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QUALITY OF LIFE IN MEN WITH PROSTATE CANCER

Being

An Evidence Based Practice Project Presented to the Graduate Faculty

of Mississippi University for Women in

Partial Fulfillment of the Requirements for

the Degree of Master of Science in Nursing

by

Pamela Lott Baird

BSN, Mississippi University for Women

Date _____ Approved Backard Marcare Graduate Studies Director

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Graduate Committee Approval

The Graduate Committee of Pamela Lott Baird hereby approves her thesis as meeting partial fulfillment of the requirements for the Degree of Master of Science in Nursing

7-31-06 Date Approved

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Approved Committee Member Approved

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DEDICATION

I wish to dedicate my research to my family and my best friends. To my children, Hannah and Lilli, thank you for being so understanding when I had to go to work on my computer at eight every night. Without you both supporting me and being the wonderful girls you are, I would not have been able to complete this program. You both gave me incentive to achieve a goal I never thought possible. To my mother, Carolyn, who helped me with my children during this whole process and has always encouraged me to just do my best. You have made this entire year possible and have given me strength when I needed it most. To my father, Robert, who had the patience to listen to me, who told me I could do it, and who inspired me to pursue this profession. I love all of you more than words can say. To Lesleigh, you have been right by me throughout this whole year and your friendship means so much. I am thankful to have gone through this experience with you. I also want to thank my dear friend Melissa who always helped me when I needed her no matter how much she had going on in her own life. You saved the day on more than one stressful occasion. Finally, thank you L., for always listening and for being my friend.

QUALITY OF LIFE IN MEN WITH PROSTATE CANCER

Pamela Lott Baird, MSN, RN

Mississippi University for Women, 2006 Supervising Professor: Dr. Rebecca Cagle Abstract

The diagnosis of prostate cancer is extremely serious and overwhelming for men of any gender, age, or socioeconomic class. Unfortunately, many patients are left to deal with the ramifications of the illness with little information or coping mechanisms. Perhaps prostate cancer could be dealt with in a more productive and positive manner if patients had opportunities to vocalize feelings and ask pertinent and relevant questions of healthcare providers without feeling embarrassed or ashamed. Clearly, quality of life is changed in many ways by this serious and often lethal illness. According to Willener & Hantikainen, the illness is quite prevalent:

Prostate cancer is the most frequent cancer in men over the age of 40. Men suffering from prostate cancer cope with dual problems; first the diagnosis of prostate cancer and second the potential negative effect on their sexuality after treatment (Willener & Hantikainen, 2005, p. 88).

Due to the overwhelming sexual health issues which impact quality of life in these patients, it is crucial for nurse practitioners as primary care providers to examine these issues and put a plan of action into practice to help restore sexual health in these patients. Furthermore, the hindrances which accompany a diagnosis of prostate cancer often

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prevent patients from achieving quality of life. It is important to open the lines of communication between patient, nurse practitioner, and spouses or partners of patients in order to develop a plan of action which might restore or even improve the quality of life in these patients.

A systematic review of literature using a computer search of CINAHL and MEDLINE identified a vast amount of literature on the variables of quality of life and prostate cancer. 197 articles in CINAHL and 1331 articles in MEDLINE were listed. The variable of quality of life listed 1247 sources of literature.

For the purposes of this literature review, a grand theory was selected to form the theoretical foundation for the purposes of this study. Neuman's Systems Model forms the foundation for this literature review. "The major concepts identified in the model are wholistic client approach, open system, basic structure, environment, created environment, stressors, lines of defense and resistance, degree of reaction, prevention as intervention, and reconstitution" (Tomey & Alligood, 2002, p. 301).

ACKNOWLEDGEMENTS

I would also like to express sincere thanks to Dr. Rebecca Cagle, my Supervising Professor. She has been wonderful to take on additional students including myself. This project would not have been possible without her continued help and encouragement. I am sure I called you more than you care to remember....but thanks for always answering.

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CHAPTER I

Dimensions of the Problem

The extreme number of prostate cancer cases each year causes not only concern for patients but a concern for exactly what nurse practitioners and physicians are dealing with. According to Taber's Cyclopedic Medical Dictionary:

Prostate cancer is a deadly illness which affects men in numerous and personal ways. A malignant tumor is almost always an adenocarcinoma of the prostate gland. Other than skin cancers, it is the most common neoplasm in men. In 2003, the American Cancer Society estimated that 221,000 American men would be diagnosed with prostate cancer and that 29,000 men would die as a result (Taber's, 2005, p.1788). The prevalence of prostate cancer also means more men dying each year to a disease which reaps havoc both personally and professionally. Moreover, prostate cancer is an illness which individuals do not like to talk about because it makes them uncomfortable and ill at ease. However, the rising numbers of men with prostate cancer is great cause for self education and patient education. According to researchers in Urologic Nursing:

Prostate cancer is the second leading cause of cancer death in men. It is increasing each year and morbidity is rising. Prostate cancer affects men both psychologically as well as physically. This devastating illness is responsible for sexual dysfunction, emotional turmoil, and physical illness and death. Prostate cancer is the most frequent malignancy in men in Canada and the United States. Through education and recognition of this insidious illness, perhaps morbidity from prostate cancer will eventually decline. Side effects of prostate cancer cause great turmoil for men and their loved ones (Butler, et al., 2001). Certainly the healthcare community as a whole must consider not only the diagnosis of prostate cancer but other aspects of patients' lives which are affected by the cancer. Although prostate cancer is a common diagnosis, there are tests which help aid in its early detection and hopefully obliteration. Crowe states:

The diagnosis and treatment have changed dramatically over the past decade. No longer is metastatic disease commonly the primary presentation. The discovery of the biomarker, prostate specific antigen (PSA), means that many younger men are now confronted with the diagnosis and, as a result of the earlier detection and the slow progression of this disease, these men may live for years after their diagnosis (Crowe, 2003, p. 279).

Not only is prostate cancer voracious and unforgiving, but its effects cause overwhelming personal concerns, as well. Many men have no significant other to talk or share feelings with. Many men feel so uncomfortable with the diagnosis of cancer that they refuse to acknowledge the severity of the situation. According to another source:

Prostate cancer is the most common non-skin cancer diagnosed among men, accounting for an estimated 33% of all cancer cases, with more than 232,090 new cases diagnosed in 2005. Because the five-year relative survival rate for early-stage cancer is nearly 100%, the experience of diagnosis and treatment can have long-term effects on men physically, psychologically, and emotionally (Galbraith et al., 2005, p. E30).

Men dealing with prostate cancer truly face so much more than anticipated. Not only must men question themselves as to their amount of inner strength to fight the illness, but they must also ascertain whether partners or spouses can deal with the frequent sexual effects of prostate cancer on their relationships. Monturo explains: The ability to maintain close interpersonal relationships is often challenged with the diagnosis of a life-threatening illness. Health care professionals need to be prepared to assess and support patients who may experience difficulties with intimate relationships as a result of a cancer diagnosis (Monturo et al., 2001, p.511).

Depression and isolation may result from the catastrophic experience of dealing with prostate cancer. In addition, personal feelings of masculinity and sexual functioning may be affected. Quality of life is invaluable because it is how a person defines happiness. Clearly, life is a process in which individuals experience, learn, fail, suffer, succeed, and finally evolve. Quality of life is a subjective state of being for each individual. How a person feels about life, family, sexuality and themselves is crucial to the ultimate reason for functioning as a wholistic individual. Life constantly changes, and an individual's quality of life is based upon the person's ability to adjust. Prostate cancer patients must not only deal with the diagnosis of a life threatening illness, but may also face threats to their sexuality.

Problem Statement

Prostate cancer is an extremely prevalent form of cancer which affects a vast number of men each year. While the cancer itself is highly recognized as a substantial problem and life threatening illness, patients' quality of life many times is disregarded. According to Taber's:

Quality of life is the worth, meaning, or satisfaction obtained from living. The concept holds varying meanings for different people and may evolve over time. For some individuals, it implies autonomy, empowerment, capability, and choice; for others, security, social integration, or freedom from stress or illness (Taber's, 2005,

p.1835).

Sexual functioning is one aspect of the patient diagnosed with prostate cancer which affects quality of life. Erectile dysfunction is a major component of sexual functioning largely affected by prostate cancer. Many factors contribute to a patient's ability to recover erections. According to Mirone:

Criteria that influence recovery of erections after surgery include younger patient age, stronger erections before operation, preservation of the neurovascular bundles and attention to fine details in the surgical technique. In addition, quality of life after prostate cancer treatment is relevant given the low rate of disease-specific death and has been examined closely during the last several years (Mirone et al., 2003, p.137).

Furthermore, continence, sexual function, and living with cancer are quite important in men who have the illness due to the possibility of loss of sexual activity as well as companionship. One source states: "Quality of life studies can delineate sexual function after radical prostatectomy, including the use of sexual aids. To our knowledge, no study has yet shown a health-related quality of life benefit from nerve sparing radical prostatectomy" (Mirone et al., 2003, p138). Accordingly, the ability to achieve and maintain an erection after prostatectomy is a topic which the nurse practitioner should address. Perhaps questioning the patient privately would encourage conversation and enable the patient to voice concerns. On the other hand, the patient may prefer the support and guidance of his spouse or significant other. When addressing the topic of erectile dysfunction, the patient should be allowed to set the pace of conversation so as to promote a comfortable environment.

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Depression is another aspect of quality of life affected by prostate cancer patients. Men become depressed not only because of the illness, but also due to pressure to perform sexually as well as verbalize emotions. According to an article in Oncology Nursing Forum:

Men with prostate cancer most at risk for depressive symptoms include those with advanced disease, prominent cancer symptoms and side effects of treatment, and a history of clinical depression. Prostate cancer pain appears to be associated strongly with depressive symptoms, whereas fatigue induced by radiation therapy or hormonal therapy has not been associated consistently with increasing depression. QOL studies have found few prostate treatment variables associated with depression. Rather, major findings from these studies indicate that being older, being married, having high social support, being optimistic, and having less impairment in physical functioning are associated with decreased risk of depression (Bennett, 2005, p. 554). For the purposes of this review, these reasons will be discussed in detail.

The factors affecting quality of life in prostate cancer patients, again, illustrate the absolute need of addressing this problem by nurse practitioners and physicians. Frequently, quality of life is not addressed when dealing with prostate cancer. Health care providers many times try and solve the immediate problem which is the prostate cancer. For this reason, this review strives to provide a melding of the literature concerning the most recent level of findings involving prostate cancer, quality of life, and the vital role of the nurse practitioner in providing primary care to these patients.

Statement of Purpose

As nurse practitioners, it is imperative to examine all aspects of prostate cancer patients' wellness, while providing high quality cost effective care. In addition, it is crucial to sensitively address sexual concerns and depressive problems while encouraging patients to acknowledge feelings of grief and loss. Quality of life is also affected by stages of prostate cancer. Viewpoints of authorities on this relevant subject matter are presented. Further, patient input into treatment and decision-making are examined. If a patient feels regret or blames himself for making decisions which do not benefit him, quality of life certainly may be lessened. The researcher will convey information on quality of life and prostate cancer as it has been researched and published. The researcher will also examine the role of the nurse practitioner in patient care. Finally, the researcher will investigate prostate cancer patient concerns and how those concerns affect quality of life in anticipated and unexpected ways.

Significance of the Study

Due to the ever increasing numbers of newly diagnosed prostate cancer patients; more information than ever is available for education and research. Not only is information used by scholars, but also the patients themselves in order to become knowledgeable so that they may face the illness directly with all information available. According to another source:

Cancer touches the lives of many people every year. One man in six will be diagnosed with prostate cancer in his lifetime. Prostate cancer is the second leading cause of cancer death in men in the United States. About 189,000 new cases of prostate cancer are diagnosed in the United States every year. African American

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men are more likely to have prostate cancer and die from the disease than are Caucasian or Asian men. An estimated 30,200 men in the United States die of the disease every year (American Cancer Society, 2002). Beyond these stark statistics lie a number of profound quality-of-life (QOL) issues for the millions of men who are living with this disease and the sequelae of treatment (Rondorf-Klym et. al. 2003, p. E24).

A computer search using MEDLINE and CINAHL displayed a large amount of articles on the topic of prostate cancer and quality of life. Articles retrieved from the two databases were relevant and useful for the review.

Table 1

Summary of Literature Searches

Search Terms	Number of Citations	Database	
Quality of life and Prostate Cance	r 197	CINAHL	
	1331	MEDLINE	
Quality of Life	1247	CINAHL	
Quality of Life and Betty Neuman	0	CINAHL	
	0	MEDLINE	

Note. CINAHL = Cumulative Index to Nursing and Allied Health Literature, MEDLINE = Medical Literature Online

Theoretical Foundation

The Neuman Systems Model by Betty Neuman will provide the theoretical

foundation for this review. According to one source:

Neuman designed a conceptual model for nursing in 1970 in response to requests from UCLA graduate students who wanted a course emphasizing breadth rather than depth in understanding the variables in nursing. Initially, the model was developed to integrate students' understanding of client variables that extend nursing beyond the medical model. The Neuman model included such behavioral science concepts as problem identification and prevention (Tomey & Alligood, 2002, p. 300).

Furthermore, the model provides a detailed description of the nurse/patient relationship. The nurse is a participant in the health of the patient and as such also becomes concerned with the patient's response to the environment and its' stressors on the patient. Neuman's grand nursing theory identifies stressors in the patient environment which affect patient health or illness. The patient's ability to deal with the given stressors in the environment and achieve or maintain health is a major aspect of Neuman's theory. In addition, nursing, person, health, and wellness are each individual components of the nursing paradigm which Neuman separates distinctly. For example, nursing is wholistic in that it is concerned with stressors on patients. Also, person is in constant change and continually interacts with the environment. Person is not restricted to one individual, but may be an issue, group, or family. Health is a dynamic state which constantly changes according to needs which are not met. Environment consists of three areas being external, internal, and created. Environment may be consciously or unconsciously created but influences and is changed by wellness of the client or patient.

Neuman's theory also consists of lines of defense and resistance. For example, the flexible line of defense is the primary line of defense which serves as a protective buffer

for the client's normal or stable state that prevents invasion of stressors and maintains the client system free from stressor reactions or symptoms. Next, the normal line of defense, also referred to as secondary line of defense, lies between the flexible line of defense and the lines of resistance and serves as a representation of the client system's normal or usual wellness state. Finally, lines of resistance are also known as the tertiary level in Neuman's model. These lines of resistance involuntarily activate when a stressor invades the normal line of defense. These lines act as stabilizers and hopefully will return the client to the normal line of defense. Death may occur if these lines are ineffective. The client system is able to recover if the lines of resistance are effective. There is also a three stage nursing process in Neuman's Systems Model. Nursing diagnosis, nursing goals, and nursing outcomes each encompass crucial areas of Neuman's theory. Nursing diagnosis is based of necessity in a thorough assessment, and with consideration given to five variables in three stressor areas. Nursing goals must be negotiated with the patient, and take account of patient's and nurse's perceptions of variances from wellness. Nursing outcomes are considered in relation to variables, and are achieved through primary, secondary, and tertiary interventions. Primary intervention is an action required to retain client system stability; selected when the risk of or hazard from a stressor is known but a reaction has not yet occurred. Interventions attempt to reduce the possibility of the client's encounter with the stressor or strengthen the flexible line of defense to decrease the possibility of a reaction when the stressor is encountered. Secondary prevention is an action required to attain system stability; selected when a reaction to a stressor has already occurred. Interventions deal with existing symptoms and attempt to strengthen the lines of resistance through use of the client's internal and external

resources. Finally, Neuman's Model includes tertiary prevention. Tertiary prevention is an action required to maintain system stability; selected when some degree of client system stability has occurred following secondary prevention interventions (Playbill Taylor Hall Theatre, 2005).

Definition of Terms

For the purpose of this project the following terms are defined:

Prostate Cancer

Theoretical. Prostate cancer is defined theoretically as a malignant tumor (almost always an adenocarcinoma) of the prostate gland. Other than skin cancers, it is the most common neoplasm in men. In 2003, the American Cancer Society estimated that 221,000 American men would be diagnosed with prostate cancer and that 29,000 men would die as a result (Taber's, 2005).

Operational. Prostate cancer is defined operationally as a malignant tumor (almost always an adenocarcinoma) of the prostate gland. Other than skin cancers, it is the most common neoplasm in men. In 2003, the American Cancer Society estimated that 221,000 American men would be diagnosed with prostate cancer and that 29,000 men would die as a result (Taber's, 2005).

Quality of Life

Theoretical. Quality of life is defined theoretically as the worth, meaning, or satisfaction obtained from living. The concept holds varying meanings for different people and may evolve over time. For some individuals it implies autonomy, empowerment, capability, and choice; for others, security, social integration, or freedom from stress or illness (Taber's, 2005).

Operational. Quality of life is defined operationally as the worth, meaning, or satisfaction obtained from living. The concept holds varying meanings for different people and may evolve over time. For some individuals it implies autonomy, empowerment, capability, and choice; for others, security, social integration, or freedom from stress or illness (Taber's, 2005).

Sexual Health

Theoretical. The World Health Organization has defined three elements of sexual health; a capacity to enjoy and control sexual behavior in accordance with a social and personal ethic; freedom from fear, shame, guilt, false beliefs, and other psychological factors inhibiting sexual response and impairing sexual relationships; and freedom from organic disorder, disease, and deficiencies that interfere with sexual and reproductive functions. Medical studies of human sexual function and activity have provided no evidence that having attained a certain age is, of itself, reason to discontinue participating in and enjoying sexual intercourse. (Taber's, 2005)

Operational. The World Health Organization has defined three elements of sexual health; a capacity to enjoy and control sexual behavior in accordance with a social and personal ethic; freedom from fear, shame, guilt, false beliefs, and other psychological factors inhibiting sexual response and impairing sexual relationships; and freedom from organic disorder, disease, and deficiencies that interfere with sexual and reproductive functions. Medical studies of human sexual function and activity have provided no evidence that having attained a certain age is, of itself, reason to discontinue participating in and enjoying sexual intercourse (Taber's, 2005).

Nurse Practitioner

Theoretical. Nurse practitioner is defined theoretically as a licensed registered nurse who has had advanced preparation for practice that includes 9 to 24 months of supervised clinical experience in the diagnosis and treatment of illness. The NP concept was developed in 1965 by Henry Silver, M.D., and Loretta Ford, R.N. Most contemporary NP programs are at the master's degree level; graduates are prepared for primary care practice in family medicine, women's health, neonatology, pediatrics, school health, geriatrics, or mental health. NPs may work in collaborative practice with physicians or independently in private practice or in nursing clinics. Depending upon state laws, NPs may be allowed to write prescriptions for medications (Taber's, 2005).

Operational. Nurse practitioner is defined operationally as a licensed registered nurse who has had advanced preparation for practice that includes 9 to 24 months of supervised clinical experience in the diagnosis and treatment of illness. The NP concept was developed in 1965 by Henry Silver, M.D., and Loretta Ford, R.N. Most contemporary NP programs are at the master's degree level; graduates are prepared for primary care practice in family medicine, women's health, neonatology, pediatrics, school health, geriatrics, or mental health. NPs may work in collaborative practice with physicians or independently in private practice or in nursing clinics. Depending upon state laws, NPs may be allowed to write prescriptions for medications (Taber's, 2005).

Primary Care

Theoretical. Primary care is defined theoretically as integrated, accessible health care, provided where the patient first seeks medical assistance, by clinicians who are

responsible for most of a patient's personal health care, including health maintenance, therapy during illnesses, and consultation with specialists (Taber's, 2005).

Operational. Primary care is defined operationally as integrated, accessible health care, provided where the patient first seeks medical assistance, by clinicians who are responsible for most of a patient's personal health care, including health maintenance, therapy during illnesses, and consultation with specialists (Taber's, 2005).

Research Questions

For the purposes of this study, the following research questions were generated:

1. What is the role of the nurse practitioner in assisting men diagnosed with prostate cancer in addressing sexual health?

2. What are hindrances of men diagnosed with prostate cancer in achieving quality of life?

Delimitations

Literature was delimited, for the purpose of this integrative literature review, to the following:

1. Literature that is available in the English language or translated into English abstracts.

2. Literature available through CINAHL and MEDLINE.

3. Literature that is available through the Mississippi University for Women Library and Interlibrary loan program.

4. Literature including prostate cancer and quality of life.

Limitations

For the purpose of this investigation a specific limitation identified is that the information obtained cannot be generalized beyond the scope of the research reviewed.

Summary

This chapter provided the basis for the literature review regarding quality of life for prostate cancer patients and the role of the nurse practitioner, as a primary care provider, in assisting those patients to seek optimal quality of life. Neuman's Systems Model by Betty Neuman was reviewed as the theoretical foundation. The terms prostate cancer, quality of life, sexual health, nurse practitioner, and primary care were defined. The research questions: What is the role of the nurse practitioner in primary care in helping men diagnosed with prostate cancer in addressing sexual health and what are the hindrances to men diagnosed with prostate cancer in achieving quality of life, were identified. The delimitations and limitations of the review were discussed.

CHAPTER II

Review of the Literature

For the purposes of this study, data-based articles were reviewed and critiqued using a concept knowledgebase for critique of theory-based, data-based, and RCT literature regarding quality of life in prostate cancer patients. The literature review of quality of life in prostate cancer patients. The literature review of quality of life in prostate cancer patients included eleven data-based articles and which represented another 346 references. In this chapter, a summary of each individual study variable is conveyed as it derived from the existing knowledgebase.

An Overview of the Healthcare Literature Related to Primary

Care Knowledge Regarding Quality of Life in Prostate Cancer Patients

In 2003, Monturo, Rogers, Coleman, Robinson, and Pickett completed a systematic literature review of twenty-three articles, where they discussed experiences of couples who had undergone the life changing experience of radical prostatectomy. Sexuality, erectile dysfunction, and sexual counseling were variables which occurred throughout the article. The randomized controlled trial research design contained an unknown number of patients and partners and there was no theoretical foundation involved. The authors include five lessons which are integral to communicating with couples in order to facilitate a viable primary care provider relationship.

A major strength of the review was that it synthesized lessons related to communicating about sexuality and intimacy from the experience of couples' therapy. Although the male partner is the cancer victim, the review provides insight into how to make the couple relationship stronger while enabling the nurse practitioner to develop a teaching relationship with each partner. Furthermore, it is essential for the nurse practitioner to remain objective. Nurse practitioners must utilize the opportunity for education and assessment of sexual health in the quality of life of prostate cancer patients. According to one source:

Sexual health and the ability to engage in an intimate relationship are important aspects of general health and quality of life for most people. Advance practice nurses are strategically positioned in many health care settings to provide assessment, intervention, and referral to patients who are dealing with disease and treatment effects. Patients usually do not volunteer information about their sexual concerns and clinicians need to incorporate sexual health into the routine health assessment. Patients and partners often respond to questions about sexual health with relief rather than embarrassment (Penson et al., 2000), particularly if they have a concern that is causing stress on their relationship. Couples living with an illness that negatively affects their relationship can benefit from skillful and compassionate assessment of their concerns (Monturo et al., 2001, p. 516).

Although there was no sample size given for the study, the review did provide a recommendation for practice which included an assessment of sexual health as an integral part of a general health assessment. However, the review consisted of an unknown number of participants in a randomized trial which may have biased results.

A key finding in the review was that it shared selected experiences of advanced practice nurses who implemented a home based nursing protocol related to psychosexual function for couples following radical surgery for prostate cancer.

The review found that many patients and their partners do not share concerns with primary care providers who they feel are uncomfortable with sensitive subjects such as sexual functioning and intimacy. Another finding of the article was that each partner should probably be interviewed individually when completing a sexual assessment so as to establish a pattern of communication with each partner.

Expanding upon the findings of Monturo, Rogers, Coleman, Robinson, and Pickett was a review of the literature by Mirone, Imbimbo, Palmieri, Longo and Fusco (2003). The article review addressed the pertinent and common problem of erectile dysfunction following prostate and bladder radical surgery. Interestingly, the source states: "Erectile dysfunction is a recognized complication of prostate and bladder radical surgery, although there is significant variation in the reported risk, much of this variability is related to the retrospective nature of most previous studies" (Mirone et al, 2003, p. 137). The researchers found also that there are several options available as therapy for erectile dysfunction: "Treatment should begin with oral drugs administration. Additional options include vacuum erection devices and intracavernous injection. Combinations of oral with intraurethral and/or intracavernous injections may also be effective" (Mirone et al, 2003, p. 139).

One major strength of the systematic literature review was that it showed evidence of a 68% recovery rate of erections in preoperatively potent men treated with bilateral nerve-sparing surgery and in 47% of those treated with unilateral nerve-sparing surgery. A weakness of the review included the fact that percentages were from a previous study. The review listed criteria that influence recovery of erection following surgery. However, the wide range of references given by the researchers could possibly skew data. One major strength of the review is that it recognized erectile dysfunction as a complication of prostate and bladder radical surgery. Willener and Hantikainen (2005) conducted a review of the literature on quality of life in men who had undergone radical prostatectomy due to prostate cancer. The Schedule for the Evaluation of Individual QoL: A Direct Weighting Procedure (SEIQoL-DW) was used as a tool in the data-based study. A purposive sample of eleven was used in the study. One strength of the study was that the research tool was subjective in approach and had a short administration time. However, no other studies within urology have used the SEIQoL-DW as a tool. The results of the study were not expected to be universally valid since the QoL is a subjective impression influenced by certain situations and at certain times. However, the study suggested that there be more support for men after leaving the hospital for radical prostatectomy. Furthermore, the researchers stressed that nurses should be trained in communication techniques that enable them to engage patients in a safe and therapeutic dialogue about their sexual concerns related to the diagnosis of prostate cancer.

The review found that although radical prostatectomy is a life altering event, men were found to enjoy the chance to share how they felt about their bodies and lives when given the opportunity. Self-help groups and discussion groups provided opportunities for the men in the study to convey their feelings and thus improve quality of life. Interestingly, the individuals in the study did not have problems understanding the instrument used to evaluate problems following surgery. The participants of the study found health, family and partnership, and sexuality to be crucial areas in their lives.

Another review of the literature was conducted by Harden, Schafenacker, Northouse, Mood, Smith, Pienta, Hussain, and Baranowski. The researchers addressed couples' experiences with prostate cancer through focus group research. In addition, prostate cancer affects spouses and partners of patients:

Because of the inherent nature of the illness, cancer of the prostate frequently affects the self-esteem and sexual function of men. Treatment side effects, including urinary incontinence, erectile dysfunction, loss of libido, and fatigue, affect not only the patient but also his spouse. These symptoms can drastically alter the established role of each member of the husband-wife dyad, resulting in feelings of frustration and stress. Changes in the marital relationship can further affect the quality of life of the couple. How couples live with a diagnosis of prostate cancer and manage treatment effects is not well-defined in the literature. As healthcare professionals gain a better understanding of couples' experiences, they will be able to design programs of care to meet the physical and psychological needs of dyads living with prostate cancer and support them in their day-to-day struggles (Harden et al., 2002, p.701).

The descriptive qualitative design contained a sample size of forty two participants and provided insight into the daily struggles of people living with prostate cancer. Although the researchers were not able to categorize comments from one ethnic group to another because of ongoing flow of dialogue within the groups, the study provided a recommendation for practice being the development of alternate methods of providing information to men concerning catheter care, postop pain, incontinence, and erectile dysfunction.

Furthermore, there was limited generalizability of qualitative data by design. The researchers discovered that four major themes emerged from the data: enduring uncertainty, coping with changes, living with treatment effects, and needing help. Because of the inherent nature of the illness, cancer of the prostate frequently affects the self-esteem and sexual function of men. Treatment side effects, including urinary incontinence, erectile dysfunction, loss of libido, and fatigue, affect not only the patient but also his spouse. These symptoms can drastically alter the established role of each member of the husband-wife dyad, resulting in feelings of frustration and stress. Changes in the marital relationship can further affect the quality of life of the couple. How couples live with a diagnosis of prostate cancer and manage treatment side effects is not well defined in the literature. The source states:

The specific aims of this study were to explore (a) the experiences of couples living with prostate cancer, (b) the impact of the illness on their quality of life, (c) their ability to manage symptoms, and (d) their ideas for interventions that would help them to improve their daily experiences (Harden et al., 2002, p. 701).

Couples who must deal with prostate cancer must adjust their habits of communication in order to develop or regain a satisfying sexual relationship which may be better than before.

Galbraith, Ramirez and Pedro (2003) completed a systematic literature review of fiftynine articles, in which they discussed how various treatments for prostate cancer affect quality of life, health status, and masculinity. The longitudinal survey with descriptive, correlational, and comparative elements consisted of 185 subjects. A major strength of the review was the extensive list of references. However, 5% of data was missing from the review which is a definite weakness. The review provided specific treatment-related information to men who are faced with making treatment decisions for prostate cancer and, in consultation with the healthcare team, can select a treatment best suited to them. However, predictors used to construct a regression equation that predicted the best replacement value for the variable that contained missing data biased results which threatened the study. Overall, the researchers found no large difference in health-related quality of life or health status. Differences exist in sexual functioning and gastrointestinal treatment-specific symptoms. No relationship existed between masculinity and health-related quality of life. The authors recognized also that primary care providers are in the unique position of being able to provide current information to prostate cancer patients which can influence decisions in treatment. Nurse practitioners in the primary care environment are thus able to help choose specific treatment options that can best suit each individual patient.

Quality of life for prostate cancer patients differs from spouses or significant others. Volk, Cantor, Cass, Spann, Weller, and Krahn (2004) utilized a cross-sectional study with 168 couples which examined the preferences of metastatic prostate cancer patients and their spouses for the results of treatment and prior screening, and quality of life. According to Volk:

Our study demonstrates that male primary care patients who are candidates for prostate cancer screening have preferences for the outcomes of prostate cancer treatment and quality of life with advanced prostate cancer that differ from the preferences of their wives. Generally, the husbands evaluated these health states as being far worse than did their wives. Many of the wives would not trade any (of their husband's) quantity of life for quality of life when impotence and mild to moderate incontinence were considered. Most husbands indicated that they would be willing to trade some longevity to avoid these complications. The outcome rated most negatively by both husbands and wives was life with advanced prostate cancer that is refractory to hormonal treatment. When preferences were determined jointly, both partners influenced the final preference (Volk et al., 2004, p 344).

Interestingly, prostate cancer appears to possess the ability to bring couples closer. Conversely, one partner may become alienated from the other. One interesting finding in the literature pertains to marital status:

The higher incidence of prostate cancer among married men may be explained by the role of the spouse in encouraging early detection. Interestingly, unmarried men regain sexual and urinary functioning at higher rates than do married men following radical prostatectomy (Volk, et al., p. 345).

Since spouses served a pivotal role in the patients' lives, the study examined the opinions of the spouses along with the prostate cancer patients. A major strength of the study was that preferences for the screening outcomes from the perspectives of men who make screening decisions were considered. In addition, forty-seven references provided a large array of information on which to base findings. However, time trade-off method can be problematic for patients who are unwilling to trade time based on personal values, thus indicating no disutility for a health state. The study provided an opportunity to involve others who might be invested in the outcome such as spouses or significant others. Threatening the study was that bias would likely result in higher utility values and less variability than might otherwise be observed. Overall, a major finding of the study was that male primary care patients who are candidates for prostate cancer screening evaluate the outcomes of prostate cancer treatment and life with prostate cancer as being far worse than do their wives. Furthermore, it was found that involving spouses in screening

decisions is not currently a widespread practice by primary care providers. This finding calls for a change in how primary care providers provide preventive services to both patients and spouses.

Investigating what problems were associated with catheter use in patients with prostate cancer and benign prostatic hypertrophy was the objective of the study by Jakobsson (2002). However, it was not the intention of the researcher to investigate these troubles. The data-based study used OLC C-30 and SOC questionnaire as research tools. The cross-sectional study with 108 subjects dealt with indwelling catheter treatment and health-related quality of life in men with prostate cancer in comparison with men with benign prostatic hyperplasia. The review consisted of twenty-five references which was one strength of the study. Similarly, another strength of the study was a strong sense of coherence, however, it cannot be established whether strong sense of coherence contributed to quality of life. In addition, a weakness of the study was the sample selected for this study "was chosen from a larger questionnaire study sample (9) and this may threaten representativity" (Jakobsson, 2002, p. 267). An opportunity of the study is that it provides suggestions to decrease problems during catheter treatment periods, thus contributing to maintenance of autonomy and life quality. However, ratings showed low mean values which threaten the study and may indicate that the questions were not sensitive enough to the variability of the men's problems. Finally, key findings of the study included that there was a lack of knowledge about wearing and practical handling of the catheter. Having a cancer diagnosis did not add to uneasiness or practical problems.

Building on the sexual health issue was a review of the literature by Butler, Downe-Wambolt, Marsh, Bell, and Jarvi (2001). The data-based qualitative study used the Cancer Recovery Model as a tool to guide the study. The purpose of the study was to investigate impotence and urinary incontinence in prostate cancer patients. The researchers wanted to know what plan the patients used to cope with these effects after diagnosis and what effect they had on quality of life. Clearly, quality of life in prostate cancer patients is influenced by several factors. The researchers presented issues which may influence quality of life in prostate cancer patients. However, despite the ample amount of literature available concerning this concept, more research needs to be done. According to the reviewers:

The existing literature on the quality of life of men with prostate cancer provides little information for health professionals to use in understanding the actual experience of men and the meaning of this illness. The need for information and methods of acquiring critical information in a timely manner, particularly for decision making, should be a priority (Butler et al., 2001, p. 288).

Clearly the need and desire for information regarding quality of life for men with prostate cancer is prevalent and relevant.

Quality of life is the ability to maintain the balance in life which one had prior to the diagnosis of prostate cancer. Furthermore, sexual fulfillment with a partner or spouse may be derived by unconventional methods. This allows for quality of life although possibly achieved in a different manner than prior to the diagnosis of prostate cancer. In addition, quality of life means inner peace with one's self. Inner peace or self-solitude is achieved through strength. The strength of fighting prostate cancer without pause is a

directly exhausting experience. However, the continuous mental and physical fight strengthens the spirit which consolidates a person's inner peace. Knowing what one has the ability to accomplish in life is a great motivational factor. Sample size was twentyone men aged forty-seven to seventy-three. A major strength of the study was that it identified indicators for quality of life for men who have had a radical prostatectomy for cancer that should be included in developing discharge teaching plans and reinforced in community follow-up. However, a weakness of the study included the broad examination of information in terms of general information about prostate cancer and its treatment. The broadness of the information generated wide ranging and different responses. The study provided an opportunity for men to ask questions about catheter treatment and care. However, limited data which was qualitative by design was a threat to the study. Finally, a key finding of the study was the meaning for men of a diagnosis of prostate cancer.

Davison and Goldenberg (2003) also conducted a review of the literature on decisional regret and quality of life after participating in medical decision-making for early-stage prostate cancer. The data-based study consisted of seventy-four subjects who completed quality of life and decisional-regret measures. The questionnaires were given at time of diagnosis and then four months after treatment. A major strength of the study included levels of QoL were compared before and after treatment. However, the study was weak in that there was no follow-up of these patients five years later in order to accurately measure the long-term impact of side-effects in decisional regret. The study provided the opportunity to lend support for clinicians to adopt a model of shared decision-making in their practice. Threatening the study was the small sample size and differences in length of time since definitive treatment making it difficult to generalize the findings. Overall, a key finding of the study included: "There is no evidence that providing information to facilitate participation in medical decision-making causes decisional regret or psychological distress within the first year after definitive treatment" (Davison & Goldenberg, 2003, p. 14). In addition: "Psychological consequences may result from taking such an aggressive approach to healthcare. Indeed, some clinicians maintain that even informed patients may have psychological consequences and decisional regret if the outcomes of their treatment are not as expected, or if the sideeffects of treatment compromise their quality of life (QoL)" (Davison & Goldenberg, 2003, p. 14). Conversely, the literature also provides noteworthy evidence which suggest decisions regarding one's own medical treatment do not result in psychological harm to patients. Further, the temporary and limited time usually shared between prostate cancer patients and physicians does not realistically allow for implementation of the patient contributing to decision-making. According to the source:

Being informed and participating in medical decision-making did not result in decisional regret or psychological distress. Indeed, emotional functioning was significantly better at the time of the follow-up. The challenge of implementing this model into clinical practice is that it requires the establishment of a strong relationship between patient and physician, and having well-informed patients. Oncologists usually have one or two contacts with these men before the diagnosis and treatment discussion. This makes it difficult to establish a strong relationship where the oncologist has knowledge of each patient's pre-existing beliefs about cancer, and the way that they are processing information about how various treatments will affect their lifestyle (Davison and Goldenberg, 2003, p. 16).

Monga, Kerrigan, Thornby, Monga and Zimmerman (2005) conducted a review of the literature on quality of life in patients with localized prostate cancer undergoing radiotherapy. The data-based longitudinal sample study of forty subjects incorporated the Functional Assessment of Cancer Therapy of Prostate (FACT-P), the Beck Depression Inventory (BDI), Piper Fatigue Scale (PFS), and Epworth Sleepiness Scale (ESS) to find out evaluate quality of life in prostate patients undergoing radiotherapy and also evaluated the connection between quality of life, depression, fatigue, and sleep problems. The study prospectively evaluated quality of life in localized prostate cancer patients undergoing radiotherapy. However, there was a lack of a control group which could skew findings. The study provided a recommendation for practice; knowing the quality of life before starting any treatment and study the impact of treatment intervention on various aspects of quality of life following cancer radiotherapy. Finally, a threat to the study was that the selected patient population could skew results. The researchers interestingly discovered that a relationship existed between physical well-being and fatigue in those patients undergoing radiotherapy.

Lastly, a review of the literature by Rosenfeld, Roth, Gandhi, and Penson (2004) examined the differences in health-related quality of life in prostate cancer patients based on stage of cancer. The data-based purposive sample study consisted of 341 ambulatory men with prostate cancer and included the Functional Assessment of Cancer Therapy (FACT)-Prostate version, Urinary Function Subscale of UCLA Prostate Cancer Index, and Hospital Anxiety and Depression Scale (HADS). One major strength of the study was that it suggested a statistically and clinically significant association between prostate cancer stage and health related quality of life. However, the study was weak in that the measure of prostate cancer stage is relatively simplistic. The study provided an opportunity to highlight the importance of slowing disease progression in men with prostate cancer, as advanced disease appears to correspond to significantly poorer quality of life. Lastly, the study was threatened in that the researchers could only control for the potential confounding effects of the variables that were assessed in the study sample. According to the source:

Higher cancer stage appears to be associated with poorer quality of life in prostate cancer and this association does not appear to be simply a function of the symptoms and disability that accompany advanced disease. These results have implications for understanding the impact of progression of prostate cancer on patients' health-related quality of life (Rosenfeld et al., 2004, p. 800).

CHAPTER III

Design and Methodology

This chapter will present the specific parameters used for this research investigation. The approach that was used was that of an integrated literature review. The approach, literature selection procedure and literature analysis procedure are detailed in this chapter.

Approach

An integrated literature review, which is a review of research that amasses comprehensive information on topic, weighs pieces of evidence, and integrates information to draw conclusions about the state of knowledge, will be used for this project. This project is a systematic review of the evidenced based literature as related to the concept of quality of life and prostate cancer patients. While there is plentiful information available pertinent to the research topic, the chosen literature provides varying techniques of teaching and learning in order to enrich the quality of life in prostate cancer patients. This examination is an evidence-based practice review. In addition, this review is a collection of current and past research literature combined with medical knowledge and patient experiences and feelings.

Literature Selection Procedure

An organized and systematic search of CINAHL and MEDLINE was conducted for the relevant literature concerning quality of life in the male population with a diagnosis of prostate cancer. Journal articles were obtained through Mississippi University for Women library. The reference list accompanying each article was then manually reviewed for further articles pertaining to the subject. Articles were selected which were substantive in both areas of research. All of the articles contain relevant information pertaining to the chosen research topic.

Literature was organized according to articles which contain information on quality of life, prostate cancer, and quality of life and prostate cancer. After thorough investigation and article selection, all articles contain information on both topics. Therefore the need for three separate classifications is undesired.

References utilized were relevant and applicable to this investigation. The references were obtained from reputable and respected scholarly journals in the healthcare fields. The evidence-based practice procedure (Straus, et al., 2005) for the systematic review comprises the following steps:

1. Convert the need for information (about prevention, diagnosis, prognosis, therapy causation, etc.) into research questions.

2. Track down the best evidence with which to answer the questions using a variety of database strategies.

3. Critically appraise the evidence for its validity (closeness to the truth), impact (size of the effect), and applicability (usefulness in our clinical practice addressing both sensitivity and specificity).

4. Integrate the critical appraisal with clinical expertise and the patient's unique biology, values and circumstances (p. 3-4).

Literature Analysis Procedure

For the purpose of this study, a knowledgebase of literature critiques will be used to critique the literature by source and date, variables of interest, literature type and research tools, research design and sample size, theoretical foundation, references and key findings. The findings document the current state of knowledge available that is discussed in Chapter Four according to the research questions regarding the quality of life in the male population with a diagnosis of prostate cancer.

Summary

This chapter detailed the parameters for this research investigation. This evidencebased practice systematic review of the literature will be conducted utilizing the literature selection procedure and literature analysis procedure highlighted above. Through this process, the research questions regarding the quality of life in the male population with a diagnosis of prostate cancer will be answered.

CHAPTER IV

Knowledgebase Findings and Practice-Based Application

The aim of this chapter is to present the findings of the knowledgebase that was derived from this evidenced-based systematic literature review. Relevant findings derived from this knowledgebase are provided in written and table form with practicebased applications from current clinical practice guidelines. The research questions are addressed and answered as they relate to the knowledgebase findings and practice-based applications.

Knowledgebase Findings

Two research questions were examined for this project. The findings reflect the current healthcare literature regarding sexual health in the male population with a diagnosis of prostate cancer, as well as, hindrances of the male population diagnosed with prostate cancer in achieving quality of life. The literature was obtained through a computer search, utilizing CINAHL and MEDLINE. The literature review regarding sexual health in the male population with a diagnosis of prostate cancer, as well as, hindrances of the male population with a diagnosis of prostate cancer, as well as, hindrances of the male population diagnosed with prostate cancer, as well as, hindrances of the male population diagnosed with prostate cancer consisted of eleven data-based articles and which represented another 346 references. Pertinent findings of these reviews will be discussed.

Research Question One

Research Question One asks: What is the role of the Nurse Practitioner in assisting men diagnosed with prostate cancer in addressing sexual health? The literature available in the area of sexual health and prostate cancer is vast. Sexual health in prostate cancer patients quantifies as part of their quality of life. This being said, there have been many who have taken on the challenge of researching this problem, as is noted in Table 2.

Table 2

Search Terms	Number of Citations	Database
quality of life and prostate cancer	197	CINAHL
	1331	MEDLINE
quality of life	1247	CINAHL

Summary of literature Search for RQ1

Through the review of the literature, it was quite obvious that primary care providers are aware of the connection between quality of life and sexual health in men diagnosed with prostate cancer. According to Monturo (2001):

Once a trusting relationship is initiated, we learned that it is important to follow the couple's lead to set the pace and depth of the dialogue about sexual concerns. Respecting the couple's boundaries and planning adequate time for discussing sensitive topics builds greater trust. For example, one couple shared distressing information at an initial visit and then withdrew from discussing sexual concerns for several weeks. The nurse respected this boundary and continued to provide information and support related to other post-operative issues. During a subsequent visit, the nurse asked a follow-up question related to sexual concerns and the couple began to discuss the topic freely again. It was clear that the couple was ready to discuss their sexual concerns in the presence of the nurse. The nurse provided

support and information related to the sexual concerns that the couple discussed during the visit (Monturo, et al., 2001, p. 514).

Interestingly, Butler (2001), relates another obstacle prostate cancer patients must deal with:

Only about half of the men were actually performing pelvic exercises, which seemed to occur in response to discussions with other men who had radical prostatectomies. Given that the rationale for not performing the exercises related to a lack of understanding about the connection between pelvic exercises and incontinence, educational interventions tailored specifically to the individual patient's needs are essential. Combining both verbal and written information may also be helpful in supporting the men's ability to hear and comprehend the message. Nurses can play a critical role in bridging the gap between the information given and assessing patient understanding of why pelvic exercises are critical in recovery. Given that the men discussed common concerns among themselves, nurses could also provide for increased supportive care with referrals or information on support groups within the local communities (Butler, et al., 2001, p. 287).

Interestingly, another review by Harden addresses the issue of intimacy for couples: A setting that is free from distraction and gives the perception of individualized attention would be more conducive to the intimate nature of issues that men and their partners may want to discuss. Information needs to be repeated and provided in other formats (e.g., written materials, brochures, videotapes). This would allow couples to review the information at their leisure and refer to it as they need clarification. Second, healthcare professionals need to fully discuss the potential treatment effects that couples my face. Understanding what type of symptoms may develop following treatment and how to handle them is essential for successful management (Harden, et al., 2002, p. 708).

In addition, the article addresses methods that nurses and others may use to instill comfort and trust in prostate cancer patients. The need is great for mutual trust and this trust may be better facilitated through encouragement of emotional support. Harden further states:

Nurses and other healthcare professionals who work in private oncology offices or clinics need to incorporate an emotional assessment and provide referrals and resources for support to couples experiencing distress. Interventions that help couples deal with role changes within their relationships would diminish the negative stressors many couples feel. Stress reduction programs specifically designed for teaching people to live with uncertainty would benefit couples and promote emotional health (Harden, et al., 2002, p. 708).

Clearly there are suggestions in the literature for Nurse Practitioners as primary care providers to assist those with prostate cancer in addressing sexual health. The literature makes relevant suggestions, but it is up to the provider to examine the individual patient wholistically. Perhaps after performing a thorough examination, the patient can have pertinent issues addressed in a professional, comfortable, and expedient manner.

Research Question Two

Research Question Two asks: According to the literature, what are hindrances of men diagnosed with prostate cancer in achieving quality of life?

With the prominent problem of prostate cancer, the amount of literature available concerning this question is ample, as is noted in Table 3.

Table 3

Search Terms	Number of Citations	Database
quality of life and prostate cancer	197	CINAHL
	1331	MEDLINE
quality of life	1247	CINAHL

Summary of Literature Search for RQ2

According to the literature, the hindrances of men diagnosed with prostate cancer in achieving quality of life, are very specific in some cases. There are numerous issues which prostate cancer patients must in order to achieve or maintain quality of life. Hindrances to prostate cancer patients include urinary incontinence, impotence, erectile dysfunction, catheterization, and decreased libido. According to Butler (2001), "Urinary incontinence (UI), a common problem induced by treatment interventions for prostate cancer, is given only cursory recognition in the literature. Yet, patients often view incontinence as significantly more disabling to their quality of life than impotence" (Butler, et al., 2001, p. 283). This is a widespread problem in the male population diagnosed with prostate cancer. Despite the fact that more than 90% of men regain control after one year, incontinence is a serious issue for men dealing with a cancer diagnosis compounded with secondary problems.

Another study, conducted by Harden et al (2002), attempted to convey the severity of treatment effects on men with prostate cancer:

Many participants felt unprepared for recognizing and managing treatment effects.

Although they had been told about possible outcomes, such as incontinence and impotence, healthcare providers rarely spent time discussing the impact of these effects on patients' daily lives. The limitations imposed by the treatment effects threatened the quality of life of the men and their partners (Harden, et al., 2002, p. 707).

Practice-Based Application

Clinical practice guidelines for primary care providers assisting prostate cancer patients are numerous. The National Comprehensive Cancer Network, American Society of Clinical Oncology, Cancer Council Australia, National Health and Medical Research Council, and The Alberta Clinical Practice Guidelines all promote guidelines which primary care providers use to treat and support men diagnosed with prostate cancer. A search conducted on the World Wide Web, utilizing available websites provided access to all clinical guidelines regarding prostate cancer. The research questions were examined with regards to these guidelines and action plans and pertinent findings will be discussed.

Research Question One

Again, Research Question One asks: What is the role of the Nurse Practitioner in assisting men diagnosed with prostate cancer in achieving sexual health? Clinical practice guidelines concerning the role of the Nurse Practitioner in this function are not specific. However, all of the above named groups have guidelines for support of specific cancer types including prostate cancer. In addition, each agency has detailed areas for types of support. While there may be difference in the recommendations between these organizations, the general idea of all of the guidelines is essentially the same. There are guidelines for side effects of prostate cancer treatment and other issues pertaining to sexual health. However, the organizations do not name nurse practitioners as the providers. Each organization lists the topics available when dealing with side effects of treatment. The guidelines range from detection of prostate cancer, prevention, and treatment guidelines.

Research Question Two

Again, Research Question Two asks: What are hindrances of men diagnosed with prostate cancer in achieving quality of life? Practice-based findings for this research question are found under the areas of rehabilitation. For example, there are headings of rehabilitation of sexual functioning, urinary health, and mental wellness. Practice-based findings do not use the words quality of life although interestingly enough, the literature for review often incorporates the words quality of life in the title or body of the literature.

Summary

The main objective of this study was to investigate the two research questions pertaining to the role of the nurse practitioner in assisting men diagnosed with prostate cancer in achieving sexual health and the hindrances of men diagnosed with prostate cancer in achieving quality of life. This chapter attempted to appropriately answer these two questions using information from the systematic review of literature and practicebased guidelines obtained from multiple medical sources. According to the review of literature, building trust with the patient and discussing sexual concerns in a respectful manner is vital in defining the role of the nurse practitioner in assisting men diagnosed with prostate cancer in achieving sexual health. Furthermore, according to the review of literature, hindrances of men diagnosed with prostate cancer in achieving quality of life are often sexual in nature. In addition, spousal involvement in dealing with these issues many times improves quality of life in both patient and spouse. The practice guidelines confirm that sexual health and quality of life are crucial issues when dealing with prostate cancer. Although the words quality of life are not listed in clinical guidelines, sexual health and urinary health are. These terms are a subcategory of quality of life.

CHAPTER V

Evidence-Based Conclusion, Implications, and Recommendations

This chapter will address the findings of this study, interpret them, and formulate conclusions. The knowledgebase findings and the practice-based application findings from the research questions will also be compared and contrasted. Limitations encountered will then be discussed. This chapter will also speak to the implications and recommendation for further research and practice. Implications and recommendations will include those of research and practice specific to nursing theory, nursing research, advanced nursing practice, nurse practitioner education, and health policy. Lastly, a comprehensive summary of this investigation will be provided.

Summary of the Investigation

The systematic review of the literature demonstrated that there has been significant interest in the effects of prostate cancer on the quality of life in the male population. Both the nurse practitioner's role in addressing sexual health in males diagnosed with prostate cancer and the effects of the diagnosis on quality of life have been researched.

Interpretation of Findings with Conclusions

This section will review the findings of the research questions from the knowledgebase and practice-based application perspectives. Additional analysis of the findings will include the comparing and contrasting of these two perspectives as they relate to each question. The research questions will be answered and will form the conclusions of this investigation.

Limitations

There were a few limitations encountered within the course of this study. The literature obtained consisted of many research articles that did not provide adequate sample sizes. Also, because of the vast amount of literature available, some important articles may have been inadvertently left out of the study.

Implications and Recommendations

The literature investigated within this study revealed some deficiencies that need to be addressed. The lack of information obtained in the areas of nursing theory, nursing research, advanced nursing practice, nurse practitioner education, and health policy proposes a need for implications and recommendations. The suggestions for improvements regarding these issues, which greatly affect the nurse practitioner, will now be discussed.

Nursing Theory

The theoretical foundation used in this study was Betty Neuman's System Model. Unfortunately, no information existed regarding this theory as it related to prostate cancer; although it was an appropriate theory for this project. Also, theory-based research was not available related to prostate cancer. While some of the research articles used were written by nurse practitioners, none applied their research to any nursing theory. Nurse practitioner journals should encourage the use of theory-based or at least theoryinvolved research on all subjects in order to develop a better understanding of how to apply theory to practice.

Nursing Research

The amount and quality of the research pertaining to prostate cancer and quality of life was abundant. Additionally, much of this research was very concise and easy to apply to primary care practice. The knowledgebase information was very well developed and the research studies were appropriate. However, the inclusion of nurse practitioners in primary care was not as frequent as one would have imagined. As a result, this study highlights the importance of nurse practitioners involvement and hopefully will illustrate the need for future reference in regard to research.

Advanced Nursing Practice

Advanced nursing practice needs to make other disciplines aware of its importance in the primary care setting. While advanced nursing practice requires guidelines and proven strategies for direction in the management of patients, it will never obtain these if the practitioner is not more assertive in the research. Additionally, advanced practice nurses are obviously knowledgeable about prostate cancer and need to extend that knowledge into creating guidelines for practice.

Nurse Practitioner Education

Nurse practitioners have a responsibility to remain abreast of current topics relevant to their practice. If practicing in primary care, guidelines for assisting patients diagnosed with prostate cancer need to be in place. It is vital to address their concerns regarding sexual health and that their physical and psychological needs are being met. Nurse practitioners must also understand the importance of practicing evidence-based medicine in regard to clinical guidelines. Otherwise, the nurse practitioner is functioning without the support of knowledge and research. Evidence-based medicine must not be underestimated in the education of the nurse practitioner.

Health Policy

Implementation of health policy in regards to prostate cancer is lacking. However, with the high incidence of sexual dysfunction following treatments for prostate cancer, increased funding or private insurance allocation for penile implants would be appropriate. Also, initiating support groups for erectile dysfunction, catheter care, and spousal involvement would be beneficial. Encouraging local and state governments for assistance in funding these ideas would be an important way that nurse practitioners could be involved in health policy related to prostate cancer.

Summary

In summary, quality of life in prostate cancer patients is affected by numerous factors. Sexuality is one aspect of life which is greatly affected as explained earlier. The literature review has provided evidence which substantiates the affect which erectile dysfunction has on sexual functioning and quality of life in prostate cancer patients. Furthermore, spouses and partners are also affected by the change in sexuality. Certainly, spouses' and partners' ideas and opinions on what is important and what is not important differ somewhat from the individuals struggling with prostate cancer. Not only do the men dealing with prostate cancer have to worry about their own lives but also the sexual satisfaction of significant others.

Quality of life may also be influenced by which stage of cancer the patient is involved. The literature provides viewpoints of authorities which justifies the realism of cancer stage progression and the effects on prostate cancer patients. Finally, quality of life and treatment decision have substantial influences on patients. Quality of life and prostate cancer is an evolving concept. How is it possible accurately to define a concept which changes according to sexuality concerns, illness staging, and treatment decision making? Quality of life and prostate cancer should not be underestimated. Individuals sometimes find the greatest strength from those battles which are fought the hardest.

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