens as well as unhealthy and unhygienic reproductive health lifestyle.

From the third objective on the psycho-social effects of prostate and cervical cancers, participants indicated the inability to engage in sexual intercourse which affects both men and women who are affected, and the inability to walk which affects the women and men whose cases are very severe, inability to urinate that affect the men, sleepless night due to pain that affect men and women who are affected, stress, depression and anxiety due the fear of death and prolonged pains.

The fourth objective opened up the coping strategies of the cervical and prostate cancer participants. Participants mentioned some coping strategies like playing indoor games with their family members and friends who visit them and walking around their neighborhoods in the evening. Others also watch comedy shows such as African films on their televisions to relieve themselves of depression and stress.

5.2 Conclusion

The psychosocial experiences of individuals living with prostate and cervical cancers are multifaceted, profoundly impacting their emotional, social, and mental well-being. This conclusion synthesizes key findings on the psychosocial challenges these individuals face and the coping strategies they employ to navigate their cancer journeys.

Both prostate and cervical cancer patients experience a wide range of emotions, including fear, anxiety, depression, and uncertainty. The diagnosis of cancer often triggers an immediate psychological crisis, characterized by shock and disbelief. As treatment progresses, patients frequently report feelings of vulnerability and loss of control, which can lead to heightened anxiety and depressive symptoms. For prostate cancer patients, concerns about sexual dysfunction and urinary incontinence further exacerbate emotional distress, while cervical cancer patients often face stigma and feelings of shame related to the disease's association with sexual health.

The social repercussions of living with prostate and cervical cancers are significant. Patients may encounter changes in their social roles and relationships, leading to feelings of isolation and loneliness. Social support is crucial, yet its availability and quality can vary widely. Prostate cancer patients might struggle with altered masculinity and the perceived need to maintain a strong façade, which can hinder open communication with loved ones. On the other hand, cervical cancer patients often confront social stigmatization, which can lead to reduced social support and increased isolation.

Effective coping strategies are essential for mitigating the psychosocial impact of cancer. Prostate and cervical cancer patients utilize a variety of coping mechanisms, including emotional expression and regulation, information seeking and knowledge, support networks, positive reappraisal and acceptance and engagement in activities.

It is imperative to identify the psychosocial effects of prostate and cervical cancers to support individuals suffering from these conditions and also assist them adopt more effective coping strategies.

5.3 Recommendations

1. While this current study identified exercise intake of alcohol, and excessive intake of meat and fatty foods as risk and causative factors of prostate cancer, it is recommended that men especially those who are aging avoid these unhealthy dietary practices or moderate their intake of these foods while they practice routine physical exercises.
2. It is also recommended that women practice safe and healthy sexual lifestyles with their partners in order to limit the exposure of their genital parts to viruses and bacterial infections in order to protect themselves from contracting cervical cancer. Women are also advised to practice a hygienic and healthy reproductive health lifestyle.
3. Psychosocial effects of prostate and cervical cancers have been identified in this study. It is recommended that mental health interventions be made available at the various cancer treatment centers to individuals suffering from these conditions. This is to help them manage and cope with their challenges as they seek treatment.
4. To cope with cancer, counselling services are relevant to individuals who are exposed to high levels of depression, anxiety and stress. While none of the participants cited the relevance of counselling as part of their coping strategies, this current study recommends that hospitals that offer management and treatment of cancer must collaborate with professional counselors or clinical psychologists to render such services to cervical and prostate cancer participants from the professional point of view. These professionals will be able to assess the stress,

anxiety and depression levels among the participants in order to make proper clinical recommendations that will shape the mental and psychological wellbeing of the participants even before they are discharged.

5. While the high costs associated with the treatment of cervical and prostate cancers are very expensive, it is recommended that the government should provide some form of financial support to individuals who are affected by these conditions or expand the coverage of National Health Insurance Scheme to cover these two infirmities. Since low income earners are unable to afford the cost of the test and vaccination,

5.4 Recommendation for Future Studies

One of the thematic areas that this research was unable to assess was the coping mechanisms of the caregivers to the elevated levels of depression, stress, anxiety and the cost of treating their infected relatives. Although this ongoing study sought to set this relevant information from the participant but they could not bring any information in that regard because they are not the objects of conversation. Upon this qualitative study, several other studies may be conducted to broaden the scope of the subject matters raised in this study. Future studies must therefore consider the inclusion of caregivers in their target population since these categories of individuals would be in a better position to render a proper account of their coping strategies during the treatment of their relatives who are affected by prostate and cervical cancers.

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APPENDIX

UNIVERSITY OF EDUCATION, WINNEBA

DEPARTMENT OF COUNSELLING PSYCHOLOGY

**PSYCHO-SOCIAL EXPERIENCES OF INDIVIDUALS LIVING WITH
CERVICAL AND PROSTATE CANCER IN THE CENTRAL REGION OF
GHANA**

Dear Sir/Madam,

You are kindly invited to participate in the data collection exercise that seeks to examine the psychosocial experiences of people with cervical and prostate cancers. You will be included in this project after your screening exercise. You are given the assurance that, every information that you give in this exercise is purely for academic purposes. You are further assured of the confidentiality and anonymity of your personal data.

SECTION A: INCLUSION CRITERIA

1. How old are you?
2. Please do you suffer for prostate or cervical cancer?
3. Would you like to participate in this study? Yes/No
4. Which language can you fluently communicate?
 - a. English
 - b. Twi
 - c. Fante
 - d. Ewe

SECTION B. Confidential Data Form

Full Name:

Town/City:

Email Address (if applicable)..... Cell Phone (if applicable).....

Birth Date Age Occupation Marital Status.....

Referral Source

Client's Signature Client's thumb Print.....

SECTION C. SOCIO-DEMOGRAPHIC CHARACTERISTICS

1. Gender: a. Male [] b. Female []

2. How old are you now?

3. How old were you when you were diagnosed of the condition?

.....

3. What is your highest level of education?

4. Marital Status a. Married [] b. Single [] c. Divorced [] d. Widowed []

5. Religion a. Christian [] b. Muslim [] c. Traditionalist [] d. None []

6. How many children do you have?

7. What is the age of your oldest child?

8. Average monthly income

a Less than GHS 500 [] b. 500-1000 [] c. 1001-1500 [] d More than 1500 []

9. How long have you been diagnosed/ been on treatment for the disease?

a Less than 1 year [] b. 1-3 years [] c. 4-6 years [] d More than 6 years []

10. Who is your primary caregiver?

11. Do you have any other person supporting our primary caregiver?

.....

KNOWLEDGE OF THE CAUSES OF CANCER CONDITION

1. How do you understand cancer as a disease?

2. What do you think are the courses of prostate or cervical cancer?

EFFECTS OF CANCER CONDITION ON PSYCHOSOCIAL WELL BEING OF PATIENTS

1. What are the effects of the treatment/ therapy on your wellbeing

2. In what ways has disease in itself affected your physical health/Wellbeing?

A. Probe for the ability to walk

B. Probe for the ability to sleep

C. Probe for ability to engage in sexual activities

D. Probe for ability to urinate

3. In what ways has the condition affected your emotional and mental wellbeing?

4. How often do you feel depressed as a result of your condition?

5. How often do you feel anxious as a result of your condition?

6. How often do you feel stressed as a result of your condition?

COPING STRATEGIES OF PROSTATE AND CERVICAL PATIENTS

1. Can you share with me how you cope with your condition?
2. What do you do when you feel depressed?
3. What do you do when you are stressed?
4. What do you do when you are anxious?
5. In what ways do you manage the pains you go through?
6. What activities have been helping you manage yourself since this disease?
7. Have you been visited by a counsellor before?
8. If yes, how did the counsellor help you?
9. If no, what has contributed to that?

SECTION D: EFFECTS OF PSYCHOSOCIAL SUPPORT ON CANCER CONDITION

1. Can you please tell me if you have received any psycho-social support?
2. Kindly share with me how your primary caregiver has helped you since you were diagnosed of your condition.
3. What support have you received from other persons who support your primary caregiver?
4. How has your condition affected people who support you?