

PSYCHOLOGICAL DISTRESS, ANXIETY, AND DEPRESSION OF MEN
LIVING WITH PROSTATE CANCER IN WINDHOEK

A MINI-THESIS SUBMITTED IN PARTIAL FULFILMENT OF THE
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ABSTRACT

The study employed a correlational survey research design. The study aimed at understanding the relationship between psychological distress, anxiety and depression among men (N=64) suffering from prostate cancer. Participants were conveniently sampled from the following institutions: the Dr. A. Bernard May Cancer Care Centre and the Namibian Oncology Centre (NOC). A self-designed socio-demographic questionnaire, the Hospital Anxiety and Depression Scale (HADS) and three Emotional Thermometers (ET) were used for this study.

The data was analysed using the Statistical Package for Social Sciences (SPSS). This study used bivariate correlations to explore the various relationships between the three variables and the socio-demographic characteristics of the participants. The psychological effects of prostate cancer on men living with prostate cancer were found to be statistically significant. Out of the men living with prostate cancer, 50% reported experiencing moderate to severe levels of anxiety, 20.3% experienced moderate to severe levels of depression and 32.8% experienced moderate to severe levels of distress. A significant strong positive correlation was found between anxiety and depression ($r = 0.75$, $n=64$, $p > .01$). There was also a significant moderate positive correlation between anxiety and distress ($r = 0.56$, $n=64$, $p > .01$). There was a moderate positive between depression and distress ($r = 0.39$, $n=64$, $p > .01$).

These findings were found to be consistent with the reported psychological experiences of men living with prostate cancer globally. In conclusion, it is recommended that future studies in Namibia follow a qualitative research design in order to gain in depth information on the exact experiences of men living with prostate cancer as well as the barriers that currently exist that prevent them from seeking psychological help.

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DEDICATION

I dedicate this mini-thesis to: all the brave men who lost the battle to prostate cancer and to those who continue to courageously live with the burden of prostate cancer.

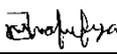
DECLARATIONS

I, Atty Twahafifwa Mwafufya, hereby declare that this study is my own work and is a true reflection of my own research, and that this work, or any part thereof has not been submitted for a degree at any other institution.

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26 October 2017

Name of Student

Signature

Date

CHAPTER ONE

INTRODUCTION

1.1 Introduction

The core aim of this mini thesis was to investigate the psychological experiences of men living with prostate cancer in Namibia. This aim was achieved by exploring the variables of psychological distress, anxiety as well as depression in men living with prostate cancer.

Cancer is a generic term used to describe over 100 diseases. These diseases are characterised by uncontrollable cell growth resulting from damaged deoxyribonucleic acid (DNA) in these cells (American Cancer Society [ACS], 2016; Nezu, Nezu, Felgoise, & Greenberg, 2012). Prostate cancer is a specific variation of cancer. It is characterised by uncontrollable cell growth in the prostate gland. The prostate gland is found only in males and as a result, prostate cancer is a cancer exclusive to males (ACS, 2016). Prostate cancer is the second leading cause of cancer deaths in men in the developed world (Agalliu et al., 2015; International Agency for Cancer Research [IARC], 2016). In Namibia, prostate cancer is the second most common cancer in males; accounting for 19.2% of all cancer diagnosis in males (Kangmennaang, Mkandawire, & Luginaah, 2016; Zietsman, Gariseb, Rautenbach, Pontac, Rooi, & Taapopi, 2011).

A cancer diagnosis is a major life stressor. It is an emotionally difficult diagnosis to come to terms with and is accompanied by psychological distress in the affected individual (National Comprehensive Cancer Network [NCCN], 2010; Pillay, 2001) as well as their caregivers (Tjiroze, 2013). According to Ouwens et al., (2010), besides a patient's physical health, cancer also significantly impacts the emotional

and social well-being of cancer patients. Prostate cancer is often accompanied by questions and personal views about mortality (Klett, 2014). Additionally, emotional and psychological torment, are also documented problems in prostate cancer patients (Klett, 2014). Uncertainty about a cancer diagnosis, what the diagnosis may mean and what to expect in terms of cancer treatment and its side effect have been found to be some of the common causes of anxiety amongst men living with prostate cancer (Aldaz, Treharne, Knight, Conner & Perez, 2016). Lastly, societal stigma, insufficient time to explain a cancer diagnosis to the patient and the narrow scope of services provided by healthcare professionals have been implicated as some of the barriers that currently exists to accessing psychosocial services for a lot of cancer patients in Africa (Aldaz, Treharne, Knight, Conner & Perez, 2016; Pillay, 2001). All of these have been implicated as some of the key factors that contribute to anxiety and depressive mood in men who are diagnosed with prostate cancer in addition to the prostate cancer diagnosis itself.

1.2 Orientation of the study

This study has its roots in the discipline of psycho-oncology. Psycho-oncology is a sub discipline of oncology which dates back to the 1970s (Holland, 2002). Primarily, the discipline of psycho-oncology is concerned with the psychological reactions of cancer patients, cancer survivors and the families of cancer patients; to the treatment of cancer and cancer as a disease in general (Holland, 2002; Nicholas, 2013). In addition to focusing on the responses of cancer patients and their formal and informal caregivers to cancer, psycho-oncology also investigates the behavioural, psychological and social aspects which impact cancer patients (Holland, 2002). The

last notable application of psycho-oncology has been to identify and address the special needs of oncology healthcare professionals (Holland, 1998).

Psycho-oncology is predicated on the fact that healthcare should be holistic, and patient centred as opposed to disease or provider centred. This means that care for cancer patients should not only take into consideration the physical needs of patients but should also consider the psychological, social and emotional needs of cancer patients (Ouwens et al., 2010).

In 2013, the IARC reported the global incidence of cancer to have risen to 14.1 million new cases. The International Agency for Research on Cancer also reported 8.2 million cancer fatalities in the year 2012. It is in light of these statistics that cancer is now implicated as one of the leading causes of death globally (IARC, 2013). Regardless of those findings however, due to the limited resources of the African continent as well as other pressing public health concerns such as malaria, tuberculosis and HIV/AIDS, cancer still receives very little public health priority (IARC, 2016; Jalloh, Niang, Ndoye, Labou, & Serigne, 2013; Pillay, 2001). Moreover a general lack of awareness among policymakers, the public and all other relevant stakeholders has also been associated with the lack of urgency attributed to cancer in Africa (Jalloh, Niang, Ndoye, Labou, & Serigne, 2013; Jemal, Bray, Forman, O'Brien, Ferlay & Parkin, 2012; Taoka, Matsunaga, Kubo, Suzuki & Yamamoto, 2014). Prostate cancer is one of the leading causes of death among men (ACS, 2016; African Organisation for Research and Training in Africa [AORTIC], 2013). It has been reported that prostate cancer, although it does occur in men younger than 40 years of age, is extremely rare amongst that age group. There is a significant risk of prostate cancer after age 50 as research found that 6 in 10 prostate cancer diagnosis are men older than 65 years of age (ACS, 2016).

Cancer patients reportedly experience anxiety, uncertainty and emotional distress as a result of their cancer diagnosis and often treatment as well (Aldaz, Treharne, Knight, Conner & Perez, 2016). According to Ashing-Giwa and Kagawa-Singer (2006) individual perceptions of cancer, emotional reactions to a cancer diagnosis as well as an individual's adjustment to their diagnosis of cancer is largely affected by culture. Psychological distress in prostate cancer patients is especially important as previous studies have suggested that because this cancer generally occurs in older men, they are less likely to discuss their emotions (Bisson et al., 2002) and as a result feelings of distress. This results in these men suffering in silence as a consequence of their psychological needs remaining unknown. Moreover, besides the emotional problems often experienced by patients', psychological distress is also largely correlated with poor treatment compliance (Watts, Leydon, Birch, Prescott, Lai, Eardely & Lewith, 2014). Psychological distress, anxiety and depression are associated with poor treatment compliance as they impair cognition, impede behaviour change, weaken motivation and decrease an individual's ability to cope (Adler & Page, 2008).

1.3 Statement of the problem

The prevalence of cancer in developing countries is rising rapidly, and is predicted to increase even more over the years due to the societal and economic changes that developing countries are currently undergoing (Agalliu et al., 2015; IARC, 2013). Prostate cancer specifically, has been reported to be amongst the leading cancer affecting males, worldwide (Jalloh, Niang, Ndoeye, Labou,. & Serigne, 2013). Prostate cancer has the highest incidence and mortality rates amongst men of African descent (Agalliu et al., 2015).

Psychological problems such as anxiety or depression have been found to have negative consequences on a patient's treatment compliance and in turn, their overall quality of life (Van Oers & Schlebusch, 2013). The most common co-morbid psychological conditions of cancer have been identified as distress, anxiety and depression (Brebach, Sharpe, Costa, Rhodes, & Butow, 2016). Although psychological problems are known to be common and treatable in cancer patients they often go undetected and untreated (Pillay, 2001).

In the African context Mofolo, Betshu, Kenna, Koroma, Lebeko, Claasen and Joubert (2015) conducted a study in South Africa aiming to assess the knowledge of prostate cancer among men attending a urology clinic in South Africa. A few studies have been conducted in Nigeria, investigating predominantly the prevalence, incidence as well as prevention of prostate cancer (Akinremi, Ogo & Olutunde, 2011). In Namibia, there have been studies done on the psychological well-being of women with breast cancer as well as cervical cancer in Namibia (Shino, 2010). A study on the psychological well-being of care-givers of cancer patients in Namibia has also been carried out by Tjiroze (2013). Africa and more specifically Namibia still lacks behind in overall research in the field of psycho-oncology. There have currently been studies to the researcher's knowledge, conducted in Namibia with the objective to assess the psychological well-being of prostate cancer patients. This has resulted in the gap in knowledge that now necessitates this study.

1.4 Objectives of the study

The main aim of this study was to explore the psychological effects of prostate cancer in men living with prostate cancer in Namibia. Following this main aim, the following three-fold objectives were formulated:

Firstly, to explore psychological distress, anxiety and depression in men living with prostate cancer.

Secondly, to describe the relationships between psychological distress, anxiety and depression in men living with prostate cancer.

Thirdly, to examine the relationships between socio-demographic characteristics, psychological distress, anxiety and depression in men living with prostate cancer.

1.5 Significance of the study

The highest prevalence of cancer (56.8%) as well as death by cancer (64.9%) currently occur in the less developed regions of the world and are predicted to increase substantially by the year 2025 (IARC, 2013). Prostate cancer specifically, has been found to be the second leading cause of cancer-related deaths in men in developed countries (Agalliu et al., 2015).

It is against this background, that prostate cancer is expected to continue being a burden to the African continent, more specifically to Namibia. This study was significant because it allowed for the documentation of the psychological experiences of men living with prostate cancer in Namibia. These findings can be taken into consideration to influence policies in order to provide a more holistic healthcare approach to men living with prostate cancer. The documentation of these psychological experiences also allows for awareness to be raised amongst healthcare professionals as well as the patients themselves. Awareness has been found to be important in order for diagnostic and treatment rates to be improved in cancer patients (NCCN, 2010; Van Oers & Schlebusch, 2013).

This study is also significant as it contributes to overall scholarship in the growing field of psycho-oncology in Africa, more particularly in Namibia.

1.6 Definition of key concepts

For the purposes of this mini thesis, the following concepts have their meanings defined: psychological distress, anxiety and depression.

According to the NCCN (2010), distress can be understood as a complex, unpleasant, emotional experience of a cognitive, behavioural and/or emotional nature. This emotional experience may interfere with an individual's ability to cope effectively with cancer, the physical symptoms of cancer as well as the treatment of the disease. Lastly, distress is said to occur on a spectrum involving normal feelings of vulnerability, sadness, and fears which can develop into more serious conditions such as depression, anxiety, and panic (NCCN, 2010).

Kaplan and Saddock (2015) have defined anxiety as the anticipation of a future threat. It is often associated with muscle tension and vigilance in preparation for future danger and is to a large extent characterised by preparation for future danger as well as extremely cautious or avoidant behaviour (Kaplan & Saddock, 2015).

The diagnostic and statistical manual (DSM) 5 (American Psychological Association [APA], 2013), defines depression as the presence of sad, empty, and/or irritable mood which is often accompanied by somatic and cognitive changes. These changes significantly impair the individual's functioning. Depression is primarily characterised by changes in affect (APA, 2013).

1.7 Overview of chapters

The remainder of this mini-thesis will be presented in the following chapters:

Chapter Two provides the literature review. The literature review includes a definition of prostate cancer and literature on the prevalence of prostate cancer – globally, in Africa and in Namibia. A brief history of psycho-oncology globally, in Africa and in Namibia is also presented in this chapter. Lastly, the psychological effects of prostate cancer with a specific focus on psychological distress, anxiety and depression are discussed in Chapter Two. The research methodology used for this mini thesis is outlined in Chapter Three. Also included in this chapter is the research design, the sampling technique, the procedures followed, the research instruments used to collect data as well as the statistical analysis that were employed for this mini thesis. Chapter Four presents the results of the data collected. These results are composed of descriptive statistics on socio-demographic characteristics of prostate cancer patients. They also include descriptive statistics on prostate cancer patients and psychological distress, prostate cancer patients and anxiety and prostate cancer patients and depression. Lastly, in this chapter the relationship between socio-demographic characteristics and psychological distress, anxiety, and depression and the relationship between psychological distress, anxiety and depression is stated. Chapter Five concludes this mini thesis by a discussion of the results from Chapter Four, outlining the limitations of this mini thesis and offering recommendations for future studies as well as for the relevant stakeholders.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

Prostate cancer is a specific variation of cancer, characterised by uncontrollable cell growth in the prostate tissue resulting in a malignant tumour (American Cancer Society, [ACS], 2016). The prostate tissue is only found in the prostate gland. The prostate gland is responsible for the production of fluid used to make semen (Kampel, 2007). The prostate gland is only found in the male reproductive system and as a result, prostate cancer is exclusive to males (ACS, 2016). The exact causes of uncontrollable cell growth in the prostate tissue are unknown (Nettina, 2014). However, genetic predispositions (evident by genetic mutations in specific genes), a positive family history of prostate cancer, increased age, unhealthy diet and African ancestry have been implicated as some of the most prominent risk factors for developing prostate cancer (Lewis, Dirksen, Heitkemper, Bucher & Camera, 2011; Nettina, 2014; Zietsman, Gariseb, Rautenbach, Pontac, Rooi, & Taapopi, (2011).

Prostate cancer is a chronic illness which poses a significant physical and emotional burden to men diagnosed with it. This burden is evident in the fact that prostate cancer is not only a chronic disease but is also a life-threatening disease which confronts patients with issues of their possible mortality, resulting in significant stress and emotional turmoil (Page & Adler, 2008). What warrants prostate cancer and the experiences of men living with prostate cancer an individual discussion, as opposed to men living with any other cancer is the fact that prostate cancer is one of the very few cancers that directly impacts a man's perception of himself in relation to his manhood (Coffey, 1993; Klett, 2014).

Although there has been a substantial amount of progress made in terms of not only the physical treatment of prostate cancer but also attempts to address the psychosocial challenges of oncology patients, prostate cancer still proves to be a great burden to men living with prostate cancer.

This chapter will present an overall history of the discipline of psycho-oncology followed by the prevalence of prostate cancer. Finally, this chapter will conclude with a discussion on the overall experiences of prostate cancer patients.

2.2 Overview of psycho-oncology

2.2.1 Psycho-oncology in the world

Psycho-oncology is a sub discipline of oncology which is concerned with the psychological experiences of cancer patients and their families towards their cancer diagnosis, cancer treatment and the overall experience of living with cancer and/or cancer survivorship (Nicholas, 2012). King (2015), described the focus of psycho-oncology as pertaining to the psychological and mental well-being of persons affected by the multidimensional aspects of cancer. The need for psycho-oncology stemmed from the knowledge that oncology patients and their families needed to not only adjust to the danger posed by cancer on their physical health but also to living with the disease and/or living or caring for a loved one who suffers from the disease (Page & Adler, 2008). Adjustment was found to directly impact a patient's health by bearing the potential to diminish health and functioning if not addressed sufficiently (Page & Adler, 2008).

In the early 1800s when clinicians first started to hypothesise about the need for an integrated approach when treating oncology patients, psycho-oncology was notably

met with a lot of hostility by physicians and patients' alike (Holland, 1998). This hostility was essentially attributed to two factors; the first one being the perceptions society held about cancer at the time (Coffey 1993; Holland, 1998). Cancer was regarded to be an incurable disease viewed solely as a death sentence (Coffey 1993; Holland, 1998). Due to this view of cancer and the lack of medical advancements in the treatment of the disease, physicians usually would not disclose a patient's cancer diagnosis to the patient but would rather opt to share it only with the family of the patient (Holland 2002; Holland 1998). The second factor that posed a noteworthy challenge to the rise of psycho-oncology back in the 1800s was the negative connotations attached to mental illness at the time (Holland, 1998). During this time, mental illness was still considered to be an evil of sort with more and more people believing that people who suffered from mental illnesses were possessed by demons. Since very little was known about the cause or treatment for mental illnesses at the time, the same stigma attached to cancer as an 'incurable' disease was also attached to mental illness (Holland, 2002).

It's in light of this progress that psycho-oncology as a discipline has made significant strides from when it first began in the 1800s however still remains in its very infant stage in the developing world.

2.2.2 Psycho-oncology in Africa

In less developed countries, attempts to incorporate the psychosocial needs of oncology patients in the overall treatment plan of patients have been met with many challenges (Grassi et al., 2016). Less developed countries have a burden of a lack of resources which often forces physicians to prioritise the physical health of oncology patients over their psychosocial needs (African Organisation for Research and

Training in Africa [AORTIC], 2013). These countries also face the challenge of a lack of knowledge of the psychosocial needs possessed by oncology patients as there have been very few studies done in these countries with the aim of assessing the psychosocial needs of oncology patients and patients in these regions are also less likely to express having psychosocial needs (Grassi et al., 2016). Another barrier Grassi and colleagues (2016) have identified faced by psycho-oncology in the developing world are the great social inequalities that exist within societies and by extension in cancer care for individuals who come from lower socioeconomic classes.

With the evident rise of cancer in the developing world there remains a dire need for psycho-oncology (in terms of education and the awareness of the psychological needs of patients) to be incorporated in overall treatment plans for patients in order to improve treatment outcomes as well as the overall quality of life of the affected individuals (Watts et al., 2014).

It's due to these challenges that psycho-oncology is still in its very infant stages in a number of African countries.

2.2.3 Psycho-oncology in Namibia

Psycho-oncology in Namibia is still a very under researched discipline. There has been a study conducted with the purpose of investigating the psychological well-being of women with breast and cervical cancer (Shino, 2010). Another study carried out in this field within the Namibian context, looked at the psychological well-being of caregivers of cancer patients (Tjiroze, 2013). Kangmennaang, Mkandawire and Luginaah (2016), also carried out a study which aimed to explore what factors prevent men between the ages of 40-64 years from screening for prostate cancer in

Namibia. Salomo (2015) conducted a study looking at the experiences of men diagnosed with prostate cancer in the four northern regions of Namibia. Although the presence of these studies does allude to the presence of psycho-oncology research in Namibia, there still remains a lot to be done. To date, there have been no studies conducted seeking to explore the psychosocial needs of men with prostate cancer or the barriers that may prevent men suffering from prostate cancer from seeking psychological help. This is despite the fact that it is well documented in other countries that men suffering from prostate cancer do in fact exhibit an array of psychosocial needs (Bisson et al., 2002).

2.3 Prevalence of prostate cancer

The overall occurrence of cancer diagnoses is reported to have doubled in the past 30 years and these statistics are expected to double again by 2020 (Ministry of Health and Social Services, [MoHSS], 2011). The highest prevalence of cancer (56.8%) as well as deaths due to cancer (64.9%) currently occur in the less developed regions of the world (International Agency for Research on Cancer [IARC], 2013). Of these cancers, the most commonly diagnosed cancer in men in developed countries is prostate cancer with an incidence of over 1 million diagnoses annually (Rivas et al., 2016). In southern Africa, 53.9% of cancer diagnosis in males were said to be cancers of prostate (Jemal et al., 2012). Furthermore, the most common cancer deaths have also been as a result of prostate cancer (Center et al., 2012). These statistics are predicted to increase substantially by the year 2025 (IARC, 2013).

In the year 2012, about 1.1 million males were estimated to have been diagnosed with prostate cancer globally, of which an estimate of 759 000 of these diagnoses, were in men living in developed regions (IARC, 2016).

The most commonly diagnosed cancers in men in Namibia have been found to be skin cancer, Kaposi sarcoma, prostate cancer, ear, nose, and throat cancer and colorectal cancer (MoHSS, 2011). Of these cancers, prostate cancer is the second most common occurring cancer in males in Namibia, accounting for 19.2% of all cancer diagnosis in males (Kangmennaang, Mkandawire, & Luginaah, 2016; Zietsman, Gariseb, Rautenbach, Pontac, Rooi, & Taapopi, 2011). It is reported that between the years 2010 and 2014 the most commonly diagnosed cancer in men living in Namibia was prostate cancer (Carrara, 2017). The mortality rate of prostate cancer in Namibia is 21.5 per 100 000 (Kangmennaang, Mkandawire, & Luginaah, 2016). According to Carrara (2017), prostate cancer was most commonly diagnosed in men of Tswana decent (35.0%), men of Baster decent (33.9%) and men of Herero decent (29.1%) from 2010 to 2014. Carrara (2017) also found that the regions with the highest prostate cancer diagnosis to be Oshana region (32.2%), Khomas (31.4%) and Kunene (25.9%).

Studies have reported a history of prostate cancer in the family (specifically first degree relatives) (Center et al., 2012; Pruthi et al., 2005), age, and race to be amongst the most significant variables correlated with prostate cancer (Center et al., 2012; Jemal et al., 2012). Prostate cancer has been found to have higher prevalence in older men (men above the age of 65 years old) (Coffey, 1993; Kangmennaang, Mkandawire, & Luginaah, 2016). Moreover, prostate cancer is not only reportedly most common in black men of African descent (Akinremi, Ogo & Olutunde, 2011) but has also been found to have its highest mortality rates in this population (Coffey, 1993; IARC, 2014).

2.4 Psychological experiences of prostate cancer patients

2.4.1 Overall experiences of prostate cancer patient

In a study conducted by Salomo (2015), some of the most common experiences of men undergoing treatment for prostate cancer were found to be; hot flashes, diaphoresis, fatigue, depression and erectile dysfunction. Alongside these many side-effects the study also found that incontinence and erectile dysfunction were the most impairing outcomes of surgery for men living with prostate cancer (Salomo, 2015). Incontinence and sexual dysfunction are directly linked to a male's masculinity and his sense of self (Krumwiede & Krumwiede, 2012). As a result thereof, these two negative side effects of undergoing prostate cancer treatment impact males most significantly resulting in males feeling ashamed and humiliated (Krumwiede & Krumwiede, 2012). Another common experience shared amongst men living with prostate cancer was found to be social withdrawal as a way to deal with feeling embarrassed due to various parts of the treatment such as the post-operative catheter treatment (Salomo, 2015).

Although men go through similar physiological experiences when diagnosed with prostate cancer and receiving treatment for prostate cancer, they all go through unique emotional experiences (Salomo, 2015). This could be attributed to the way individual males perceive, understand and experience prostate cancer which differs from culture to culture and amongst religions as well (Chaturvedi, Strohschein, Saraf & Loiselle, 2014). This can be explained by the fact that each religion and culture has its own unique way of viewing diseases and death. For example, Hinduism defines cancer as a consequence of past sins whereas in Western culture, cancer is viewed as an obstacle individuals need to overcome and gain 'mastery' over nature

(Chaturvedi, Strohschein, Saraf & Loiselle, 2014). Due to these subjective views on health and more specifically, on prostate cancer it can be expected that although there are some universal similarities in the experiences of men living with prostate cancer, their perceptions of the disease, treatment thereof and survivorship won't be identical across cultures. The different experiences of men diagnosed with prostate cancer can also be attributed to the circumstances surrounding an individual's diagnoses. For example Salomo (2015) reported that although some men were aware of prostate cancer prior to their diagnosis and expected to be diagnosed with cancer at some stage of their lives, some men were totally caught off-guard by their prostate cancer diagnosis. This could be for a variety of reasons of which having no knowledge about the existence of prostate cancer could be one of the possible reasons that could explain the shock and denial that can come with a diagnosis.

As a result of the psychological impact of prolonged medical treatment, it has been documented that cancer patients across the globe predominantly have a high incidence of experiencing decreased quality of life in comparison to populations that don't have cancer (Kim & Kim, 2016; Williams, Jackson, Beeken, Steptoe & Wardle, 2015). The term quality of life is a construct composed of multiple aspects which rely on an individual's self-report of their physical, functional and social or educational well-being for assessment (Miles et al., 2016).

At least 30% of oncology patients have reported the presence of some form of psychosocial distress and one or more mental disorder and an even greater portion of this population has reported the presence of unrecognized or untreated psychosocial experiences primarily brought on by the diagnosis of cancer and having to live with cancer (Grassi et al., 2016).

Men who are living with prostate cancer are not exempted from these experiences as they too experience a range of negative psychological experiences. Although it is known that men have negative experiences to their diagnosis of prostate cancer as well as the treatment associated with it however, physicians have still been found to significantly underestimate the distress experienced by these patients (Keller et al., 2004). Amongst these experiences most men reportedly suffer from - a variety of these experiences are psychological in nature including depression, anxiety, fear, anger, shame, embarrassment and the loss of intimacy (Klett, 2014). Furthermore, some studies have also found that although less common than the former experiences, a minority of cancer survivors also experience full symptoms of post-traumatic stress disorder (PTSD) (Miles et al., 2016).

Inadequate communication has also been listed amongst the experiences of oncology patients (Miles et al., 2016), with older adults usually being the most likely population to encounter poor communication between them and their respective health care providers (Chaturvedi, Strohschein, Saraf & Loiselle, 2014). Prostate cancer and its treatment more often than not seen to result in erectile dysfunction and as a consequence thereof, poses a significant challenge to men's perception of their masculinity as well as their self-image (Rivas et al., 2016). The daunting reality of sexual dysfunction faced by men with prostate cancer was also found to have a substantial psychological influence on these men and their partners (Klett, 2014).

All in all, an experimental research found that individuals who had been diagnosed with cancer not only had overall poorer quality of life but also suffered from lower life satisfaction in comparison to individuals who had not been diagnosed with cancer (Williams, Jackson, Beeken, Steptoe & Wardle, 2015).

2.4.2 Psychological distress and prostate cancer

Psychological distress is defined as a state of emotional suffering. This state is comprised of depressive symptoms (such as anhedonia, sadness and hopelessness) as well as symptoms of anxiety (such as restlessness and feeling tense) (Drapeau, Marchand & Beaulieu-Prévost, 2012). According to Horwitz (2007) the symptoms that characterize psychological distress occur when an individual responds to a stressor or emotional turmoil in an in conducive manner as a result of an individual's ineffective coping strategies (Horwitz, 2007).

A study conducted by Herschbach et al., (2004), found the variables of age, gender, metastases, illness duration, treatment setting as well as diagnosis in a patient to be significantly linked to the psychological distress experienced by oncology patients. In this same study of 1721 participants Herschbach and colleagues (2004), reported the most significant distress factor to be the patients' fear of having their cancer progress. In another study carried out in the states, the findings showed substantive levels of distress in 20% to 40% of patients who were either newly diagnosed with cancer or in patients who presented with (Holland et al., 2010). In contrast, a study conducted by Miles et al., (2016) the findings showed that both; the stage of the cancer as well as the treatment that the individual was undergoing, had no noteworthy influence on the psychological distress experienced by a patient but was instead directly impacted by the subjective perceptions of the patient.

2.4.3 Anxiety and prostate cancer

Due to the stigma that is still attached to having a mental illness in most communities or a cancer which may impair one's sexual functioning, most men suffering from prostate cancer choose not to seek the necessary psychosocial support (Klett, 2014).

The decision not to seek help even when necessary is often largely due to cultural beliefs and expectations (Chaturvedi, Strohschein, Saraf & Loiselle, 2014). Expectedly then, anxiety and other mental health issues remain a challenge to diagnose in men living with prostate cancer (Klett, 2014).

Watts et al., (2014) found anxiety (27.4%) to be highest in patients awaiting treatment. The same study found anxiety to be at its lowest in patients who were busy receiving treatment (15.9%) and moderate in those who had completed their treatment (18.49%). In a study conducted by Bisson et al., (2002), in males living with prostate cancer anxiety was identified as the most common psychological disorder amongst these participants. According to the literature, the dangers of anxiety and related mental health issues can't be over emphasised. Men living with prostate cancer and are suffering from anxiety and/or depression reportedly have an increased risk of five times that (of men living with prostate cancer but not suffering from these mental health issues) of ending up in the emergency room, approximately three times higher the risk of hospitalization and death. These men have also been found to have poor treatment compliance and hostile reactions to treatment (Klett, 2014). In a study by Mehnert et al., (2009) they investigated anxiety amongst other variables in association with social support in ambulatory prostate cancer patients. They found that marital status and the level of education were significant socio-demographic characteristics as they were correlated to anxiety in this population.

2.4.4 Depression and prostate cancer

The World Health Organisation (WHO) (2012), has defined depression as a common mental disorder of which anxiety is usually (but not always) a co-morbid disorder of (Brebach, Sharpe, Costa, Rhodes, & Butow, 2016). Depression is accompanied by

feelings of depressed mood, by the loss of interest or pleasure in usually pleasurable activities, experiences of decreased energy, guilt and/or feelings of low self-worth, sleep or appetite disturbances and poor concentration all of which results in a considerable amount of impairment of the individual's ability to function on a day-to-day basis and in extreme cases, may even lead to suicide (WHO, 2012). Depression is regarded as the mental disorder that has garnered the most overall attention in terms of research and possible treatment integration programmes, in oncology populations (Massie, 2004). Correlated with major depression in these populations are negative lifestyle trends such as smoking, lack of physical exercise as well as tendencies of overeating (Page & Adler, 2008). A major consequence of depression is the impediment of not only behavioural change but also treatment compliance and a reduction in motivation and an individual's coping abilities (Page & Adler, 2008).

According to Massie (2002), approximately 58% of cancer survivors were found to report having had depression or at least having suffered from depressive symptoms at some stage of their lifetime. This is consistent with the results from a comparison study which found depression and suicidal ideation to be higher in cancer populations (Kim & Kim, 2016; Williams, Jackson, Beeken, Steptoe & Wardle, 2015). Additionally, another study found depression in older cancer patients to have a negative impact on their ability to not only make treatment decisions but also their abilities to abide to treatment routines (Nelson et al., 2009).

2.5 Summary

Although there have been studies conducted outlining the experiences of men who are diagnosed with prostate cancer, undergoing treatment for prostate cancer and/or

are survivors of prostate cancer there still remains a lot of room for improvement in incorporating the psychosocial needs of these patients into their overall treatment. As was discussed in this chapter, a lot of men who suffer from prostate cancer often have reservations disclosing their psychosocial needs to healthcare professionals due to a number of reasons. As a result of this non-disclosure, physicians are often unaware of the psychosocial needs these patients may have and as a result are unable to offer the necessary help. Psycho-oncology remains a noteworthy area of treatment as studies across the globe continue to prove a relationship between depression and anxiety and social functioning, disability and overall functional impairment in oncology patients (Page & Adler, 2008).

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

The previous chapter presented an in-depth discussion on some of the literature that currently exists on psycho-oncology globally. The chapter also included some statistics derived from various research efforts reporting the prevalence of prostate cancer globally. Furthermore, it included a discussion on the various psychological experiences of prostate cancer patients.

This chapter offers a detailed description of the research methodology employed for this study. It provides an outline of the research design, population and sample for this study. This chapter also delineates the numerous procedures followed in the process of conducting this study. Additionally, the research instruments are presented, as well as the data analysis procedures. This chapter concludes with a presentation of the ethical considerations for this study.

The research methods described in this chapter were used in order to meet the aim and objectives of this study. Primarily, the study sought to explore the psychological effects of prostate cancer on men living with prostate cancer in Namibia. The following three-fold objectives were formulated from the primary aim:

- To explore psychological distress, anxiety and depression in men living with prostate cancer.
- To describe the relationships between psychological distress, anxiety and depression in men living with prostate cancer.

- To examine the relationships between socio-demographic characteristics, psychological distress, anxiety and depression in men living with prostate cancer.

3.2 Research design

The research design for this study was a quantitative, correlational and descriptive design. According to Creswell (2014), a quantitative study is one in which the methods for data collection are determined prior to the researcher conducting the study. In quantitative studies, data is collected through means of interviews or questionnaires, and is analysed and interpreted using statistics (Creswell, 2014). As this research was non-experimental in nature, no variables were manipulated. This study made use of questionnaires in order to collect data. This was apparent in the two self-report questionnaires used to collect data as well as the self-designed socio-demographic questionnaire.

This research design was chosen as it was most suitable in achieving the objectives of this study (to describe the various variables mentioned above and the relationship between those variables). The study also employed a cross-sectional method of data collection. A cross-sectional method is a once-of study where data is collected from all participants simultaneously (Beins & McCarthy, 2012).

3.3 Population

The population for this study was all men who were living with prostate cancer and were receiving treatment at the Dr. A. Bernard May Cancer Centre and the Namibian Oncology Centre in Windhoek during the period of data collection for this study.

3.4 Sample

The sample consisted of 64 men living with prostate cancer in Namibia. The inclusion criteria were as follows;

- men with a confirmed prostate cancer diagnosis;
- men receiving any form of prostate cancer treatment at the Dr. A. Bernard May Cancer Centre or at the Namibian Oncology Centre (NOC) during the period of data collection (June – September) for this research;
- men who were not critically ill and as a result were in a physical position to complete the questionnaires used for this study and
- lastly, men living with prostate cancer who met the criteria and consented to partaking in this research.

The exclusion criteria for this research were as follows;

- men living with prostate cancer however were not receiving any form of treatment;
- men receiving prostate cancer treatment at centres other than the Dr. A. Bernard May Cancer Centre and the NOC;
- men with prostate cancer but were critically ill at the time of data collection and as a result, unable to complete the questionnaires for this research and
- lastly, men who refused to give consent for this study were also excluded from participation.

The sampling technique that was employed for this study was a non-probability, convenience sampling method. Convenience sampling is a sampling method in which the participants for the study who meet the criteria are chosen by the

researcher based on their accessibility at the time of data collection for the study (Beins & McCarthy, 2012). A convenience sample was chosen for this study because the Dr. A. Bernard May Cancer Care Centre in Windhoek is currently the only state-funded treatment centre for oncology patients in Namibia and the NOC is currently the private oncology only centre in Namibia. As a result, all oncology patients receiving oncology treatment in Namibia receive treatment at either the Dr. Bernard May Cancer Care Centre or the NOC with the exception of a select few who receive treatment at the Paramount Healthcare Centre. In light of this, the Dr. A. Bernard May Cancer Care Centre and the NOC are the only locations where the researcher had access to a large number of prostate cancer patients. Therefore the researcher deemed it most feasible for this study to select the participants from these two centres and hence employing a convenience sampling technique. The researcher tried to control for any form of bias by selecting participants who met the inclusion criteria solely on their willingness to partake in the study.

3.5 Procedures

Ethical clearance for this study was granted by the Ethics Committee of the University of Namibia (see Appendix A). Additionally, the researcher obtained permission to conduct this study from the Ministry of Health and Social Services' research unit as well as from the branch manager of the NOC. Following approval and ethical clearance, the researcher then briefed all the oncology staff members at the Dr. A. Bernard May Cancer Care Centre and the social worker at the NOC about the objectives of this study. Potential participants for this study were identified by the oncology staff at the centres as they were knowledgeable about the patients' diagnosis and treatment. The oncology staff informed the participants about the study

as well as whether or not they would be interested in partaking in the study. After the initial contact described above, the participants were approached by the researcher and were given a chance to either accept or decline participation in this study. Upon consenting to participate in this study, participants were presented with an information letter (see Appendix B), a socio-demographic questionnaire as well as the two instruments used in this study. All the participants that requested assistance in completing their questionnaires were assisted by the researcher and a trained research assistant.

Participation in this study was voluntary. The questionnaires for this study were completed anonymously and participants were allowed to terminate their participation in this study at any time during the research process if they so wished.

3.6 Research instruments

A self-designed socio-demographic questionnaire, alongside two self-report instruments was used in this study. The instruments were all relatively short and easy to complete.

3.6.1 Socio-demographic questionnaire

The socio-demographic questionnaire administered in this study was a self-designed questionnaire and was self-report. This questionnaire comprised of 13 questions. This questionnaire was used to collect data on patient's age, home language, stage of cancer, marital status and region of origin amongst other questions (see Appendix C).

3.6.2 Hospital Anxiety and Depression Scale (HADS)

The HADS (see Appendix D) was first developed approximately 30 years ago by Zigmond and Snaith (Bisson et al., 2002; Stern, 2014). This questionnaire is comprised of two subscales; one subscale measuring (generalised) anxiety and another measuring depression. The instrument assesses for depression by asking participants to subjectively rate how accurate statements such are: “I feel as if I am slowed down”, “I still enjoy the things I use to enjoy”, “I have lost interest in my appearance.” Anxiety is assessed through statements such as: “I feel tense or ‘wound up’”, “worrying thoughts go through my mind”, “I get a sort of frightened feeling like ‘butterflies’ in the stomach” (Snaith, 2003). The HADS is a 14-item self-administered questionnaire. Each subscale consists of 7 items. Each item has four possible responses ranging from 0 to 3. The minimum possible overall score on a subscale is 0 and the maximum is 21. Scores for the total HADS range from a minimum of 0 to a maximum of 42.

Although there are currently no fixed cut-off scores for the HADS (Herrmann, 1997; Herrero et al., 2003), a score of 0-7 is generally accepted to be indicative of mild anxiety/depression and non-clinical cases. A score of 8-10 is accepted to be indicative of moderate anxiety/depression and cases warranting possible intervention. A score of 11-21 represents severe anxiety/depression and constitutes a definite clinical case (Zigmond & Snaith, 1983).

The HADS is a convenient instrument for measuring anxiety and depression as these have been found to usually coexist in previous studies conducted on medical populations (Bisson et al., 2002; Stern, 2014). Previous research on the HADS as a measure for anxiety and depression has however cautioned that the HADS is

effective in screening for the fore mentioned variables (Luckett et al., 2010; Mitchell et al., 2010), however the instrument is inadequate when used as a diagnostic instrument (Grassi et al., 2015).

This study employed a cut-off score of 8 as being indicative of clinical anxiety or depression for both subscales. Furthermore, for the purposes of this study a complete score of 15 or more (for both scales combined) was considered to represent significant psychological distress. This decision was motivated by previous studies conducted on oncology populations (Cohen et al., 2002; Ibbotson, Maguire, Selby, Priestman & Wallace, 1994; Jacobsen et al., 2005). When evaluating non-psychiatric patients, several studies have found it best to use the overall score of the HADS when screening for the unique psychological experiences (of anxiety and depression) as opposed to using the subscales (Hopwood, Howell & Maguire, 1991; Spinhoven et al., 1997).

In recent years, the HADS has been used extensively on an international scale. The instrument has been found to possess sufficient psychometric properties (Vodermaier, Linden & Siu, 2009) and to be applicable for use in people from various cultural backgrounds (Barth & Martin, 2005). In a review of the literature on studies conducted on the HADS Bjelland, Dahl, Haug, and Neckelmann (2002) found that the HADS was a valid and reliable measure for anxiety and depression. In addition the HADS has also been comprehensively evaluated against criterion standards. This validation existed for specific disease types, the stage of the disease and for different languages and cultures (Vodermaier, Linden & Siu, 2009). Bjelland, Dahl, Haug and Neckelmann (2002) reported an internal consistency of 0.68 to 0.93 for the anxiety subscale and 0.67 to 0.90 for the depression. The HADS is a well-documented assessment tool in the medical setting. In addition the instrument has

also been used to measure anxiety and depression in specifically oncology patients globally (Bisson et al., 2002; Shino, 2010; Stern, 2014; Tjiroze, 2013) and has been found to be ideal for this population (Vodermaier, Linden, & Siu, 2009).

Self-report instruments in general are credited for being easy to administer. Correspondingly when properly validated, they also serve as a useful tool in helping health professionals identifying high risk patients and provide the necessary mental health support (Vodermaier, Linden & Siu, 2009). Some of the other notable advantages of the HADS are that the instrument is easy to score, it is a time-efficient instrument (the questionnaire takes between 2-5 minutes on average, to complete) and it's easy to understand and use (Bisson et al., 2002; Stern, 2014). Another advantage is the HADS doesn't focus on any physical or somatic symptoms that could be a result of the illness and thus, the instrument has been found to be ideal in measuring anxiety and depression in patients who are significantly physically ill (Barth & Martin, 2005; Stern, 2014).

In summary, the HADS is an important instrument in measuring anxiety and depression as psychological experiences and is very helpful in aiding health professionals in not only the screening but eventually also in the understanding of an individual's unique psychological experiences as well as in providing options for possible intervention (Snaith, 2003; Vodmaier, Linden & Siu, 2009). Other instruments used to measure anxiety and/or depression were found to be lengthy, usually required a trained worker in order to administer effectively and fell short of distinguishing specific psychological experiences from one another (Snaith, 2003).

3.6.3 Emotional Thermometer (ET)

The Emotional Thermometer (ET) is a four scale-item which measures psychological distress, anxiety, depression and anger. However for the purposes of this study, only the three thermometers measuring psychological distress, anxiety and depression were used (see Appendix E). This study excluded the variable of anger as the main aim of this study was to explore the psychological experiences that have been commonly reported in oncology populations (Grassi et al., 2016; Klett, 2014; Krumwiede & Krumwiede, 2012).

The rationale that led to the development of the ET was rooted in the fact that although a large amount of cancer patients had significant clinical distress (Rimando & Situ, 2012), this distress often went undiagnosed by oncology health professionals. This necessitated the need for the development of a short, yet reliable, instrument to screen for distress and consequently avail the necessary interventions (Jacobsen et al., 2005). Vodermaier, Linden and Siu (2009) found that in order to provide access to mental health care for all those in need it is imperative that distressed oncology patients are identified accurately.

The ET is an extremely brief self-report screening instrument. A screening instrument is usually the term used to refer to a short instrument not used for diagnostic purposes (Vodermaier, Linden & Siu, 2009). It is presented as a visual thermometer (Rimando & Situ, 2012; Roth et al., 1998). The instrument measures psychological distress, anxiety and depression by asking patients to rate their experiences on a scale from 0 (no distress) to 10 (extreme distress) (Jacobsen et al., 2005; Holland & Bultz, 2007). When using the ET, distress is understood to be an unfavourable psychological, social and/or spiritual experience which is characterised

by a patient's inability to cope effectively with their cancer diagnosis, the physical symptoms pertaining to cancer and/or their cancer treatment (Holland & Bultz, 2007). This instrument has been used globally to measure the psychological distress, the levels of anxiety and the levels of depression in oncology patients (Mitchell, 2007; NCCN, 2008).

The ET is scored on an 11-point scale. A score of zero on the ET is indicative of no distress at all while a score of ten is indicative of extreme distress. There is generally consensus amongst researchers on what is to be considered the cut-off score for the Distress Thermometer (DT)/ET. Past studies have used 5 as a cut off-score and indicative of significant distress (Cohen et al., 2002; Gessler et al., 2008; Roth et al., 1998) and more recently, studies have begun to use a score of four as a cut-off score for significant distress warranting possible intervention (Grassi et al., 2015, Jacobsen et al., 2005, NCCN, 2008).

The DT, from which the ET is derived has been widely validated through various studies conducted globally (Akizuki, Yamawaki, Akechi, Nakano, & Uchitomi, 2005; Bevans et al., 2011; Hegel et al., 2008; Roerink et al., 2013). Some studies have even postulated that variations of the original DT (i.e. the ET) appear to be more improved versions of the original DT scale (Vodermaier, Linden & Siu, 2009). One study for example found that more than 50% of the nurses who had used the tool found it to be extremely helpful in screening for distress and consequentially, in offering more holistic patient care (Mitchell et al., 2012). According to Hegel et al., (2008), the DT has also become a very popular tool used specifically in screening for distress in prostate cancer patients. In Namibia specifically, the DT which is one of the scales from the ET has been used in cancer studies in the past in order to screen

for distress in patients with breast and cervical cancer as well as to screen for distress in caregivers of cancer patients (Shino, 2010; Tjiroze, 2013).

According to some of the literature (NCCN, 2010), the most commonly reported negative psychological experiences in cancer patients are fatigue, pain, anxiety and depression. These psychological experiences are all screened for using a single tool; the ET. The ET, amongst other ultra-short and single-item instruments, has been found to be a significantly useful screening tool in busy and under-staffed oncology and medical centres (Shino, 2010).

3.7 Statistical analysis

The data for this study was analysed by means of statistical analysis. This method of analysis was chosen as it was found to be most suitable for a quantitative study. The statistical analysis was performed using the Statistical Package for Social Sciences (SPSS) (2013). The researcher used SPSS in order to ensure the results were analysed accurately. In order to understand the data collected in this study, descriptive statistics were used. The researcher made use of means, modes, medians, standard deviations and frequencies in order to interpret findings. Furthermore, the researcher also used Pearsons (r) correlation coefficient in order to determine relationships between the variables.

3.8 Research ethics

Before questionnaires were filled out, the researcher explained the objectives of this study to all participants. Participants were required to consent by means of a signature if they understood what the study was about and were willing to partake in the study. Participants were also informed that their participation in this study was

voluntary. They were allowed to terminate their participation in this study at any stage of the research. This study didn't request any names or other identifying data from participants which ensured the study was anonymous. All the data collected for this study was coded numerically and were only analysed by the researcher which allowed for participants responses to be confidential. Lastly, all the questionnaires for this study will be stored by the researcher in a safe storage facility and will be kept for five years after which the researcher will shred all the questionnaires.

3.9 Summary

In summation, this chapter offered an overview of the rationale for the research methods used to collect and analyse data for this study. In this chapter, the research design was discussed, followed by a description on the sample for this study and how the participants were selected. The procedures that the researcher undertook in order to conduct this study were also mentioned in this chapter. This chapter also contained a discussion on the research instruments used for data collection. The chapter concluded with a presentation of the statistical analysis employed.

CHAPTER FOUR

RESULTS

4.1 Introduction

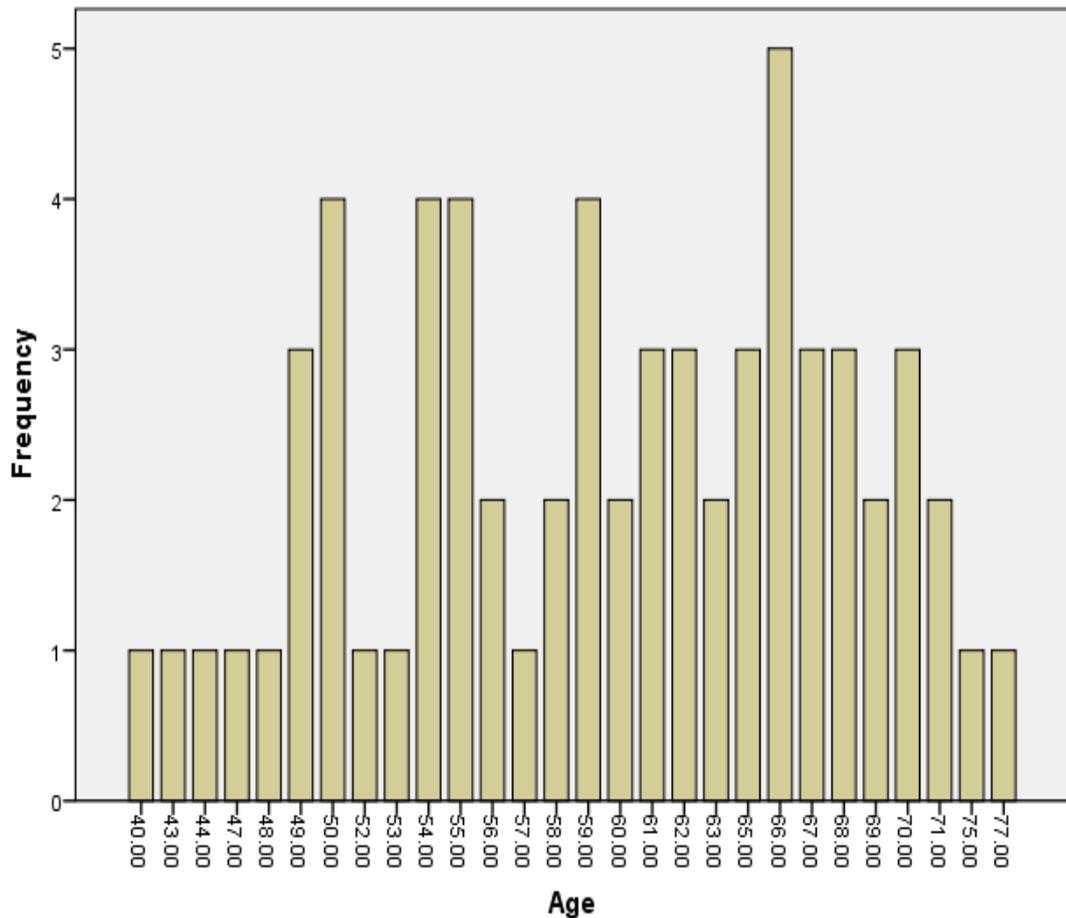
The previous chapter focused on the research methodology that was used to conduct this study. This chapter will focus on presenting a socio-demographic description of the research sample. Following, this chapter will also include an outline of the reliability of the Hospital Anxiety and Depression Scale (HADS) and the Emotional Thermometer (ET). In addition, the three variables; anxiety, depression and distress were explored in this study. Hence, this chapter will quantify these three variables that were obtained by using the HADS and the ET. This chapter also presents the relationships between the three variables and the socio-demographic characteristics of the study sample.

4.2 Description of study sample

The sample for this study consisted of 64 men living with prostate cancer in Namibia. All of these men were receiving treatment at either the Dr. Bernard AB May Cancer Care Centre or at the Namibian Oncology Centre between the months of June – September 2017. The oldest recorded participant for this study was a 77 year old male (see Figure 4.1). The youngest participant was 40 years old. The range between the oldest participant and the youngest participant was 37 years old. The mean age for the sample was 59.6 years old. The mean age at which men received their prostate cancer diagnosis for this study was 57 years old.

Figure 4.1

Mean age of study sample

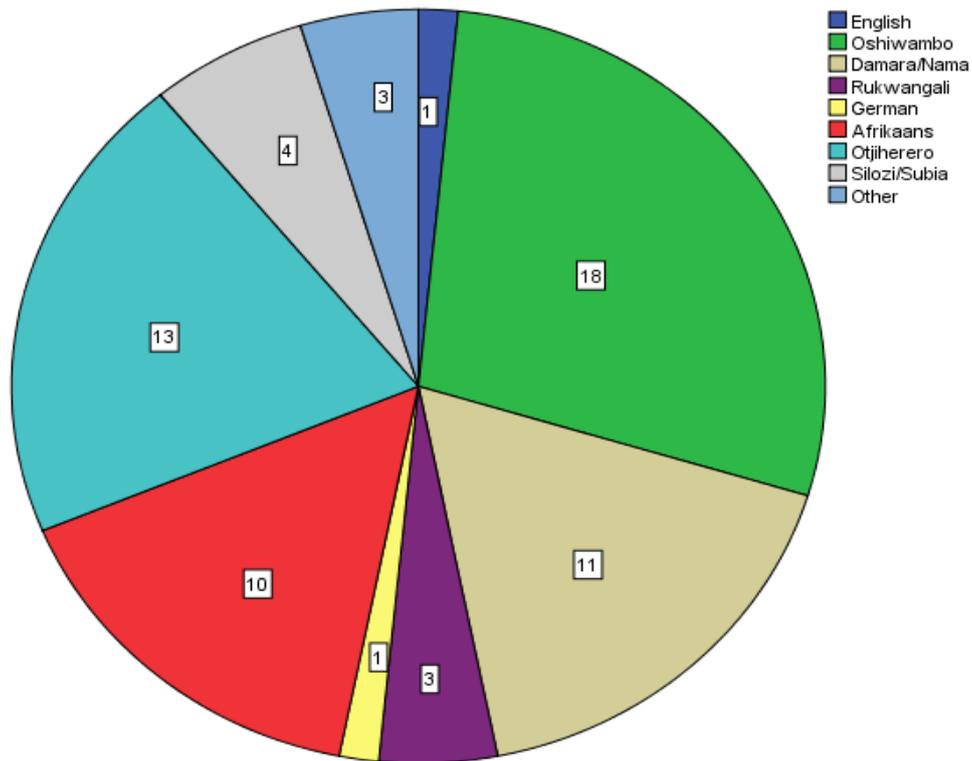


The highest number of children reported per participant was 13. The mean number of children the participants of this study had was 5.7 children.

All but one participant (who reported stage 1 cancer) did not know the current stage of their cancer. Oshiwambo (28.1%) was the most common home language amongst this sample, followed by Otjiherero (20.3%). Whereas English and German were the least common home languages (1% each) (see Figure 4.2).

Figure 4.2

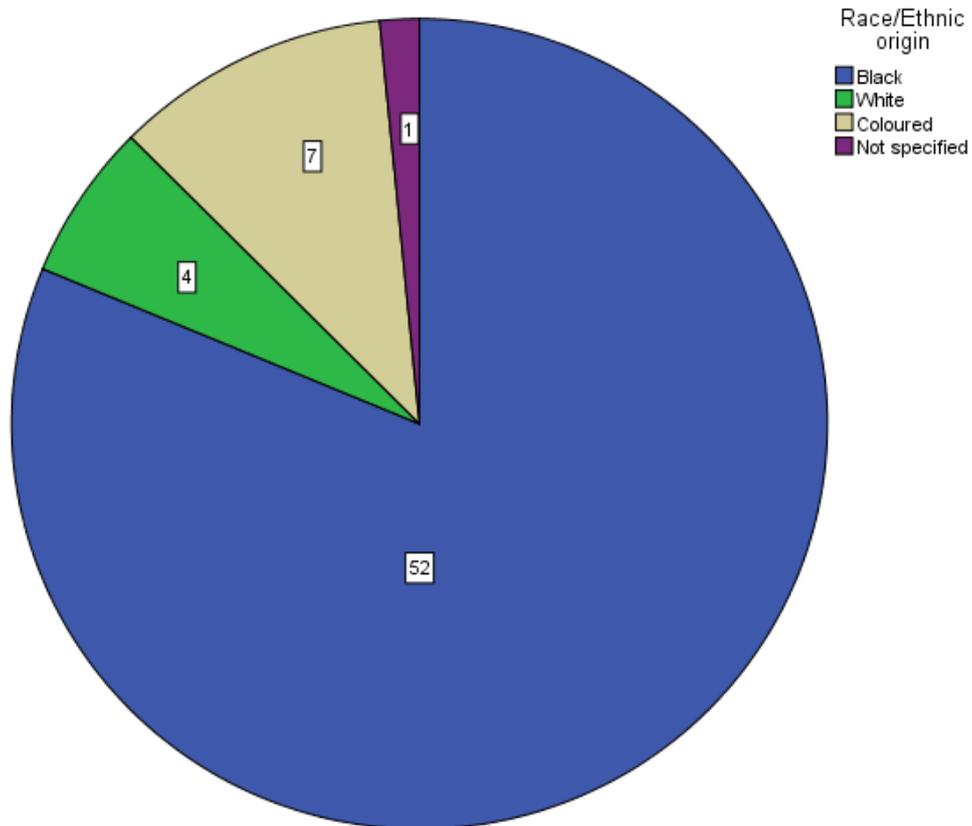
Distribution of home languages of participants



For this study, 81.3% of the participants were black, 10.9% of the participants were coloured and 6.3% of the participants were white (see Figure 4.3). The most frequent region of origin (10.9%) for this study was the Kunene region. The least represented regions were; the Kavongo East, the Omaheke, the Omusati and the Ohangwena regions with 4.7% participants each.

Figure 4.3

Race of the study sample



Out of the 64 males, 39.1% reported their perceived social support to be good, 35.9% said it was excellent, 23.4% said it was satisfactory and 1.6% said it was poor. In this study, 62.5% of the respondents were married, 26.6% were single, 6.3% were divorced and 4.7% were widowers. Secondary education was the most common reported highest level of education, representing 45.3% of participant responses. Following, 28.1% of participants reported primary education as their highest level of education. Approximately 14.1% of participants had a tertiary education, 7.8% had no formal education and 4.7% had only obtained an early childhood education.

The highest reported employment status was 39.1% for retirement. This was followed by 35.9% of men who reported being employed full-time. In addition, 14.1% of men were unemployed, 6.3% were self-employed and 4.7% were employed on a part-time basis.

4.3 Reliability of the HADS and subscales

The reliability of a scale refers to the internal consistency of the scale. It measures the degree to which the items of an instrument accurately measure an identical underlying construct (Foxcoft & Roodt, 2013; Pallant, 2011; Beins & McCarthy, 2012). The reliability for the HADS was measured using the Cronbach's alpha. According to the Cronbach's alpha, any value above 0.7 is indicative of a reliable scale. The total reliability for the HADS was 0.84 (see Table 4.1). The anxiety subscale of the HADS had a reliability of 0.78 (see Table 4.2) and the depression subscale had a reliability of 0.61 (see Table 4.3).

Table 4.1

Reliability for the HADS

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.837	.844	14

Table 4.2

Reliability of the anxiety subscale of the HADS

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.784	.793	7

Table 4.3

Reliability for the depression subscale of the HADS

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.613	.633	7

4.4 Descriptive statistics for the HADS and subscales

The mean score for the HADS was 12.5 with a standard deviation (SD) of 6.64 (see Table 4.4). The highest overall score recorded for the HADS in this study was 28. The lowest score recorded was a score of 0. On the HADS 21 men had obtained a total score of 16 or higher. Using this as a measure of distress, there were 21 positive cases indicative of moderate to severe distress.

For the subscale of anxiety, the mean was 7.58 and a standard deviation of 3.88. The highest score recorded for this subscale was 15 and the lowest score was 0 (see Figure 4.4). A total of 32 men were recorded to have moderate to severe depression.

For the subscale of depression, the mean was 4.92 and the standard deviation was 3.21. The maximum score recorded for this subscale was 14 and the minimum score was 0 (see Figure 4.5). In total, 13 men were assessed with moderate to severe depression.

Table 4.4

Descriptive statistics for the HADS and subscales

	HADS	Anxiety subscale	Depression subscale
N Valid	64	64	64
Missing	0	0	0
Mean	12.500	7.5781	4.9219
Std. Deviation	6.63564	3.87833	3.21359
Minimum	0	0	0
Maximum	28.00	15.00	14.00

Figure 4.4

Distribution of anxiety subscale scores

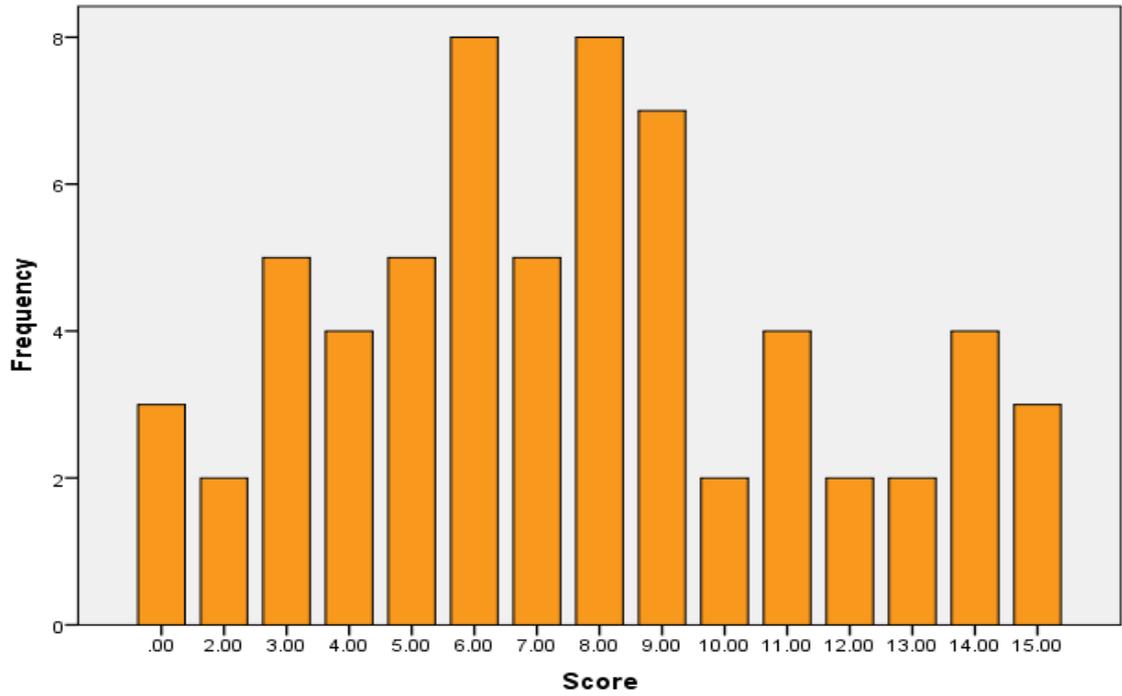
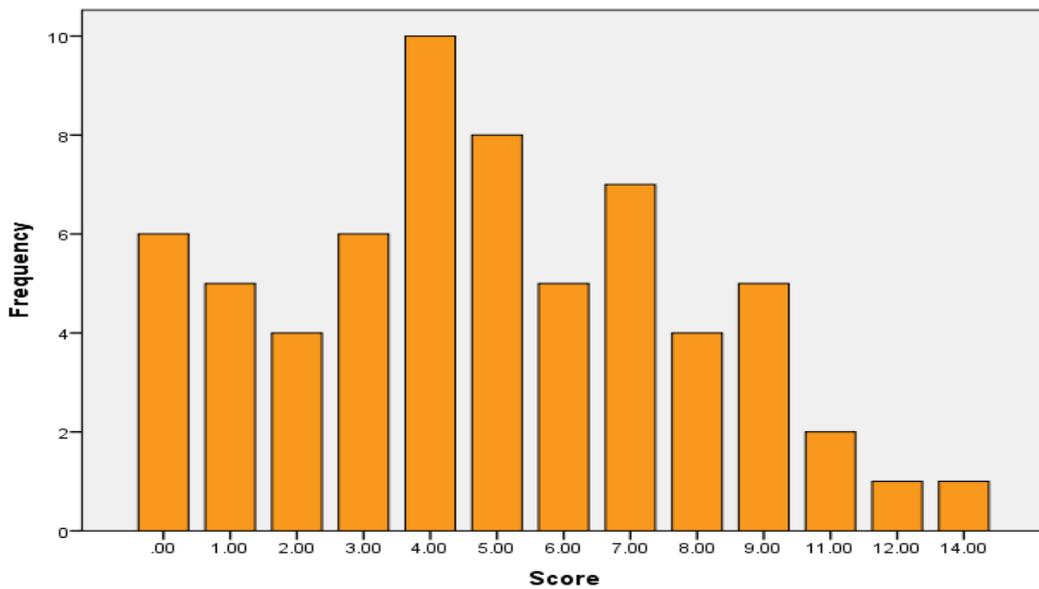


Figure 4.5

Distribution of depression subscale scores



Using the cut-off score of 15 as indicative of overall distress (Jacobsen et al., 2005; Ramirez, Richards, Jarrett & Fentiman 1995; Tjiroze, 2013) a total of 32.8% of the men who participated in this study were significantly distressed (see Table 4.5). The mean score of the HADS (12.5) however was below the cut-off score used for this study.

It was also found that 37.5% of the respondents for this study scored either 8 or more on the anxiety subscale. This score is indicative of moderate – severe anxiety. A total of 14.1% of the men who participated in this study were found to be between moderately to severely depressed. These results, just as on the overall HADS, indicate that less than half of the participants for this study had experienced noteworthy negative psychological experiences at the time of data collection.

Table 4.5

Performance on the HADS

Variables	Results
	N = 64
Above HADS Anxiety cut-off (≥ 8)	37.5%
Below HADS Anxiety cut-off (< 8)	62.5%
Above HADS Depression cut-off (≥ 8)	14.1%
Below Depression cut-off (< 8)	85.9%
Above HADS total cut-off (≥ 15)	32.8%
Below HADS total cut-off (< 15)	67.2%

4.5 Descriptive statistics for the ET and individual thermometers

The mean score for all three emotional thermometers combined was 7 (see Table 4.6). A maximum score of 15 out of a possible overall score of 30 was recorded for the three thermometers combined. The lowest score recorded was a score of 0. The standard deviation was 4.16. For the Distress Thermometer (DT), the mean score was 2.50. The maximum score was 6 and the minimum was 0. The standard deviation for this thermometer was 1.77. Using the distress thermometer, a total of 21 men reported significant clinical distress. For the Anxiety Thermometer, the mean score was 2.41. The highest score on this thermometer was 6 and the lowest was 0. The standard deviation was 1.62. According to the results obtained from the anxiety thermometer, it was found that a total of 29 males had clinically significant anxiety. The depression thermometer had a mean of 2.05. The maximum score was 7 and the minimum score was 0. The standard deviation for this thermometer was 1.80. A total of 14 males were found to have clinically significant depression.

Table 4.6

Descriptive statistics for Emotional Thermometers

	Distress thermometer	Anxiety thermometer	Depression thermometer
N Valid	64	64	64
Missing	0	0	0
Mean	2.5000	2.4063	2.0469
Std. Deviation	1.77281	1.62049	1.80326
Minimum	.00	.00	.00
Maximum	6.00	6.00	7.00

A lot of studies (Gessler et al., 2008; Jacobsen et al., 2005; NCCN, 2010) have used a cut-off score of 4 and above as indicative of clinically significant distress, anxiety and depression. The same cut-off score was used for this study. The mean score for the Distress Thermometer was 2.5, 2.4 for the Anxiety Thermometer and 2.0 for the Depression Thermometer (see Table 4.6). All three of these averages were lower than the established cut-off score for this study.

It was found that out of the 64 participants for this study, 15.6% scored 4 or higher on the distress thermometer (see Table 4.7). A total of 10.9% males were found to be clinically anxious using the Anxiety Thermometer. It was also found that 12.5% of the males who took part in this study were clinically depressed. This was evident by them scoring a 4 or higher on the thermometer.

Table 4.7

Performance on the Emotional Thermometers

Variables	Results
	N = 64
Above Distress T cut-off (≥ 4)	15.6%
Below Distress T cut-off (<4)	84.4%
Above Anxiety T cut-off (≥ 4)	10.9%
Below Anxiety T cut-off (<4)	89.1%
Above Depression T cut-off (≥ 4)	12.5%
Below Depression T cut-off (<4)	87.5%

4.6 Correlations between total HADS and subscales

The researcher explored the correlation between the HADS and its subscales. The rationale therefore was to determine if participants scored higher for the variables of anxiety and depression combined (as illustrated by the HADS) in comparison to the individual variables of anxiety and depression (as was illustrated by the subscales of the HADS).

The relationship between the total HADS score and the anxiety subscale was explored using the Pearson product-moment correlation coefficient. A strong, positive correlation was found between the two variables; $r=0.95$, $n=64$, $p>0.001$ (see Table 4.8). High scores on the overall HADS were associated with high levels of anxiety. The coefficient of determination for this relationship was 89.7%.

The relationship between the total HADS score and the depression subscale was also explored using the Pearson product-moment correlation coefficient. The results yielded a strong, positive correlation between the two variables; $r=0.92$, $n=64$, $p>0.001$. High scores on the HADS were associated with high depression. The coefficient of determination for these two variables was 85.0%.

The relationship between anxiety and depression was also explored using the Pearson product-moment correlation coefficient. The two variables were found to have a strong, positive correlation; $r=0.75$, $n=64$, $p>0.001$. High anxiety was indicative of high depression. The coefficient of determination for the two variables was 56.1%.

Table 4.8

Correlations between the HADS and subscales

	HADS	Anxiety subscale	Depression subscale
HADS	-	.947**	.922**
Anxiety subscale		-	.749**

Note: N = 64,
 **correlation is
 significant at .000

4.7 Correlations between total Emotional Thermometers

The correlation between the overall score obtained on the ET and the distress thermometer was a strong, positive correlation; $r=0.82$, $n=64$, $p>0.001$ (see Table 4.9). The higher the total score for all three ET's the higher the individual distress. The coefficient of determination for the two variables was 66.4%.

The relationship between the total ET scores and the anxiety thermometer was a strong, positive correlation; $r=0.82$, $n=64$, $p>0.001$. The higher the overall ET score was the higher the anxiety. The coefficient of determination for the two variables was 66.9%.

The correlation between the overall score obtained on the ET and the depression thermometer was a strong, positive correlation; $r=0.77$, $n=64$, $p>0.001$. The higher the overall ET scores the higher the depression it was found. The coefficient of determination for the two variables was 59.1% (see Table 4.9).

Table 4.9

Correlations between Emotional Thermometers

	Distress thermometer	Anxiety thermometer	Depression thermometer
Distress thermometer	-	.564**	.390**
Anxiety thermometer		-	.433**

Note: N = 64, ** = correlation is significant at $p \leq .000 \geq .001$

4.8 Correlations between emotional thermometers and HADS subscales

The correlation between distress and anxiety (as assessed by the anxiety thermometer) was a fairly strong positive correlation; $r=0.56$, $n=64$, $p>0.001$ (see Table 4.10). The higher the distress found the higher the levels of anxiety could be expected. The coefficient of determination for distress and anxiety was 31.8%.

The correlation between distress and depression (as measured by the depression thermometer) was a moderate, positive correlation; $r=0.39$, $n=64$, $p>0.001$. Distress did not have a very large impact on the depression scores. The coefficient of determination for distress and depression was 15.2%.

The correlation for distress and anxiety (as was measured by the HADS) was a moderate, positive correlation; $r=0.39$, $n=64$, $p>0.001$. Distress did not have a very large influence on the anxiety levels recorded on the HADS. The coefficient of determination was 15.5%.

The relationship between distress and depression (as measured by the HADS) was a moderate, positive correlation; $r=0.33$, $n=64$, $p>0.001$. Distress had only a slight connection to the depression measured by the HADS. The coefficient of determination was 10.6%.

The correlation between the anxiety measured by the anxiety thermometer and the anxiety measured by the HADS was a strong, positive correlation; $r=0.60$, $n=64$, $p>0.001$. High measures of anxiety on the HADS meant an expected high score of anxiety of the anxiety thermometer. The coefficient of determination was 36.7%.

The correlation between anxiety (as measured by the anxiety thermometer) and depression (as measured by the HADS) was a moderate, positive correlation; $r=0.44$, $n=64$, $p>0.001$. The anxiety thermometer scores slightly corresponded with the scores recorded on the depression subscale. The coefficient of determination was 19.5%.

The relationship between depression measured by the depression thermometer and depression measured by the HADS was a moderate, positive correlation; $r=0.35$, $n=64$, $p>0.001$. The depression score recorded on the depression thermometer did not always correspond with the score recorded on the HADS depression subscale. The coefficient of determination was 12.0%.

Table 4.10

Correlations for the HADS and Emotional Thermometers

	HADS	Anxiety subscale	Depression subscale	ET total	Distress thermometer	Anxiety Thermometer	Depression thermometer
HADS	-	.947** .000	.922** .000	.549** .000	.387** .002	.568** .000	.375** .002
Anxiety subscale		-	.749** .000	.558** .000	.394** .001	.606** .000	.355** .004
Depression subscale			-	.461** .000	.325** .009	.442** .000	.346** .005
ET total				-	.815** .000	.818** .000	.769** .000
Distress thermometer					-	.564** .000	.390** .001
Anxiety thermometer						-	.433** .000

Note: N = 64, ** = correlation is significant at $p \leq .000 \leq .009$

4.9 Correlations between socio-demographic variables, the HADS and Emotional Thermometers

This paragraph will report on the significant relationships found between the socio-demographic characteristics of the study sample and the overall HADS score, the subscales of anxiety and depression, the overall ET score and/or the individual thermometers of distress, anxiety and depression. All relationships were investigated using the Pearson product-moment correlation coefficient.

There were no significant relationships between the variables of age, age of prostate cancer diagnosis, home language, race, region of origin, perceived social support, marital status, number of children, highest level of education and employment status and the variables of distress, anxiety and/or depression (see Table 4.11).

Table 4.11

Correlations between socio-demographic variables, the HADS and Emotional Thermometers

	Marital status	Stage of cancer	Children	Educa- tion	Emple- yment	ET - distress	ET - anxiety	ET - depression	Anxiety subscale	Depression subscale
Marital status	-	.153	.016	.124	.065	.131	.162	.238	-.008	.056
Stage of cancer		-	.113	-.006	-.006	.179	.189	.144	.248*	.194
Children			-	-.224	.106	.097	.113	.077	.192	.015
Education				-	-.019	-.059	.011	.095	-.069	.158
Employment					-	.022	-.024	-.087	.061	.092
ET –distress						-	.564**	.390**	.394**	.325**
ET – anxiety							-	.433**	.606**	.442**
ET -depression								-	.355**	.346**
Anxiety subscale									-	.749**

Note: N = 64, * = correlation is significant at .048, ** = correlation is significant at $p \leq .000 \leq .009$

4.10 Summary

This chapter offered a detailed account of the data collected during this research. The data collected by means of questionnaires was analysed using various statistical methods. The specific statistical methods used in this chapter, were chosen in order to meet the objectives of this study. The findings reported in this research are on psychological distress, anxiety and depression. The interpretation of the results reported in this chapter will be presented in chapter five.

CHAPTER FIVE

DISCUSSIONS AND CONCLUSIONS

5.1 Introduction

In the previous chapter the results recorded for this study were presented. This chapter will offer an extensive discussion on those results in order to interpret those findings. This discussion will be a six part discussion focusing on: the characteristics of the study sample, psychological distress, anxiety and depression as well as the relationships between the three variables.

The limitations identified for this study will also be discussed. Following this will be recommendations for practical implementation and recommendations for future research. Lastly, this chapter will include an overall conclusion for this study.

5.2 The research sample characteristics

This research was made up of 64 males only. This is because prostate cancer is a cancer exclusive to males. The population of men living with prostate cancer in Namibia was estimated to be 1 128 males between the years 2010 - 2014 (Carrara, 2017). However the current population of men living with prostate cancer is unknown. This number could have decreased due to cancer mortality or increased as the burden of cancer has been hypothesised to increase as discussed in Chapter Two.

Although the estimated (1 128 men) population of men living with prostate cancer in Namibia is much larger than the sample size that was used for this study, men are reluctant to share their emotional experiences. This hesitance could be a reason as to why approximately 15 men declined participation in this study. Another reason could

be that the researcher only had a short period (4 months) of time to collect data for this study.

5.3 Demographics of the research sample

Socio-demographic characteristics of a study sample have been found to have a noteworthy influence on the psychological experiences of men living with prostate cancer. In a study conducted by Chambers et al., (2013), it was found that the level of education of men living with prostate cancer seemed to have a significant impact on how the patient responds to psychosocial intervention. In a study by Jalloh, Niang, Ndoye, Labou, & Gueye (2013), found race to have a noteworthy influence when looking at men diagnosed with prostate cancer. The findings reported a higher incidence of prostate cancer in black men in comparison to men of other races (Jalloh, Niang, Ndoye, Labou, & Gueye, 2013). It is against this background that a brief discussion on the socio-demographic characteristics of the sample for this study will be presented in this paragraph.

The majority of participants for this study were predominantly black men. The researcher is unsure if this is because prostate cancer has been found to have a higher incidence in black men (Jalloh, Niang, Ndoye, Labou, & Gueye, 2013). African ancestry for example, has been implicated as one of the risk factors of prostate cancer (Ankinremi, Ogo & Olutunde, 2011; Center et al., 2012). Alternatively, these findings could be reflective of men from other races having other treatment options and receiving their treatment in South Africa for example. For this study, the Oshiwambo speaking group (28.1%) and the Otjiherero speaking group (20.3%) had the highest prostate cancer representation. These findings are slightly lower than those reported by Carrara (2017). In that study, 29.1% of men were from the

Otjiherero ethnic group and there were no statistics provided for the Oshiwambo ethnic group.

Although the youngest participant for this study was a 40 year old man. The youngest age at which a participant received a prostate cancer diagnosis was 39 years old. The oldest participant was 77 years old. Age 77 is characteristic as most men living with prostate cancer have been reported to be amongst that age range. Prostate cancer has its highest prevalence in older men (65+ years) (Coffey, 1993; Kampel, 2007; Kangmennaang, Mkandawire, & Luginaah, 2016). However, according to the literature, being diagnosed with prostate cancer at 39 years of age is an early presentation of the disease (Adshead & Stricker, 2005). Although this early presentation is not a very common occurrence may occur in high risk men. High risk men are men with a strong family history of the disease, men of African descent and men with diets with high fat contents and low vegetable intake (Carrara, 2017; Clarke, 2014).

The psychological implications for younger men (men below the age of 65) being diagnosed with prostate cancer are quite vast. It has been found that younger men are less likely to cope with the burden of prostate cancer. A plausible explanation for these findings could be due to the fact that most men who are diagnosed with prostate cancer are treated with radical prostatectomy (Champion et al., 2002). This line of treatment results in infertility. Unlike older men, younger men are usually in the process of starting their families. A prostatectomy has a significant influence on this aspiration.

All but one of the respondents for this study stated that they had no knowledge of the stage of their cancer. A lot of distress in oncology populations has been attributed to

a lack of information from their healthcare providers (Miles et al., 2016). Most of the men who completed the questionnaires for this study stated that they had expressed an interest to their health care providers to know more about their diagnosis and prognosis. They expressed frustration, as most of their health care providers often told them they didn't have time to discuss this information with each and every patient. This frustration as a result of insufficient information results in uncertainty about the disease and the course of treatment. This can lead to a substantial amount of psychological distress in patients.

When reporting on their perceived social support, 39.1% of men reported their social support to be good and 23.4% of men found it to be satisfactory. The way men perceive the support they are receiving from their families and communities is significant as it impacts how well they adjust to the disease and how they learn to cope with living with the disease. It has also been found that men with good family support are more likely to adhere to treatment (Alferi, Carver, Antoni, Weiss & Durèn, 2001). The perceived social support is important for the overall psychological well-being. Patients are more likely to feel supported if they feel the cancer is a shared burden as opposed to an individual one. A total of 62.5% of men in this study were married. Marriage had a bearing on how men perceived their social support, with most of the men who thought their social support was excellent or good - reporting to be married. This could be because married men have the additional support of a spouse and have someone to share the emotional journey with. Men who are married may be less distressed compared to their single counterparts. This is because they don't share the fear of the impact the cancer may have on them finding a wife and starting a family.

Out of all the men who partook in this study, 45.1% reported secondary education as their highest level of education. It has been previously found that men with lower levels of education tend to experience more distress and anxiety following a cancer diagnosis (Chambers et al., 2013; Klabunde, Reeve, Harlan, Davis & Potosky, 2005).

This could be because the disease could be unfamiliar to this group of people and they may have very limited information at their disposal. Out of the participants for this study, 39.1% of them were retired. These men are faced with adjusting to their new life and finding new meaning and purpose. It is common that human beings identify through their jobs and find purpose through their work, in the absence thereof many have reported to feel worthless, and in search of meaning (Rasmussen & Elverdam, 2008). Adding a chronic illness to this major life change could result in overall psychological distress. Additionally there is also an undeniable financial strain that comes with being diagnosed with prostate cancer. For men who don't reside in Windhoek for example, they have to worry about travelling to and from Windhoek on a regular basis for their treatment amongst other things. A cancer diagnosis is a financially taxing experience which can also contribute to the distress experienced by these males (Lim & Zebrack, 2004).

5.4 Psychological distress, anxiety and depression

5.4.1 Psychological distress

The psychological experiences of newly diagnosed and treatment undergoing oncology populations have been noted to be vast. These patients experience stress, distress, anxiety, depression and reduced quality of life most commonly (Cousson-Géalié, Bruchon-Schweitzer, Atzeni & Houede, 2011). For this study however, only the variables of psychological distress, anxiety and depression were investigated. In

prostate cancer patients specifically, a lot of their physical experiences such as incontinence and erectile dysfunction have been studied. However, not much exploration has been done on the impact that the shame and embarrassment that accompanies these experiences may have on the psychological well-being of men.

Distress is the most frequent occurring psychological experience in this sample, according to the ET. On the HADS however, distress is the second most common psychological experience. These findings are in line with past studies that have found a high incidence of distress in oncology patients to be a common phenomenon. This is partially attributed to the uncertainty that accompanies a cancer diagnosis and living with cancer (Lazarus & Folkman, 1984). Another plausible reason for the distress noted in some of the participants for this study could be as a result of the other life changes these men are undergoing. A large portion of the participants for this study were retired. With retirement comes the challenge of men having to adjust their lives as well as their self-image. After having looked at themselves as employed and through their jobs for so long and now being faced with the challenge of finding new meaning. This adjustment can be imagined to be stressful.

A lot of the men who partook in this study did not reside in Windhoek however can only access their treatment in Windhoek. Another reason resulting in distress can be attributed to the financial costs incurred having to travel to and from their place of residence. Also the discomfort of having to live far away from home while receiving treatment should not be underestimated. Sometimes men have to stay in Windhoek for up to two months in order to receive treatment. Being away from home, from their wives and their livestock for some men can be a distressful experience.

Psychological distress in oncology populations has a negative impact on patients' adherence to treatment and by extension - overall patient outcomes. Individuals who experience significant distress have a higher propensity of developing other psychological problems such as depression and/or anxiety (Bevans et al., 2011).

5.4.2 Anxiety

Anxiety is a common psychological experience in men living with prostate cancer. In this study, according to the Anxiety Thermometer a total of 10.9% of respondents for this study were significantly anxious. However this number was more than three times higher on the HADS with an overall score of 37.5%. These findings prove that quite a significant number of men who took part in this study were very anxious. Anxiety was the most frequent reported psychological experience on the HADS.

The researcher cannot attribute the findings of anxiety in this sample solely to the presence of prostate cancer as other confounding variables were not controlled for. However, a cancer diagnosis and having to live with cancer can be an extremely anxiety provoking situation. This is because in light of a prostate cancer diagnosis men are faced with a lot of decisions. They need to decide who to disclose their diagnosis too. They also need to make important decisions in terms of how to proceed with treatment. Some men may also be faced with a lack of information about prostate cancer. Some men have heard about prostate cancer for the first time only after being diagnosed with prostate cancer (Salomo, 2015).

It is also common that a lot of men upon receiving their prostate cancer diagnosis don't have any access to therapy. In these clinical settings there is an underrepresentation of multi-disciplinary professionals. This leaves most men to their own devices and often times they simply don't have enough information or

sufficient information to understand their diagnosis and prognosis. Yet even when they do have information, receiving a cancer diagnosis has been found to be a traumatic experience. Hence in order to cope with the magnitude of the change that comes with this experience, the option of therapy could yield more advantages than disadvantages in this population.

There are noteworthy cons of the presence of anxiety in this population. For one, who are living with prostate cancer and experience high levels of anxiety have been found to have poor treatment compliance and hostile reactions to treatment (Klett, 2014). Further than that, the presence of severe anxiety has an influence on how well these men cope in their day-to-day lives. Anxiety can prove to impair their social interactions and as a result could lead to them isolating themselves and feeling alone and hopeless.

Overall, it can be argued that there were moderate levels of anxiety amongst the participants for this study. Although the mean was 7.6 for the overall sample there is only a marginal difference of 0.4 between the average obtained for this sample and the general cut-off of 8.

5.4.3 Depression

In a study conducted by Rawl and others (2002) age was linked to depression with younger patients being found to be more depressed than their older counterparts. For this study those findings were consistent. Younger men scored higher on the HADS and Emotional Thermometers in comparison to older men. There was only a slight difference (of 1.6%) in scores between the levels of depression recorded on the HADS depression subscale and the Depression Thermometer.

Depression in oncology patients is important as it has a significant impact on their quality of life (Giesler, Kelly, Foster & Koch, 2002). Depressive symptoms directly impact the patients' ability to care for themselves and to cope with the demands of undergoing cancer treatment (Watson, 2001). However, depression in oncology patients could also have further implications. It could impact the entire family system that needs to care for someone with a chronic physical illness and simultaneously an individual who is hopeless, feels worthless and helpless. In addition to the financial strain that these systems have to endure depression could lead to an emotional burden as well not only on the patient but their spouse and family as well.

Men tend to deny their illness and underuse health care services according to Oliffe (2009). This can largely be credited due to some of the ways in which men have been taught to view their masculinity. For example, in some cultures it is deemed unmanly to maintain health and to make use of regular medical check-ups (Oliffe, 2009). These views often act as barriers to promoting overall health in this population. Further implications for these views could be that even when men are faced with feelings of sadness and hopelessness, they may be less inclined to express these feelings or seek help for them. Depression is viewed as a female issue and feelings of sadness and worthlessness are thought to be common experiences in women but not in men.

The manner in which society views men and expects men to behave can also further act as catalyst to promoting and maintaining depression within this population. A prostate cancer diagnosis is a life altering event. However men don't get the opportunity to mourn the loss of their previous health status. They are not provided with a platform to worry openly about the future or to discuss the prospects of

treatment. Treatments such as prostatectomies have significant bearing on the self-image of males. They entail the loss of a previous form of physical functioning.

Watson (2001) has postulated that being able to screen for depression and by consequence, intervene with effective treatment plans not only has an overall impact on survival but also on improving quality of life.

5.4.4 Correlations between the three variables: distress, anxiety and depression

Although the correlation between distress and anxiety was a positive correlation it was only of moderate strength. High distress scores were accompanied by high anxiety scores for this study although the inverse was not always the case. There was a 4.6% difference in overall scores for the Distress Thermometer and the Anxiety Thermometer. This is consistent with the 4.7% difference found in scores on the overall HADS and the anxiety subscale.

Slightly fewer men were assessed with psychological distress in comparison to anxiety. This could primarily be because distress can be expected to include anxiety symptoms. Yet anxiety alone is not always reflective of noteworthy psychological distress. This is due to distress being a much broader, all-encompassing term, including but not limited to anxiety.

Distress and depression were found to have a weak but positive correlation. The difference between the Distress Thermometer and the Depression Thermometer total scores was only 3.1%. However there was a much larger difference recorded on the HADS. Distress was found to be the most common psychological experience (alongside anxiety) of men living with prostate cancer this was directly paralleled by

depression – which was the least common experience of men living with prostate cancer.

It is possible that men are more likely to express experiencing psychological distress as opposed to admitting to feeling depressed due to the negative connotations attached to depression. However it should also be noted that distress may also include depression. Men living with prostate cancer are known to experience of range of psychological experiences. Distress may capture their experiences better than the single variable of depression which perhaps only accounted for one aspect of their experiences.

Anxiety and depression had a moderate positive correlation when looking at the Anxiety Thermometer and the Depression Thermometer. However the HADS found a much stronger positive correlation between the two variables. In many cases, anxiety and depression are comorbid psychological experiences. In oncology populations, past studies have found that patients who are anxious are also more likely to be depressed. This could be because anxiety on its own is a negative psychological experience that could result in the patient experiencing feelings of helplessness over their own lives. These feelings could consequently lead to depression.

In this study, there was a notable relationship between anxiety and depression. Scores on the Anxiety Thermometer and on the Anxiety Subscale of the HADS to a certain degree could help predict possible scores on the Depression Thermometer and Depression Subscale.

5.5 Limitations

One of the limitations of this study was the researcher did not measure the variables of psychological distress, anxiety and depression in the patients before they received their prostate cancer diagnosis. As a result, the findings of this study cannot with certainty be attributed solely to the presence of prostate cancer in this sample. Another limitation identified by the researcher is; because the research method was that of a quantitative nature, the researcher was not able to obtain in-depth information on the psychological experiences of men living with prostate cancer in Namibia.

Thirdly, data was collected solely in Windhoek so men who may be living with prostate cancer yet receive treatment elsewhere were excluded from this study. As a result, the researcher was unable to generalise the findings to the entire prostate cancer population living in Namibia.

5.6 Recommendations

5.6.1 Recommendations for practical implementation

This study had quite a number of males living with prostate cancer verbally express (to the researcher during data collection) having experienced frustrations as a result of a lack of sufficient information from their health care professionals. Previous studies have found the role of the general practitioner to be central in cancer care (Adshead & Stricker, 2005). This is due to the fact that a lot of patients will seek the advice of the general practitioner on how to proceed after receiving a cancer diagnosis. A possible recommendation would be; health care professionals providing

more holistic information to patients when they are diagnosed and through the course of their treatment.

The researcher also recommends that there be accessible psychosocial support offered through means of a psychologist or social worker to men living with prostate cancer. This is especially necessary for men who have just received a prostate cancer diagnosis as well as for men with stage 4 cancer. In addition, the researcher also thinks that a lot of the men could benefit from support groups for men living with prostate cancer.

Another recommendation would be to continue spreading intensive awareness on prostate cancer as well as the psychological experiences common in oncology populations. The researcher would also advise that this awareness is done in the ethnic languages.

Lastly, the researcher recommends psycho-education for men who are living with prostate cancer. In order to help them not only identify their feelings but also learn to express them and cope with them effectively. The aim of such an intervention would be beneficial in helping men make truly informed treatment decisions. It will also be helpful to teach them effective coping strategies and as a result it could result in the burden on the family system.

5.6.2 Recommendations for future research

The researcher's recommendations for future research are as follows: that future studies are of a qualitative nature in order to accommodate some of the experiences of men living with prostate cancer that aren't assessed by instruments. For example, while conducting this research, a lot of the respondents spoke to the researcher about

one of their main concerns being they worry who will take care of their livestock if they died of prostate cancer.

The researcher only had four months of data collection for this study which resulted in the researcher getting a sample smaller than what was envisioned. The researcher suggests that future quantitative studies consider increasing the sample size. This is in order to get sufficient power and as a result get more defined relationships between variables.

Another consideration for future studies would be that studies be conducted in the native languages of the participants. Although the participants were able to speak English and understand it, most of them expressed that they would have been more comfortable expressing themselves in their native languages.

Lastly, researcher recommends that future studies seek to investigate the most effective psychological interventions for oncology patients. Various methods are currently used when offering interventions to this population however none of them have been tested and validated on Namibian populations.

5.7 Conclusions

Despite the limitations highlighted in this chapter, this study has generated information that can be very useful in identifying problem areas in the current services available to men with prostate cancer. Furthermore, information yielded in this study can also prove to be useful in designing and implementing programmes for the diverse psychosocial needs of men living with prostate cancer.

A cancer diagnosis is accompanied by a significant amount of negative psychological experiences. Sometimes the symptoms resolve by themselves and are considered

normal and appropriate responses to being diagnosed with a life-threatening disease. However, in the failure of symptoms to resolve by themselves, most men still don't seek treatment. A lot of men receive their prostate cancer diagnoses at a very late stage due to their unwillingness to seek help (Klabunde, Reeve, Harlan, Davis & Potosky, 2005; Oliffe, 2009). There are also other barriers that may limit men from getting the necessary help. Professional services for psychosocial support for example are quite expensive which may result in men regarding it to not be a priority.

Additionally, individual experiences of illness are to a large extent influenced by the context in which individuals live in and their subjective experiences within these contexts. Men living with prostate cancer have experiences other than prostate cancer which could be unique to them. It is important that these unique experiences are taken into consideration if the psychosocial needs of all men living in Namibia are to be catered to. The experiences of men during illness are not static but rather constantly changing phenomenon. Constant research needs to be conducted in order for health care providers to stay in tune with the most relevant needs of oncology patients.

Various psychosocial interventions on diverse populations have been found to have a positive influence on decreasing distress, anxiety and depression. It is important to control distress, anxiety and depression in oncology populations due to the overwhelming impact these variables have on treatment adherence, self-care and individual capacity to cope with treatment. Ultimately, a decrease in the occurrence of these experiences in oncology populations could improve the overall quality of life of these individuals.

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APPENDIX A: ETHICAL CLEARANCE CERTIFICATE



ETHICAL CLEARANCE CERTIFICATE

Ethical Clearance Reference Number: FHSS/177/2017

Date: 28 March, 2017

This Ethical Clearance Certificate is issued by the University of Namibia Research Ethics Committee (UREC) in accordance with the University of Namibia's Research Ethics Policy and Guidelines. Ethical approval is given in respect of undertakings contained in the Research Project outlined below. This Certificate is issued on the recommendations of the ethical evaluation done by the Faculty/Centre/Campus Research & Publications Committee sitting with the Postgraduate Studies Committee.

Title of Project: Psychological Distress, Anxiety, And Depression Of Men Living With Prostate Cancer In Windhoek-

Nature/Level of Project: Masters

Researcher: Atty Mwafufya

Student Number: 201202220

Faculty: Faculty of Humanities and Social Science

Supervisors: Dr. E. Shino

Take note of the following:

- (a) Any significant changes in the conditions or undertakings outlined in the approved Proposal must be communicated to the UREC. An application to make amendments may be necessary.
- (b) Any breaches of ethical undertakings or practices that have an impact on ethical conduct of the research must be reported to the UREC.
- (c) The Principal Researcher must report issues of ethical compliance to the UREC (through the Chairperson of the Faculty/Centre/Campus Research & Publications Committee) at the end of the Project or as may be requested by UREC.
- (d) The UREC retains the right to:
 - (i) Withdraw or amend this Ethical Clearance if any unethical practices (as outlined in the Research Ethics Policy) have been detected or suspected,
 - (ii) Request for an ethical compliance report at any point during the course of the research.

UREC wishes you the best in your research.

Prof. P. Odonkor: UREC Chairperson

A handwritten signature in black ink, appearing to be "P. Odonkor", written over a horizontal line.

Ms. P. Claassen: UREC Secretary

A handwritten signature in black ink, appearing to be "Paula Claassen", written over a horizontal line.

APPENDIX B: CONSENT LETTER

INFORMATION LETTER AND CONSENT FORM

[INSERT DATE]

Dear Participants

My name is Atty Twahafifwa Mwafufya (20120222), I am a final year Master of Arts in Clinical Psychology student at the University of Namibia (UNAM). I am required to complete a mini-thesis in partial fulfilment for the Master of Arts degree. My research project is on the psychological distress, anxiety and depression of men living with prostate cancer in Windhoek.

In order to collect the necessary data, I am humbly asking that you complete the questionnaires attached. I also ask that you take note that your participation in this research is absolutely voluntary and you are allowed to withdraw from this study at any time. The information that will be collected from the participants of this study will be used only for academic purposes and will be treated with outmost confidentiality. No identity of any participant will be disclosed either.

I thank you for your willingness to participate in this study. Should you have any questions, please feel free to contact me or my supervisor, Dr. Elizabeth N. Shino (Tel: 061 206-3807; Mobile 081 250 9414; eshino@unam.na).

Sincerely yours,

Atty T. Mwafufya

0812224543

attym8@gmail.com

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## **INFORMED CONSENT**

I hereby give consent to participate in this study on the psychological distress, anxiety, and depression of men living with prostate cancer in Windhoek.

\_\_\_\_\_

Signature

\_\_\_\_\_

Date

## APPENDIX C: SOCIO-DEMOGRAPHIC QUESTIONNAIRE

### **PART A: SOCIO-DEMOGRAPHIC INFORMATION**

Age: \_\_\_\_\_ years

Age at which you were first diagnosed with prostate cancer: \_\_\_\_\_ years

**Current stage of cancer:**

|               |  |
|---------------|--|
| Stage 1 (I)   |  |
| Stage 2 (II)  |  |
| Stage 3 (III) |  |
| Stage 4 (IV)  |  |
| Unknown       |  |

**Home Language:**

|             |  |                       |  |
|-------------|--|-----------------------|--|
| English     |  | Afrikaans             |  |
| Oshiwambo   |  | Otjiherero            |  |
| Damara>Nama |  | Silozi/Subia          |  |
| Rukwangali  |  | Setswana              |  |
| German      |  | Other (specify) _____ |  |

**Race/ Ethnic Origin:**

|       |  |                       |  |
|-------|--|-----------------------|--|
| Black |  | Coloured              |  |
| White |  | Others(specify) _____ |  |

**Region of Origin:**

|              |  |              |  |
|--------------|--|--------------|--|
| Kunene       |  | Omusati      |  |
| Oshana       |  | Ohangwena    |  |
| Oshikoto     |  | Kavango West |  |
| Kavango East |  | Zambezi      |  |
| Erongo       |  | Otjozondjupa |  |
| Omaheke      |  | Khomas       |  |
| Hardap       |  | Karas        |  |

**Place of residence before cancer diagnosis:**

|                            |  |
|----------------------------|--|
| Rural area (specify _____) |  |
| Urban area (specify _____) |  |

**Perceived social support:**

|                 |  |
|-----------------|--|
| 1. Excellent    |  |
| 2. Good         |  |
| 3. Satisfactory |  |
| 4. Poor         |  |
| 5. Bad          |  |

**Marital Status:**

|          |  |
|----------|--|
| Single   |  |
| Married  |  |
| Widowed  |  |
| Divorced |  |

**Number of children:**

\_\_\_\_\_

**Highest level of education obtained:**

|                                                                                                     |  |
|-----------------------------------------------------------------------------------------------------|--|
| No formal education                                                                                 |  |
| Early childhood education                                                                           |  |
| Primary education (grade 1- grade 7)                                                                |  |
| Secondary education (grade 8- grade 12)                                                             |  |
| Tertiary education (certificate, diploma, degree, honours degree, master's degree, doctoral degree) |  |

**Employment**

|               |  |
|---------------|--|
| Full-time     |  |
| Part-time     |  |
| Retired       |  |
| Disabled      |  |
| Unemployed    |  |
| Self-employed |  |

## APPENDIX D: HOSPITAL ANXIETY AND DEPRESSION SCALE

### Hospital Anxiety and Depression Scale (HADS)

Tick the box beside the reply that is closest to how you have been feeling in the past week.  
Don't take too long over you replies: your immediate is best.

| D | A |                                                                                     | D | A |                                                                              |
|---|---|-------------------------------------------------------------------------------------|---|---|------------------------------------------------------------------------------|
|   |   | <b>I feel tense or 'wound up':</b>                                                  |   |   | <b>I feel as if I am slowed down:</b>                                        |
| 3 |   | Most of the time                                                                    | 3 |   | Nearly all the time                                                          |
| 2 |   | A lot of the time                                                                   | 2 |   | Very often                                                                   |
| 1 |   | From time to time, occasionally                                                     | 1 |   | Sometimes                                                                    |
| 0 |   | Not at all                                                                          | 0 |   | Not at all                                                                   |
|   |   | <b>I still enjoy the things I used to enjoy:</b>                                    |   |   | <b>I get a sort of frightened feeling like 'butterflies' in the stomach:</b> |
| 0 |   | Definitely as much                                                                  | 0 |   | Not at all                                                                   |
| 1 |   | Not quite so much                                                                   | 1 |   | Occasionally                                                                 |
| 2 |   | Only a little                                                                       | 2 |   | Quite Often                                                                  |
| 3 |   | Hardly at all                                                                       | 3 |   | Very Often                                                                   |
|   |   | <b>I get a sort of frightened feeling as if something awful is about to happen:</b> |   |   | <b>I have lost interest in my appearance:</b>                                |
| 3 |   | Very definitely and quite badly                                                     | 3 |   | Definitely                                                                   |
| 2 |   | Yes, but not too badly                                                              | 2 |   | I don't take as much care as I should                                        |
| 1 |   | A little, but it doesn't worry me                                                   | 1 |   | I may not take quite as much care                                            |
| 0 |   | Not at all                                                                          | 0 |   | I take just as much care as ever                                             |
|   |   | <b>I can laugh and see the funny side of things:</b>                                |   |   | <b>I feel restless as I have to be on the move:</b>                          |
| 0 |   | As much as I always could                                                           | 3 |   | Very much indeed                                                             |
| 1 |   | Not quite so much now                                                               | 2 |   | Quite a lot                                                                  |
| 2 |   | Definitely not so much now                                                          | 1 |   | Not very much                                                                |
| 3 |   | Not at all                                                                          | 0 |   | Not at all                                                                   |
|   |   | <b>Worrying thoughts go through my mind:</b>                                        |   |   | <b>I look forward with enjoyment to things:</b>                              |
| 3 |   | A great deal of the time                                                            | 0 |   | As much as I ever did                                                        |
| 2 |   | A lot of the time                                                                   | 1 |   | Rather less than I used to                                                   |
| 1 |   | From time to time, but not too often                                                | 2 |   | Definitely less than I used to                                               |
| 0 |   | Only occasionally                                                                   | 3 |   | Hardly at all                                                                |
|   |   | <b>I feel cheerful:</b>                                                             |   |   | <b>I get sudden feelings of panic:</b>                                       |
| 3 |   | Not at all                                                                          | 3 |   | Very often indeed                                                            |
| 2 |   | Not often                                                                           | 2 |   | Quite often                                                                  |
| 1 |   | Sometimes                                                                           | 1 |   | Not very often                                                               |
| 0 |   | Most of the time                                                                    | 0 |   | Not at all                                                                   |
|   |   | <b>I can sit at ease and feel relaxed:</b>                                          |   |   | <b>I can enjoy a good book or radio or TV program:</b>                       |
| 0 |   | Definitely                                                                          | 0 |   | Often                                                                        |
| 1 |   | Usually                                                                             | 1 |   | Sometimes                                                                    |
| 2 |   | Not Often                                                                           | 2 |   | Not often                                                                    |
| 3 |   | Not at all                                                                          | 3 |   | Very seldom                                                                  |

Please check you have answered all the questions

#### Scoring:

Total score: Depression (D) \_\_\_\_\_ Anxiety (A) \_\_\_\_\_

0-7 = Normal

8-10 = Borderline abnormal (borderline case)

11-21 = Abnormal (case)

## APPENDIX E: EMOTIONAL THERMOMETER

### EMOTION THERMOMETER

**Instructions:** In the three columns that follow, please mark the number (0-10) that best describes how much emotional upset you have been experiencing in the past week, including today.

Distress

Anxiety

Depression

