

TITLE PAGE
UNIVERSITY OF GHANA
COLLEGE OF HEALTH SCIENCES

**EXPERIENCES OF SPOUSES OF WOMEN WITH MASTECTOMY RESULTING
FROM BREAST CANCER IN THE ACCRA METROPOLIS**



**THIS THESIS IS SUBMITTED TO THE UNIVERSITY OF GHANA, LEGON IN
PARTIAL FULFILMENT OF THE REQUIREMENT FOR THE AWARD OF
M'PHIL NURSING DEGREE**

JULY, 2015

DECLARATION

I, Brenda Adei Kotei do hereby declare that this thesis is my own research carried out under supervision. This thesis has not been submitted in any form to another university for an award of a degree. References to other works and literature used in this research have been duly acknowledged in the text and list of references.

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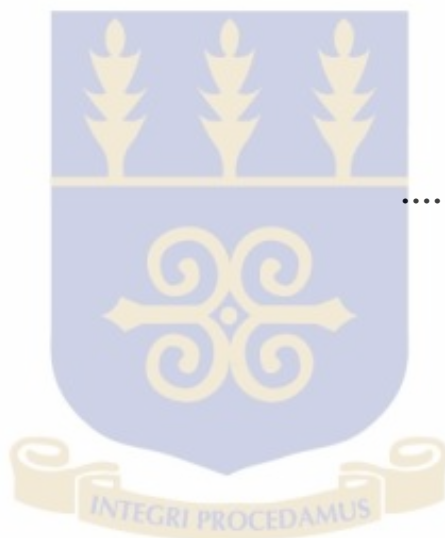
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DEDICATION

This work is dedicated to my children, Audrey Sesienam Osei- Assibey and Francis Yaw Osei-Assibey Jnr.



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TABLE OF CONTENTS

TITLE PAGE	i
DECLARATION	ii
DEDICATION	iii
ACKNOWLEDGEMENTS	iv
TABLE OF CONTENTS	v
LIST OF FIGURES	x
LIST OF TABLES	xi
LIST OF ABBREVIATIONS	xii
ABSTRACT	xiii
CHAPTER ONE	1
1.1 Background to the study	1
1.2 Statement of the problem	7
1.3 Purpose of the study	8
1.4 Objectives	9
1.5 Research questions	9
1.6 Significance of study	9
1.7 Operational definition of terms	10
CHAPTER TWO	11
2.1 Introduction	11
2.2 Historical background of the Quality of Life Model by Betty Ferrell	11
2.3 Physical Well-Being of spouses of women with mastectomy	16

2.4 Social well-being of spouses of women with mastectomy	17
2.5 Psychological well-being of spouses of women with mastectomy	21
2.6 Spiritual Well-Being of spouses of women with mastectomy	24
2.7 Support	25
2.8 Spousal Involvement in Diagnosis and Treatment.....	28
2.9 Summary of the Literature Review	29
CHAPTER THREE	31
3.1 Methodology	31
3.2 Research Design.....	31
3.3 Research Setting.....	31
3.4 Target Population	33
3.5 Inclusion Criteria.....	33
3.6 Exclusion Criteria.....	33
3.7 Sampling Technique and sample size	33
3.8 Data Collection Tool	34
3.9 Data Collection Procedure	34
3.10 Pretesting of the Interview Guide.....	35
3.11 Methodological Rigour	35
3.12 Data Management	37
3.13 Data Analysis	37
3.14 Ethical Considerations.....	38
CHAPTER FOUR.....	40

4.1 Findings/Results	40
4.2 Demographic data	40
4.3 Physical Well-Being of spouses of women with mastectomy	42
4.3.1 Sleep Disruption	42
4.3.2 Fatigue	43
4.4 Social Well-Being of Spouses of Women with Mastectomy	43
4.4.1 Relationship	43
4.4.2 Sexual function/ Affection.....	46
4.4.3 Financial Burden.....	49
4.4.4 Employment.....	50
4.4.5 Secrecy.....	51
4.5 Psychological Well-Being of spouses of women with mastectomy	52
4.5.1 Fear	53
4.5.2 Anxiety	54
4.5.3 Distress	54
4.5.4 Loss of Concentration.....	55
4.5.5 Helplessness.....	56
4.5.6 Control.....	57
4.5.7 Surprise.....	58
4.6 Spiritual Well Being of Spouses of women with Mastectomy	58
4.6.1 Meaning.....	58
4.6.2 Hope.....	60

4.6.3 Positive Change	60
4.7 Support (Giving and Receiving)	61
4.7.1 Domestic Support given to wife	62
4.7.2 Emotional Support given to wife	62
4.7.3 Support received by spouse	63
4.8 Spousal involvement in diagnosis and treatment	64
4.8.1 Knowledge of Spouses on BC and Mastectomy	64
4.8.2 Identification or confirmation of lump by spouse	66
4.8.3 Spousal acceptance and consent for Mastectomy	67
4.9 Summary	68
CHAPTER FIVE	69
5.1 Discussion of Findings	69
5.2 Demographic Characteristics	69
5.3 Physical Well-Being of Spouses of Women with Mastectomy	70
5.4 Social Well-Being of Spouses of Women with Mastectomy	71
5.5 Psychological Well-Being of spouses of women with mastectomy	73
5.6 Spiritual Well-Being of Spouses of Women with Mastectomy	78
5.7 Support	79
5.8 Spousal Involvement in Treatment and Diagnosis	81
CHAPTER SIX	84
6.1 Summary, Implications, Limitations, Conclusion and Recommendations	84
6.2 Summary of the study	84

6.3 Implications.....	86
6.3.1 Nursing Education	86
6.3.2 Nursing Practice	86
6.3.3 Nursing Research.....	87
6.3.4 Nursing Administration	87
6.4 Limitations	87
6.5 Conclusion.....	87
6.6 Recommendations	88
References.....	91
Appendix A: Background Information Form	106
Appendix B: Interview Guide	107
Appendix C: Information Sheet and Consent Form	108
Appendix D: Table 2. General Profile of Participants.....	111
Appendix E: Ethical Approval Letter	112
Appendix F: Introductory Letter to Korle-Bu Teaching Hospital	113
Appendix G: Introductory Letter to Reach for Recovery Ghana	114

LIST OF FIGURES

Figure 1: Quality of Life Model Applied to Family Caregivers	13
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LIST OF TABLES

Table 1: Themes and Sub-themes	41
Table 2: General Profile of Participants	111

LIST OF ABBREVIATIONS

BC.....Breast Cancer

KBTH.....Korle-Bu Teaching Hospital

QoL.....Quality of Life

RRG.....Reach for Recovery Ghana

ABSTRACT

Breast Cancer is the leading cause of death and most commonly diagnosed cancer in women. The most common treatment is surgery in the form of mastectomy. Breast Cancer (BC) and mastectomy does not affect the well-being of only the woman but also that of the husband or partner. Breast cancer is therefore referred to as a couple's disease. The purpose of this study was to explore the experiences of spouses of women with mastectomy as a result of their wives' BC in the Accra Metropolis. The Quality of Life Model Applied to Family Caregivers by Betty Ferrell was the organizing framework for this study. A qualitative exploratory descriptive design was employed. A purposive sampling technique was used and data were saturated with the twelfth participant. Data were collected with a semi-structured interview guide. All interviews were audio taped and transcribed verbatim. Data were analyzed using thematic content analysis. During the study, anonymity and confidentiality were ensured. The four themes stipulated by the model; physical, social, psychological and spiritual well-being of spouses was identified. Emerging themes were support and spousal involvement in diagnosis and treatment. Few of the men experienced sleep disruption and fatigue. The relationship of most of the spouses with their wives became better after the surgery. Spouses feared their wives could die during surgery. Spiritually, spouses derived meaning and hope from God. The spouses gave their wives domestic and emotional support. Most of the spouses were actively involved in the treatment and diagnosis of their wives. It was recommended that spouses be included in the provision of care for women with BC and educational material should be prepared and given to the spouses.

CHAPTER ONE

1.1 Background to the study

This chapter presents the background of the study, the problem statement, purpose of the study, objectives of the study and the research questions that will guide the researcher to achieve the research objectives. The significance of the study as well as the operational definitions is also presented in this chapter.

The word cancer has become synonymous with pain and death (Silva, Santos, Almeida, & Fernandes, 2010). The mere mention of the word puts the person suffering it into a state of hopelessness even though technological advances have improved its diagnosis and treatment. For some, cancer is a taboo and their families are stigmatized because of it (Karbani et al., 2011).

Breast Cancer (BC) is caused by uncontrolled division of cells in the breast leading to abnormal growth (Dirbas & Scott-Conner, 2011). Mastectomy is surgery to remove all breast tissue in order to treat or prevent breast cancer (Burkitt, Quick, & Reed, 2007). Mastectomy is usually performed in early stage BC (Cancer Research UK, 2013). It is a procedure carried out to treat breast lesions such as; ductal carcinoma, non-invasive BC, stages I, 2, and 3 BC, inflammatory BC and Pagett's disease (Dirbas & Scott-Conner, 2011). It is also carried out as a preventive measure for women who are at risk of developing BC (Dirbas & Scott-Conner, 2011). To treat BC, interventions implemented are chemotherapy, radiotherapy and surgery (Sun, Iqbal, Singh, Sun, & Zaidi, 2010) but in Ghana, the most common treatment resorted to is surgery in the form of mastectomy (Clegg-Lamprey, Dakubo, & Attobra, 2009). The types of mastectomies performed include radical, modified radical, "simple" or "total" and partial mastectomy (Dirbas & Scott-Conner, 2011; Salani, Barrett, Ricci, Bevilacqua, & Riera, 2014). Breast cancer can occur in males and females (Lewis, Heitkemper, Dirkson, O'Brien,

& Bucher, 2007) however, occurrence in males is rare and Gethins (2012) adds that the incidence in males is 1:1000. For females, their incidence is higher and according to GLOBOCAN (2012) 1.7 million women were diagnosed with BC worldwide. Breast cancer is the most common cause of cancer death among women (522, 000 deaths in 2012) and the most frequently diagnosed cancer among women worldwide (GLOBOCAN, 2012). In the United States, apart from skin cancers, BC has been identified as the most common cancer in women and the second leading cause of cancer deaths with about 39,520 women dying yearly (DeSantis, Ma, Bryan, & Jemal, 2014). Breast cancer is also common in the UK where it accounts for 30% of all cancers. The Cancer Research Institute in the UK reports that there were 49,900 new cases in 2011 while the number of deaths was 11,700 in 2012 (Cancer Research UK, 2014).

In Eastern Africa, the rate of BC is 30 per 100,000 (GLOBOCAN, 2012) and 27 per 100,000 in Middle Africa (Bray, Ren, Masuyer, & Ferlay, 2013). In Ghana, there is no source for this information but GLOBOCAN reports that BC is the second most frequent cancer with 2260 (20% of all cancers) women being diagnosed with BC in Ghana. Out of the 2260 cases that were diagnosed, 1021 of the women died (GLOBOCAN, 2012). At the Korle-Bu Teaching Hospital (KBTH), the national referral centre, a total of 1160 cases were recorded at the breast clinic from January 2011 to December 2013.

Mastectomy results in side effects like tightening of the chest wall, phantom breast sensations, arm swelling and sensory changes (Lewis et al., 2007). This is present in both genders. However in women, apart from these effects, they suffer the loss of the breast, which is a cherished organ of the female body. The breast signifies femininity, sexuality,

nurturance, beauty and a sense of self-worth and confidence thus mastectomy breaks this complete body image (Arroyo & López, 2011; Aziato, 2009).

A woman who undergoes mastectomy suffers functional loss and other psychological problems like depression, shame, rejection and loss of body image (Arroyo & López, 2011; Fouladi et al., 2013; Pinar, 2012). However, the suffering is not experienced by only the woman as many studies indicate that their partners also experience pain, psychological distress and other emotions associated with the disease and its treatment by mastectomy (Brandão, Schulz, & Matos, 2014; Kayser, Feldman, Borstelmann, & Daniels, 2010; Lewis, Fletcher, Cochrane, & Fann, 2008). Thus, even though the incidence is rare (1 in 1000) in men (Gethins, 2012), its effects is quite frequent in men because they may be married or living with women diagnosed with BC who may have mastectomy. Despite findings that spouses suffer with their wives, little attention has been focused on the spouses from whom the affected women turn to for support. Understanding the impact of mastectomy on spouses is of clinical importance since studies have shown that support from spouses of women with BC plays an important role on how women cope psychologically, physically and adjust to the disease (Lebow, Chambers, Christensen, & Johnson, 2012).

Researches on quality of life (QoL) of spouses whose partners have BC indicate lower QoL compared to spouses of healthy women (Northouse, Katapodi, Schafenacker, & Weiss, 2012; Wagner, Bigatti, & Storniolo, 2006). A woman's partner plays an important role in her life when she has to deal with BC and research findings indicate that waiting for the diagnosis to be confirmed is a source of substantial anxiety for spouses (Marshall & Kiemle, 2005). During the healing phase, that is immediately after the surgery, the spouse is one of the most important sources of care for women with breast cancer (Cebeci, Yangin, & Tekeli, 2012;

Silva et al., 2010). This is so because research indicates that the spouse is usually the primary care giver (Romito, Goldzweig, Cormio, Hagedoorn, & Andersen, 2013).

Studies on the experiences of women with mastectomy reveal that emotional and financial support is got mainly from spouses and other family members and again women mentioned their spouses as their caregivers (Aziato, 2009; Cebeci et al., 2012; Kudel, Edwards, Raja, Haythornthwaite, & Heinberg, 2008; Tighe, Molassiotis, Morris, & Richardson, 2011).

Despite the above findings however, spouses are not always able to respond positively and give their partners the needed support due to their own psychological distress, anxiety and fear of losing the partner (Silva et al., 2010). Thus, a study revealed that some women with mastectomy had support from spouses while others did not (Piot-Ziegler, Sassi, Raffoul, & Delaloye, 2010). Also, another study in Nigeria revealed a 38.3% divorce rate three years after mastectomy (Odigie et al., 2010). One can therefore not conclude as to whether the spouse supports or does not support the partner after mastectomy indicating the need for research into the experiences of spouses to further understand the phenomenon.

Breast cancer diagnosis and its treatment can lead to problems in relationships, communication, sexual functioning and intimacy (Ussher, Perz, & Gilbert, 2012). On the other hand, it has also been found that couples who start supporting each other early after breast cancer diagnosis have been found to be more satisfied with their marriage a year later (Dorval et al., 2005). Couples share finances, aspirations, dreams, emotions and their physical bodies. The body of a woman is an attraction for her spouse and mastectomy has an effect on the way the woman views her body image. Studies have shown that women feel less attractive and less feminine after undergoing a mastectomy (Arroyo & López, 2011; Sandham & Harcourt, 2007) and this can have an effect on the marital relationship. This is because the breast is a sexual organ and some studies have shown that removal of it leads to

impaired sexual functioning (Abasher, 2009; Emilee, Ussher, & Perz, 2010; Manganiello, Hoga, Reberte, Miranda, & Rocha, 2011). Extensive research has been done on the impact of mastectomy on sex. It has been found that mastectomy has a negative impact on sexual relation and functioning (Manganiello et al., 2011; Takahashi & Kai, 2005). In a systematic review by Emilee et al. (2010), similar findings have been elicited. This review, like most studies on BC and mastectomy focused on sexuality and its effect on the woman.

The choice for mastectomy is even complicated in situations where the spouse does not consent to the treatment and as a result, surgery is done against the will of the spouse but with the encouragement of other family members (Aziato & Clegg-Lamprey, 2014; Fang, Shu, & Fetzer, 2011). It has also been found that women who regarded their spouses' opinion were less likely to have a mastectomy (Hawley et al., 2009) but those who received genuine support from their spouses took less time in deciding to have a mastectomy (Fouladi et al., 2013). Some women even found it difficult to break the news of having a mastectomy to their spouses probably for fear of their reaction (Drageset, Lindstrøm, Giske, & Underlid, 2011). Sadham and Harcourt (2007) revealed that a spouse gave the permission to his wife to undergo mastectomy on condition that she would have a reconstruction after the mastectomy. He expressed this as "I wouldn't have agreed to just a mastectomy. I just wouldn't have agreed to it anyway....it had to be a reconstruction" (Sandham & Harcourt, 2007 p.68). This indicates that the spouses' contribution to the choice of treatment is vital, so there is the need for them to be included in treatment decisions. This reluctance by some spouses to support the woman for mastectomy may apply to Ghanaian men probably because of the sociocultural factors in which he finds himself. Polygamy is practiced in the Ghanaian society and culture (Nukunya, 2003) and thus spouses may be pressured to go in for a second wife because of loss of breast of the wife. This has been reported in Iran where a spouse threatened

to divorce his wife because of mastectomy (Joulaee, Joolae, Kadivar, & Hajibabae, 2012). Similar reports have been received from Pakistan where mother –in laws pressured their sons to go for second wives due to their wives mastectomy (Khanam, 2013).

On some occasions, after mastectomy, the woman has to undergo other treatments like radiotherapy and chemotherapy when indicated to improve prognosis (Aebi, Davidson, Gruber, & Cardoso, 2011; Blitzblau & Horton, 2013). This can pose a potential financial burden on the woman and her spouse since the woman is likely to turn to the spouse for financial support (Aziato, 2009; Clegg-Lampsey et al., 2009; Shrestha, 2012). Thus, in cases where finances are limited and school fees have to be paid, spouses may face some distress as to whether to pay school fees or medical bills of the partner.

As mentioned earlier, mastectomy can be done at different stages of the disease but usually in the early stage and this may influence the experiences of the spouse. In Ghana, about 60% of patients with BC report with stage IIIb and IV disease (Clegg-Lampsey, 2009). Due to the late presentation, prognosis may be bad leading to poor coping in the couple. The type of surgery can also have an effect on how the spouse copes. Women going for surgical removal of the lump reported fewer problems than mastectomy (Rowland et al., 2000) and hence the choice of a lumpectomy or mastectomy can influence the effect on the spouse.

In marriages where the couple is older and childbearing has ended, BC and mastectomy does not seem to have a negative effect on the spouse hence the marital relationship (Manganiello et al., 2011). It was reported in a review on spouses of cancer patients that younger couples with school going children reported more conflicts with child raising (Carlson, Bultz, Spec, & St. Pierre, 2000). Thus the age of the couple can have an effect on the experience of the spouse, therefore the need to explore their experiences.

Many studies done on mastectomy have focused on the psychosocial effect of mastectomy on the woman (Arroyo & López, 2011; Aziato, 2009; Odigie et al., 2010). Meanwhile, Some studies conducted on experiences of spouses are obsolete (Baider & De-Nour, 1984; Sabo, Brown, & Smith, 1986). Additionally, other studies have also focused on spouses experience with wives' BC and not mastectomy (Levy, 2011; Sandham & Harcourt, 2007; Wagner, Bigatti, & Storniolo, 2005; Zahlis & Lewis, 2010). In addition, some work have been done on QoL of spouses whose wives have BC but not mastectomy (Wagner et al., 2005). A systematic review on spouses' experiences with their wives mastectomy by Rowland & Metcalfe (2014) from a period between 1980 and 2013 produced only 17 studies that were of good methodological rigour and relevant to the topic according to the authors. Unfortunately, most of the above studies were not done in Ghana. The afore-mentioned so far indicate that researchers in Ghana have not explored the experiences of the spouse after mastectomy. It is therefore important to explore the experiences of spouses whose wives have mastectomy resulting from BC in Ghana by examining their total well-being in order to gain understanding to develop appropriate nursing interventions.

In carrying out this study, the Quality of Life Model Applied to Family Caregivers will be used as a guide.

1.2 Statement of the problem

A study at the KBTH indicates that after diagnosis many women run away and do not come for treatment and it was also found that married women in comparison to unmarried women were more likely to abscond (Clegg-Lampsey, 2009). Spousal experiences may be contributing to this trend. Again another study at the KBTH revealed that 78 out of 89 women interviewed had mastectomy (Clegg-Lampsey, Dakubo, & Attobra, 2009). This indicates that there is a high rate of mastectomy as the choice of treatment for BC. This high

rate of mastectomies may be attributed to the fact that most BC cases in Ghana are diagnosed late. According to the breast care clinic annual report, from January 2011 to December 2013 a total of 307 mastectomies have been performed at the KBTH. Elsewhere, the few studies that have been conducted on spouses of women with mastectomy revealed that some spouses reported inability to sleep, anxiety, depression, helplessness, difficulty coping, role adjustment and distress to the news of their wives illness and mastectomy (Foy & Rose, 2001; Levy, 2011; Sandham & Harcourt, 2007; Silva et al., 2010; Zahlis & Lewis, 2010). Due to the above mentioned effects of BC and mastectomy on spouses, it is therefore important to explore the experiences of Ghanaian men. Using a qualitative approach, Aziato (2009) explored the post-mastectomy experience of 10 women in the Accra Metropolis. In this study the perspective of the spouse was not explored therefore the need for the current study.

Anecdotal evidence from the researcher's working experience at the surgical ward and other nurses working at the breast care unit indicate lack of support from spouses of some women scheduled for mastectomy but there is no empirical evidence to this observation. It is therefore important to explore the experiences of spouses of women with mastectomy as literature reviewed so far seems to suggest that such a study has not been conducted in Ghana.

1.3 Purpose of the study

The purpose of the study is to explore the physical, social, psychological and spiritual well-being of spouses of women with mastectomy in Ghana.

1.4 Objectives

The specific objectives of the study are:

1. To explore the physical well-being of spouses of women with mastectomy.
2. To determine the social well-being of spouses of women with mastectomy.
2. To examine the psychological well-being of spouses of women with mastectomy.
3. To explore the spiritual well-being of spouses of women with mastectomy.

1.5 Research questions

1. What is the physical well-being of spouses of women with mastectomy?
2. What is the social well-being of spouses of women with mastectomy?
3. What is the psychological well-being of spouses of women with mastectomy?
4. What is the spiritual well-being of spouses of women with mastectomy?

1.6 Significance of study

Findings from this study will help professional nurses provide care that will fit into the needs of spouses of women with mastectomy. It will provide useful information that can be used in preparing educational materials for spouses of women with mastectomy. Based on findings, counselling services provided for the spouses could be enhanced to help them adjust to their wives condition. Finally, it is also hoped that the findings may add to the knowledge in nursing on how to support these men and unearth other possible and related areas for future research.

1.7 Operational definition of terms

- Breast cancer: abnormal growth of cells in the breast
- Mastectomy: surgical removal of breast
- Spouse/husband : a man above 18 years living with a woman as the partner
- Experience: any occurrence in spouse that is related to mastectomy
- Wife: a woman who has mastectomy and is living with a spouse
- QoL: encompasses the interactions of physical, psychological, social (home and work) and spiritual well-being of a spouse as a result of wife's mastectomy.
- Family Caregiver : a spouse who gives any form of help (physical, psychological, social and spiritual) to his wife as a result of mastectomy

CHAPTER TWO

2.1 Introduction

The aim of this literature review is to explore research that has been done on the experiences of spouses whose wives have mastectomy. Literature search was done using Pubmed, JSTOR, Google Scholar, ScienceDirect, EBSCOhost, HINNARI, Willey Online Library, and Taylor & Francis Online Library. The key words breast cancer, mastectomy, wife were used together with physical, psychological, social and spiritual effect on spouse, partner, husband, family, and caregiver and qualitative in order to identify relevant studies on experiences of spouses of women with mastectomy. The search identified few studies on the specific research topic even though there was a plethora of studies on BC and mastectomy and its effect on sexuality and also the effect of mastectomy on the woman. Many of the studies identified also focused on QoL of both patients and their spouses with regard to BC. The review will focus on the historical background of the QoL Model Applied to Family Caregivers and justification for the use of the theory. The rest of the chapter reviews studies on the physical, social, psychological, and spiritual well-being of spouses of women with mastectomy, support and spousal involvement in diagnosis and treatment.

2.2 Historical background of the Quality of Life Model by Betty Ferrell

The Quality of Life model was originally developed to generate theory that defines the domains of QoL in clients with cancer specifically to explore the experience of pain and fatigue and its relationship to QoL. The original model is therefore sometimes referred to as the conceptual model of pain and QoL (Ferrell, 1994; King & Hinds, 2011). In 1985, a theoretical model was developed by Padilla and Grant to show the relationship between the nursing process and the dimensions of QoL. Later this work was used as a conceptual framework by Ferrell, Wisdom and Wenz in 1989 in the development and testing of the QoL

instrument which was used in a survey. The QoL survey was designed to measure QoL as an outcome variable in the management of cancer pain. Further studies were done in which the instrument was used to gather data about the relationship between pain and QoL. From these studies a conceptual model commonly referred to as the City of Hope Model emerged to illustrate the influence of pain on the dimensions of QoL. The four dimensions of QoL included in this model are physical, social, psychological and spiritual well-being (King & Hinds, 2011). Since the development of this first model, other models have been developed. This includes the QoL Model Applied to Family Caregivers (shown in fig 1) which was developed in 2001. From the model, The Quality of Life (FAMILY VERSION) with a thirty-seven item ordinal instrument has been developed to measure the Quality of Life of a family member caring for a patient with cancer.

According to the QoL Model Applied to Family Caregivers, the physical well-being refers to the physical functioning of the caregiver and health problems that may arise are fatigue, sleep disruption, function, nausea, appetite, constipation and aches and pain. The social well-being involves the interaction of the caregiver with the patient and others. The parameters under the social well-being are isolation, role adjustment, financial burden, roles/relationships, affection/sexual function, leisure activities, burden and employment. The psychological well-being refers to the emotional functioning of the caregiver. The caregiver may experience anxiety, depression, helplessness, difficulty coping, fear, uselessness, loss of concentration, control and distress. The spiritual well-being refers to the spiritual impact of caring for a relative with cancer and involves meaning, uncertainty, hope, religiosity, transcendence and positive change. The physical, social, psychological and spiritual well-being interacts to determine the overall QoL of the family caregiver.

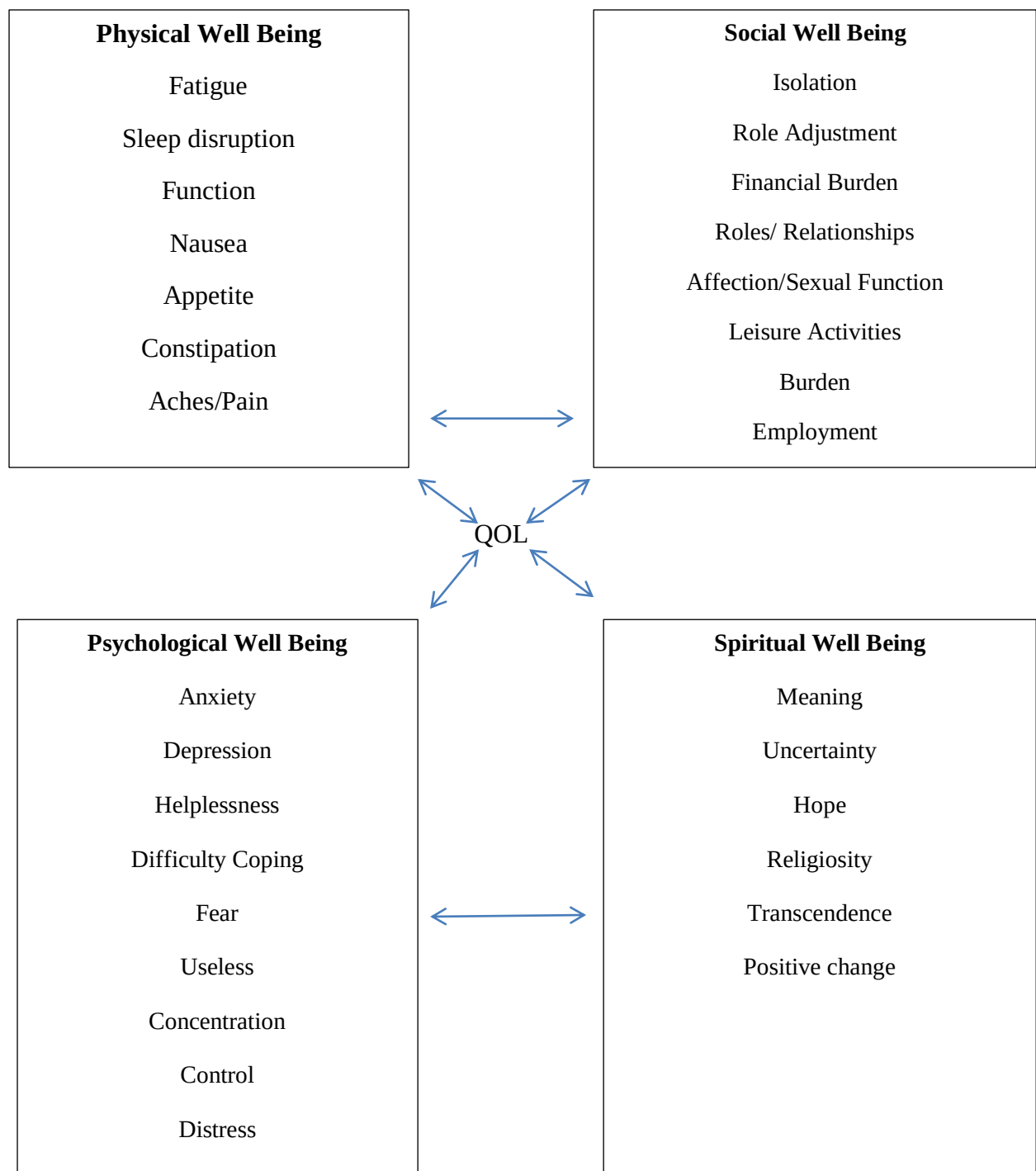


Figure 1: Quality of Life Model Applied to Family Caregivers

The concept of QoL is central to cancer nursing (Ferrell et al., 1992) therefore one cannot attempt to study cancer and its effects on patients and their family without mentioning the state of their QoL. The QoL Model Applied to Family Caregivers was developed specifically for relatives of cancer patients who are involved in one way or the other in the care of their relative. The model has all the domains which are found in other models like Padilla & Grants' Model of 1985 that sought to explain the relationship between the nursing process and the dimensions of QoL. The model also has all the components in Ferrans' 1990 model on QoL. The domains in the model has also been used by various researchers in the study of the effects of cancer on the QoL of patients and their family (Fujinami, Otis-Green, Klein, Sidhu, & Ferrell, 2012; Kim & Given, 2008; Lu et al., 2010). Thus, the experiences of spouses of women with mastectomy will be explored by looking at their physical, social, psychological and spiritual well-being.

Quality of life is a term which refers to a general sense of well-being and addresses multiple dimensions of life and several definitions of QoL include: satisfaction, happiness, achievement of goals and personal control (Dow, Ferrell, Leigh, Ly, & Gulasekaram, 1996). For the purpose of this study, QoL encompasses the interactions of physical, social (home and work) psychological and spiritual well-being of a spouse of a woman with mastectomy. The term caregiver refers to "anyone who provides assistance to someone else who is incapacitated and needs help to some extent" (Family Caregiver Alliance, 2001 p.1). In addition to the above mentioned, the Family Caregiver Alliance also define an Informal caregiver and family caregiver as terms that refer to unpaid individuals such as family members, friends and neighbours who provide care. These individuals can be primary or secondary caregivers, full time or part time, and can live with the person being cared for or live separately. Family members are also defined as "informal caregivers who are unpaid

persons who help someone with physical care or coping with disease” (Ferrell & Mazanec, 2009 p. 136). Thus, family caregivers are those who are related to the patient through blood line or friendship and are not paid for the care rendered. This care can be physical, social, psychological or spiritual (City of Hope, 2014).

Studies into the experiences of women with BC and mastectomy indicate that some support is got from spouses during and after surgery (Aziato, 2009; Cebeci et al., 2012; Fouladi et al., 2013). Also some studies into experiences of men whose wives have mastectomy also indicate that they gave physical and emotional support to their wives during and after treatment (Sandham & Harcourt, 2007; Silva et al., 2010; Zahlis & Lewis, 2010).

Studies reviewed did not mention specifically their usage of the QoL Model by Betty Ferrell, but the four domains described in the model were assessed by various authors to measure or predict the QoL of spouses and family caregivers.

In a quantitative study to investigate the impact of palliative surgery on the dimensions of QoL of family caregivers, authors evaluated family caregiver outcomes in the physical, social, psychological and spiritual domains by using the QoL- Family Caregiver Tool (Juarez, Ferrell, Uman, Podnos, & Wagman, 2008). Authors did not make any modifications to the model. Similarly, in another quantitative study in China to explore the QoL and related factors among cancer caregivers, the QoL- Family Version Tool was used to measure the QoL of family caregivers (Lu et al., 2010). In this study, two of the items in the spiritual domain were omitted by authors because they reported that most Chinese do not have religious beliefs. Findings indicated that 42% of the caregivers were spouses and amongst family caregivers, spouses gave wide range of care from providing physical care including bathing of patient to engaging in other instrumental activities of daily living like shopping. Caregivers were distressed about their patients’ illness.

Based on the above definitions of family caregiver, QoL and examples of the context in which the QoL Model Applied to Family Caregivers has been used, it is inferred that a spouse is a caregiver. Thus, the Quality of Life Model Applied to Family Caregivers is applicable and will be used to guide the current study of Experiences of Spouses Whose Wives Have Mastectomy as a result of BC in the Accra Metropolis.

2.3 Physical Well-Being of spouses of women with mastectomy

The physical well-being of spouses of women with mastectomy appears not to have been frequently researched into as suggested by the scarcity of knowledge on it. The available literature however suggests that men also face some physical challenges due to their wife's BC diagnosis and treatment. A survey was carried out in Sweden to evaluate the sick leave pattern of spouses of patients with cancer. In this study, 1923 spouses were used and the findings revealed that, spouses of women with cancer reported an increase in sick leave especially a few months to the diagnosis and after the diagnosis of cancer compared to the general population (Sjövall et al., 2010).

A qualitative study in Brazil by Silva et al. (2010) to explore the perception of spouses of women with mastectomy reported that some spouses also became sick on hearing the diagnosis and treatment of their wives. In a related study to explore the experiences of spouses with their wives BC in the first six months, some spouses said they could not sleep, lost their hair and felt older, this made the spouses become worried about their own health (Zahlis & Lewis, 2010). Report from a study indicated that spouses needed prolonged physical effort to support partners and likened it to running a long race (Lethborg, Kissane, & Burns, 2003).

A systematic review into the physical well-being of cancer caregivers revealed that caregivers of cancer patients, some of which are spouses complained of problems with sleep and fatigue (Glajchen, 2012). A quantitative, descriptive preliminary study was carried out in Israel to

investigate the perception of husbands to their wives' BC diagnosis and treatment. It was found that some of the husbands complained of sleep disruption.

2.4 Social well-being of spouses of women with mastectomy

Findings from studies indicate that some spouses, in order to be physically involved in the care of their wives after mastectomy applied for early retirement or resignation from their work places (Sandham & Harcourt, 2007; Silva et al., 2010). For other men it called for a change in their work schedule to make time to be with their wives and also to take care of home and children. Even when they were at work, these spouses were constantly thinking about their wives. This resulted in lack of concentration which in turn affected their job performance (Zahlis & Lewis, 2010) and ability to work (Lethborg et al., 2003).

There is a growing body of evidence that BC and mastectomy has negative effects on sexual relations for both the woman and her spouse (Brédart et al., 2011; Emilee et al., 2010; Lewis, Sheng, Rhodes, Jackson, & Schover, 2012; Manganiello et al., 2011). Some of these problems with sexual intimacy are due to changes in the physical appearance of their wives after the mastectomy (Sandham & Harcourt, 2007; Silva et al., 2010). Some studies into the experiences of women after mastectomy indicate loss of interest and decrease in sexual relations (Manganiello et al., 2011; Odigie et al., 2010; Shrestha, 2012). Studies have shown that there is cessation or decreased frequency of sex and intimacy reported by a large number of men interviewed (Gilbert, Ussher, & Hawkins, 2009; Hawkins et al., 2009; Ussher, Wong, & Perz, 2011) which led to some men contemplating on going in for other women (Levy, 2011).

A qualitative study in Iran into men's sexual issues after BC in their wives revealed problems in the sex lives of spouses because culture and religion played an important role in the sexual adjustment of spouses (Nasiri, Taleghani, & Irajpour, 2012). Similarly, findings on the role of

culture and religion on sexuality after BC is reported by another study in Iran. The aim of this study was to describe and compare the marital relationship, sexuality and marital adjustment of Israeli and Chinese husbands of women with BC. The study involved 50 Israeli men and 50 Chinese men. Findings revealed a lower frequency of sex amongst partners of women with BC in both groups. Also, there was a significant difference between Israeli and Chinese husbands on sexual interest, pleasure and performance. Israeli men reported fewer sexual problems compared to the Chinese men (Woloski-Wruble, Dekeyser Ganz, Jiang, Qiang, & Kadmon, 2012). The limitation of this study is that there was no mention of the use of a statistical method in determining the sample size therefore generalisation of findings may not be accurate.

Age has been found to have an effect on the sexual function of couples after mastectomy. In a qualitative study in Brazil to investigate the psychosocial perspectives of the partners of women with BC treated with mastectomy, it was found that older husbands above the age of 60 years did not have problems with sexual intimacy because sex was no longer the focus of their marriage (Hoga, Mello, & Dias, 2008).

The effect of BC and mastectomy on marital relationship is a mixed one as some men reported an improvement in their relationship while others reported having some difficulties with communication. Zahlis & Lewis (2010) reported that BC diagnosis and treatment altered relationships. For some partners it brought them closer together and for others their relationship became more difficult due to communication problems. It was found similarly by Silva et al. (2010). The aim of their study was to explore the perceptions of spouses after removal of their wives' breast. The study was done in Brazil and involved 5 spouses. Findings indicated that for some spouses, there was no change in their relationship after the mastectomy of their wives. For some, their relationship became better and for others their

relationship became more difficult. A limitation to the study was the use of the word “mastectomized women” in the topic, which sounded derogatory. A hermeneutic phenomenology study in Canada by Shannon (2015) was carried out to explore the experiences of men with leisure during and after the treatment of their wives’ BC. The study revealed that men wanted to spend more time with their wives because there was an increased sense of appreciation and affection for them.

In a study to investigate factors affecting continuity of cancer care in Iran, some of the women had fears over the impact the surgery would have on their marital relationship and one of the participants testified that a neighbour's husband became bad tempered after wife had undergone mastectomy (Fouladi, Ali-Mohammadi, Pourfarzi, & Homaunfar, 2014). A theme that emerged from the study by Levy (2011) was “Avoidant man versus avoidant woman” (Levy, 2011 p. 151). This occurs when the couple cannot share their feelings with each other and they become alienated and distanced. This may lead to divorce or being preoccupied with other things such as work and taking care of children instead of communicating with each other. This consequently led to a lack of emotional relationship between the couple (Levy, 2011).

A study to explore how couples adjust to their marriages and the state of loneliness of women and the reaction of their husbands indicated that as the time since diagnosis increased the couple felt lonelier (Avci & Kumcagız, 2011). In the same study, it was found that husbands with higher educational level had better marital adjustment after their wives mastectomy. Authors explained that this was probably because educated men were more likely to support and share in the experiences of their wives.

The length of time a couple has been married was found to have an effect on the marital relationship after BC diagnosis and treatment. This was revealed in a quantitative study carried out in the north eastern USA by Kayser et al (2010) to examine the effect of interventions based on couples on the QoL of patients with BC and their partners. It was found that couples who had been married for longer periods (above 14 years) did not really find the intervention useful. Authors concluded that couples who had been married for longer periods might have gone through other life threatening illnesses and crisis and therefore the BC diagnosis and treatment did not affect their relationship. This enabled them to better adjust to current situation (Kayser et al., 2010).

In a qualitative study on experiences of women with mastectomy, most of the women revealed that the prolonged nature of treatment posed a financial burden to them. Also, they turn to their husbands or partners for financial help (Shrestha, 2012). In a similar study in Pakistan, most (68%) of the women had financial problems because they did not receive financial support from their husbands (Khanam, 2013). A quantitative descriptive preliminary study carried out in Israel to investigate the perception of husbands to their wives' BC diagnosis revealed that half of the spouses reported having financial problems due to the costly nature of the treatment (Woloski-Wruble & Kadmon, 2002).

In the study by Zahlis and Lewis (2010), some spouses said they did not keep their wives cancer diagnosis and treatment a secret but told family and friends about it and asked for help from them. Sandham and Harcourt (2006) however, discovered that some partners did not want to talk about their wives' BC and mastectomy with others because they felt it was not in a man's place to talk about their wives' surgery with others.

2.5 Psychological well-being of spouses of women with mastectomy

The psychological effect of BC and mastectomy has been explored by various authors who have revealed that BC and its treatment have considerable psychological effects on the spouse. In some cases, men hid their emotions and did not express how they felt (Shannon, 2015).

Depression and anxiety appears to be the most common psychological effect of BC and mastectomy in spouses as has been reported by many authors (Hasson-Ohayon, Goldzweig, Braun, & Galinsky, 2010; Lambert, Girgis, Lecathelinais, & Stacey, 2013; Mitchell, Ferguson, Gill, Paul, & Symonds, 2013; Nakaya et al., 2010). The aim of the study by Nakaya et al., (2010) was to investigate the risk of hospitalisation with severe depression in spouses of women with BC. Study findings indicate that spouses of women with BC had an increased chance of being hospitalised with severe depression. Also, a number of studies have been done to compare depression and anxiety amongst spouses of women with BC and spouses of healthy women. These studies indicate higher levels of depression and anxiety in spouses of women with BC than spouses of healthy women (Bigatti, Wagner, Lydon-Lam, Steiner, & Miller, 2011; Mitchell et al., 2013). Using a systematic analysis, Mitchell et al., (2013) found out that anxiety and depression was more prevalent in spouses of survivors of cancer who had lived with cancer for a long time than men with healthy women.

In a quantitative study to explore depression in husbands of women with BC, it was found that there was a higher level of depression in the husbands. Depression was even higher especially with husbands who used social support as a means of coping with wives' BC diagnosis (Bigatti et al., 2011). A factor that could have limited the findings of the study was the use of five different scales in addition to an interview that lasted between 30 – 40 minutes. This could lead to participant fatigue and confound the study results. In a quantitative study that aimed to examine the prevalence of psychosocial variables associated

with anxiety and depression among partners and caregivers of cancer survivors, it was found that, anxiety and depression were higher in partners than the general populace. Also, a considerable number of spouses in the study reported experiencing feelings of anxiety even a year after diagnosis and survival (Lambert et al., 2013). A cross-sectional survey in which the emotional adjustment and QoL of 70 partners of women with BC was compared to that of 70 partners of women without BC. In the findings, the report was that spouses of women with BC had higher levels of anxiety compared to spouses of healthy women. The study's findings also indicated that partners of women who had mastectomy had lower scores in the psychological domain of QoL compared to partners of healthy women (Moreira & Canavarro, 2013).

Studies have also shown that in some cases, anxiety and depression is higher in spouses than their wives. A quantitative study in Denmark to explore the increased risk of severe depression in male partners of women with BC reported that the spouses were at an increased risk for depression (Nakaya et al., 2010). Moreira and Canavarro (2013) also identified in their study that spouses of women with BC had higher scores on anxiety and depression and also had poorer QoL. The study by Mitchell et al., (2013) also had a similar finding which showed that even in some cases, the anxiety of spouses was greater than that of the women. In Washington, Zahlis and Lewis (2010) examined spouses' experience during the acute initial period of diagnosis and treatment of their wives' BC. Their study revealed that spouses were anxious about the cancer and how it would affect their wives' physical and mental health. In a cross sectional survey to explore the psychosocial problems and needs of patient with BC and their relatives after treatment, it was found that the relatives which were mostly spouses worried about the cancer spreading or returning and this was related to lack of access to information and health care professionals (Schmid-Büchi, Halfens, Dassen, & van den Borne, 2011). Lethborg, Kissane, & Burns (2003) also found that, while women were still

trying to come to terms with the diagnosis and treatment, spouses were thinking about the need to be in control. This initial need to be in control later gives in to anxiousness as spouses worry about the future, which may be due to the chronic nature of the disease in some cases where the cancer is not cured after mastectomy (D'Ardenne, 2004). Marshall and Kiemle (2005) in a study to explore the impact of breast reconstruction following cancer and its effect on patients and partners reported similarly that some men had anxiety, which was due to how they viewed the mastectomy. These spouses had anxiety because they did not know how their partners will react to the mastectomy. In another study to determine depression amongst partners of patients with BC, it was revealed that spouses who were less educated and married for shorter period were more likely to be depressed (Lewis, Fletcher, Cochrane, & Fann, 2008).

Some studies have found that spouses feared for their own future, cancer recurrence and progression (Fletcher, Lewis, & Haberman, 2010; Zahlis & Lewis, 2010) and their children's risk for BC and future after the potential death of their wife (Zahlis & Lewis, 2010). The study by Fletcher et al. (2010) was to describe spouses' concerns related to cancer and also to test the construct and predictive validity of a brief standardised measure of spouses' demands in Washington. Spouses felt helpless and lacked control as they were intensely occupied with thoughts about the cancer spreading and going unnoticed by the medical team. Also, spouses were helpless as they did not know whether the cancer will become uncontrollable and return. Since one of the objectives of the study by Fletcher et al. (2010) was to test the construct and predictive validity of a brief standardised measure of the demands of spouses, the demands could have been considered across the illness trajectory of BC in order for the measure to be generalizable.

There were situations in which some spouses also felt useless and powerless by not being able to do anything to protect their wives (Zahlis & Lewis, 2010). For some spouses, their helplessness during the course of treatment was due to the pain the wife was going through (Lethborg et al., 2003).

Difficulty in coping was exhibited by spouses finding it difficult to accept the BC and mourned the loss of the breast after surgery. Spouses also found it difficult to cope with home and work responsibilities which sometimes left spouses feeling irritable and frustrated thus becoming less patient with co-workers (Zahlis & Lewis, 2010).

2.6 Spiritual Well-Being of spouses of women with mastectomy

Spirituality has been used by BC survivors and their family members as a way of coping (Colgrove, Kim, & Thompson, 2007). In the same study, caregivers who were mainly spouses who found meaning in the care they were giving their wives were able to overcome the stress of care giving on their mental health.

In a systematic review to explore the impact of cancer on various aspects of the family caregivers' QoL across the trajectory of the illness, few of the studies revealed that caregivers expressed similar spiritual needs such as finding meaning and hope (Kim & Given, 2008). Similarly, spouses were hopeful that the cancer will disappear at the end of treatment and life will return to normal as though nothing had happened (Levy, 2011). This has made some spouses to seek healing in God since they believed it was God who allowed the cancer to occur (Silva et al., 2010; Zahlis & Lewis, 2010).

A qualitative study in Scotland with 26 spouses of women who had completed various types of treatment including mastectomy revealed the presence of ambiguity and uncertainty amongst spouses. The uncertainty was due to three main reasons. The first was that they were not sure of their role in their wives' BC because even though they wanted to offer emotional support, health facilities and professionals did not provide an enabling environment for that.

The second had to do with what they thought about their relationship and adaption; that is the uncertainty about their future with their wives and whether the cancer would return. The third had to do with the fact that after treatment, spouses expected their lives to come back to the pre cancer stage but their wives were not ready to move on (Harrow, Wells, Barbour, & Cable, 2008). The uncertainty brought about by the readiness of spouses to move on but hesitation from women is also reported by Lethborg, Kissane & Burns (2003). Findings from some studies indicate that spouses are uncertain about the possible future untimely death of their wives due to BC (Harrow et al., 2008; Lethborg et al., 2003).

In a quantitative study to explore the psychosocial problems and needs of patients with BC and their relatives after treatment, it was found that some of the spouses who form majority of relatives needed help in finding their purpose in life and also develop hope for the future (Schmid-Büchi et al., 2011). In the study by Fletcher et al. (2010) on concerns of spouses of women with BC, they found that spouses were concerned about themselves including their own mortality, the need to re order their lives priorities and the many uncertainties they had. A report from a study to explore the experience of partners of women with early stage BC at the completion of treatment indicated that even though spouses were relieved that treatment was over, half of them were uncertain about the future of their partners and their own future (Lethborg et al., 2003). In the same study, spouses reported the BC experience had affected their lives positively. It made them appreciate the present and they did not bother much about the future and the BC experience helped them think positively. Having a positive attitude towards the cancer and life was also reported by spouses in the study by Zahlis & Lewis (2010).

2.7 Support

Support is a concept that arises when one has to battle cancer or provide care for someone suffering from cancer. Some studies into experiences of women with mastectomy have

indicated that women got support from husbands and this support played a role in their recovery (Aziato, 2009; Cebeci et al., 2012; Fouladi et al., 2013). Support from a husband or partner leads to better coping in a wife and thus better coping in a husband as well. There is therefore a reliance of a couple on each other for better adjustment after a cancer diagnosis and treatment. This concept is frequently referred to in literature as “dyadic” coping (Brandão, Schulz, & Matos, 2014; Kayser et al., 2010). Support is not only given by the husband but also husbands receive support from family, friends and the church. In a study to explore the experiences of partners with their wives’ breast reconstruction after mastectomy, some spouses indicated that they received support from close relations and the support they received was what got them through the BC experience (Sandham & Harcourt, 2007).

Some studies on spouses’ experience with their wives’ BC have shown that spouses give physical and emotional support to their wives (Harrow et al., 2008; Salonen, Rantanen, Kellokumpu-Lehtinen, Huhtala, & Kaunonen, 2014). A quantitative study in Finland to investigate the QoL and social support received by spouses of patients with BC who have undergone surgery indicated that spouses received support from their family and friends. This support improved their QoL and well-being (Salonen et al., 2014). The study by Harrow et al in Scotland into the concerns of husbands of women treated for BC indicated that men accompanied their wives to hospital consultations and also provided emotional support for their wives.

Some spouses have indicated some changes in their roles as a result of wives’ BC and mastectomy (Lambert et al., 2013; Sandham & Harcourt, 2007; Silva et al., 2010; Zahlis & Lewis, 2010). In a qualitative study in England to explore the experiences of partners with breast reconstruction after mastectomy, authors reported that spouses took over more responsibilities at home by helping with physical care of wives and taking care of other

household chores at home. This was because their wives could not lift things immediately after their mastectomy and subsequent breast reconstruction (Sandham & Harcourt, 2007). In the study, there was no mention of the racial background of the participants. A factor that could have limited the finding of the study was the fact that all participants were Caucasians. Also, the fact that all participants except for one was in full time employment could have influenced the results. Lu et. al., (2010) also found similarly that spouses bathed their wives and helped with other activities like shopping.

In an attempt to examine the experiences of spouses whose wives have been newly diagnosed with local or regional BC and are undergoing treatment, a qualitative study was undertaken by Zahlis & Lewis (2010). The study involved 48 spouses in the USA. Study findings indicated that spouses had to assume taking care of the children and also taking up household chores, which some of them found very challenging. A limitation of this study is the fact that 48 participants were used in a qualitative study. This large number of participants for a qualitative study could generate large volumes of data that could not be easily managed. It was similarly found by Shannon (2015) that men reorganised their work schedule in order to support their wives. They did this by helping to take care of the home and children.

A quantitative study was carried out in China and Israel to investigate the social support received by husbands of BC patients. It was found that both groups received some social support in the form of taking care of their wives from family and friends. Israeli men however received more support and authors explained that this was because Israeli men were more likely to share their problems and seek for help (Kadmon, Woloski-Wruble, Yongqin, Wan-Min, & Dekeyser, 2004). In the study by Woloski-Wruble and Kadmon (2002) however, 75% of husbands claimed they did not need help from outside for domestic chores.

A study by into the coping of women with mastectomy in Iran revealed that emotional support given by husbands helped their wives in returning to a better mental condition (Fouladi et al., 2013). Similarly, women who had partners and received support from them had lower scores on anxiety (Borstelmann et al., 2015).

2.8 Spousal Involvement in Diagnosis and Treatment

The importance of spousal involvement in diagnosis and the choice for a woman to have a mastectomy cannot be over emphasised as demonstrated by many studies (Ballinger, Mayer, Lawrence, & Fallowfield, 2008; Fang et al., 2011; Fouladi et al., 2013; Hawley et al., 2009). For most married women with BC the opinion and involvement of their spouses is quite important and women who get full support from their spouses tend to spend less time in deciding whether to have a mastectomy or not (Fouladi et al., 2013). Some women also thought about partners first before taking the decision to have a mastectomy (Fang et al., 2011).

A mixed method approach was employed to examine the information needs of informal carers and also the sources of their information. In this study, 74% of participants were spouses. Authors revealed that informal carers got information from TV, family and internet (Beaver & Witham, 2007).

In a study to investigate the acceptance of mastectomy and factors that went into the decision making amongst breast cancer patients who were ethnically diverse, Hawley et al. (2009) revealed that women who regarded their spouses opinion were less likely to have mastectomy as the first choice of treatment (Hawley et al., 2009). In a similar study, authors wanted to find out reasons patient went in for mastectomy in a specialist clinic in UK with high mastectomy rate. Authors revealed that eighty (80) out of ninety seven (97) talked to their husbands or partners before making the decision to have a mastectomy. Out of the eighty (80)

women, fifty eight percent (58%) found it very useful to have discussed the choice for a mastectomy with their spouses (Ballinger et al., 2008).

A qualitative exploratory study by Aziato and Clegg-Lamprey (2015) into the reactions of women with BC and factors that influenced the decisions of women for treatment revealed that in some cases, consent was not given by spouses for mastectomy. Thus, some women had their mastectomies with the approval of other family members and not their spouses. Authors revealed in the same study that some spouses identified or confirmed the lump in their wives breast.

Sandham and Harcourt (2006) indicated in their study on experiences of partners with their wives breast reconstruction after mastectomy that partners were actively involved in the decision making process. Partners also attended hospital consultations with wives. Also in the same study some partners demonstrated lack of knowledge on BC and mastectomy. Partners who sought for information in the study did so from the internet. In a systemic review by Rowland and Metcalfe (2014) on experiences of men with their wives mastectomy, it was found that spouses wished for more information on BC and mastectomy. This information helped them in the decision making process. This need for more information on BC and its treatment is similarly reported by Woloski-Wruble and Kadmon (2002). Some partners of BC patients reported receiving information from health professionals and that they were satisfied with the information they received (Hoga et al., 2008).

In a quantitative retrospective study by Ohene-Yeboah and Adjei (2012), in Ghana, 248 out of the 330 women diagnosed with BC was as a result of breast lump. The purpose of this study was to investigate the characteristics of BC in Kumasi.

2.9 Summary of the Literature Review

The literature reviewed so far reveal that BC and its treatment by mastectomy can affect the physical, social, psychological and spiritual well-being of spouses of women with

mastectomy. Most of the studies reviewed however, are from developed countries and therefore may not reflect the experiences of spouses in Ghana. In Ghana, there is a gap in knowledge about mastectomy as a result of BC and its effect on spouses of women who have it. In this study, the experiences of Ghanaian men with their wives' mastectomy will be brought to the fore. It is hoped that findings from the study will help develop appropriate interventions that will address the needs of spouses of women with mastectomy.

CHAPTER THREE

3.1 Methodology

This chapter describes the research design, setting, target population, sampling, data collection and data analysis. In addition, methodological rigour and ethical considerations are discussed.

3.2 Research Design

The study aimed at exploring the experiences of spouses of women with mastectomy as a result of BC. A qualitative exploratory descriptive design was employed. This research design enables a researcher to explore how people understand and describe human phenomenon (Creswell, 2014). This design is used when little is known about the topic to be studied and the researcher wishes to know more about the topic. It is also used when the researcher wishes to explore the lived experiences of people (Padgett, 1998). This design enabled spouses give in-depth and detailed descriptions of their experiences with their wives mastectomy resulting from BC. It also allowed the researcher probe into the physical, psychological, social and spiritual effects of mastectomy on the spouse. This design was appropriate for the study because much is not known about experiences of spouses of women with mastectomy in Ghana.

3.3 Research Setting

The study was carried out in the Accra Metropolis. It has a total land size of 200 square kilometres. Accra “district” is an urban metropolis with a total population of 1,848, 614 (2010 Population Census Report). It is the most densely populated part of the Greater Accra Region. Initially, it was divided into 6 sub-metros namely Ablekuma, Ashiedu-Keteke, Ayawaso, Kpeshie, Okaikoi, and Osu-Clotey up to 2004, but later it was increased to 13 by a

legislative instrument. The health sector within this metropolis continues to work according to the old system of 6 sub-metros. Towns in the metropolis are grouped into: first class, second class, third class and fourth class residential areas. The sectors of Accra Metropolis economy consist of Primary Sector (farming, fishing, mining and quarrying), Secondary Sector (manufacturing, electricity, gas, water, construction) and Tertiary Sector (Wholesale trade, retail trade, hotel, restaurant, transportation, storage, communication, financial intermediation, real estate service, public administration, education, health and other social services).

Generally there are several levels and categories of health facilities within it and these are divided into government, quasi-government, mission and private. The levels include Hospitals, Health Centres/Health Post and others. There are 28 Hospitals in Accra metropolis. One of such hospital is the KBTH which served as one of the recruiting points for the study. Recruitment was done at the breast clinic of the Department of Surgery. This Department is one of the earliest departments established in the KBTH to provide surgery and consultancy services as well as offer training and conduct research. In 2001, a breast clinic, where patients could walk in without referral, was started in the department.

The second recruitment outlet was at Reach for Recovery Ghana (RRG). This organisation was started in Ghana in 2003 by a BC survivor with mastectomy. RRG support group and non-profit organisation was therefore designed to provide a network of support to BC patients and survivors particularly for women with mastectomy. The organisation is affiliated to Reach for Recovery International with its headquarters in Geneva. The mission of the organisation is to give survivors and their family hope by giving them information and support. Some spouses accompanied their wives to the facility and were recruited there.

3.4 Target Population

The target population was all men residing in the Accra Metropolis and have a wife with mastectomy as a result of BC.

3.5 Inclusion Criteria

The criteria for inclusion in the study were men who were: (a) above the age of 18 years, (b) married or co habiting with a “wife” who has mastectomy for at least 6 months and (c) could speak English and Twi

3.6 Exclusion Criteria

Excluded from the study were: (a) men whose wives have breast cancer but have not had mastectomy, (b) men whose wives have mastectomy but are not living with them, (c) men whose wives have mastectomy in less than 6 months, (d) cannot speak English and Twi

3.7 Sampling Technique and sample size

Purposive sampling technique was used. Purposive sampling “is the deliberate choice of an informant due to the qualities the informant possesses” (Tongco, 2007 p. 147). To recruit this sample, the researcher in this study selected respondents whom she believed were the best people to provide information on the phenomenon under study. As mentioned earlier, the breast clinic of the KBTH, Department of Surgery and Reach for Recovery, Ghana were the outlet for recruitment. The head nurse and a staff nurse at the clinic identified women with mastectomy who have spouses and were living with their spouses. Women with mastectomy following BC who had come to the breast clinic for review or counselling were approached and used as links to recruit their spouses. The purpose of the research was explained to them. After that an information sheet containing the purpose of the research, men who qualify to take part in the research (inclusion criteria) and researcher’s number was handed to the women to give to their spouses. Interested spouses called the researcher. Also, contact numbers of spouses were taken from women who provided them after the purpose of the

research was explained to them. Spouses who came to the breast clinic with their wives were approached directly. At RRG, the information sheet was given to the administrator and she helped identify spouses by giving the information sheet to the women or their spouses when they visited the facility. The sample size was 12 participants. This was subject to data saturation. Data saturation is the point at which no new responses emerge from the respondents as they are all virtually providing the same answers (Creswell, 2014).

3.8 Data Collection Tool

A face-to-face interview of each participant was conducted using a semi-structured interview guide. A face-to-face interview allows participants narrate experiences in-depth and also allows the researcher to redirect participants response when out of context (Creswell, 2014). The interview guide was made up of section A and B. Section A, contained the demographic information of the participants while Section B had questions that was guided by the QoL model applied to family caregivers, the literature reviewed and also the objectives of the study.

3.9 Data Collection Procedure

The researcher sought formal permission from the, breast clinic and RRG with an introductory letter from the School of Nursing, University of Ghana. Attached to this was a copy of the information sheet and ethical approval. The participants were interviewed at a location and time comfortable to them. Four (4) of the interviews took place in participant's houses, five (5) at an office assigned to the researcher in the surgical block and three (3) in a restaurant. Participants were given a consent form (see Appendix C) one week before the interview. This allowed them reflect on it and also clarify any concerns they may have. However for participants who could not read and write English, prior to the explanation of information sheet (see Appendix C) and consent form in Twi, the researcher sought input from an expert in Twi to ensure that the right translation was done. The contents of the

information sheet and consent form were then verbally translated to participants. Before commencement of interview, participants were allowed to sign or thumbprint the consent form in the presence of a witness. The interviews were conducted in either English or Twi.

Interviews were audio taped and lasted between 30-60 minutes. Demographic information was collected at the beginning of the interview and was not recorded. The interview was in the form of a conversation with open ended questions. This allowed participants to respond using their own words. The researcher probed during the interview to focus responses within the objectives of the study and also to get in- depth responses. Participants were allowed to validate key issues at the end of each interview. Privacy was ensured during the interview. The researcher documented non-verbal communications like smiling and other facial expressions in a field diary. This helped the researcher understand and interpret data correctly during analysis.

3.10 Pretesting of the Interview Guide

Pretesting or piloting of the interview guide is the process of interviewing a few participants who share similar characteristics as participants in the study setting to ensure appropriateness of the interview guide (Hennink, Hutter, & Bailey, 2011). The interview guide was pretested on two spouses identified at the 37 Military Hospital. Pretesting ensured that questions were clear and understandable. Questions that were not clear were restructured. Analysis of the responses obtained improved upon the interview guide. Data gathered from the piloting was not included in the main study.

3.11 Methodological Rigour

Rigour or trustworthiness in qualitative research ensures that findings accurately represent exactly what participants intended to say and that findings can be trusted (Lincoln & Guba,

1985). To ensure rigour the criteria of credibility, transferability, dependability and confirmability must be met (Lincoln & Guba, 1985).

Credibility is achieved when the findings from the data reflects reality (Shenton, 2004). In order to ensure this, the researcher purposefully recruited participants who met the inclusion criteria and could give in-depth information on the lived experiences of spouses of women with mastectomy. Member checks were conducted to verify responses of participants by discussing themes arrived at with them. In addition each interview was transcribed and coded before the subsequent ones. The researcher requested an independent coder to code some of the transcripts to allow for comparisons to be made. Prolonged engagement established rapport.

The second criteria ,transferability, is the extent to which the findings of the study can be applicable in other settings (Shenton, 2004). The researcher provided a detailed description of research setting, methodology and background of participants who were used in the study for other researchers to apply when transferring the conclusions of this study to other similar cases. All transcribed data and field notes were kept for audit trail.

Dependability, the third criteria pertains to whether or not the study can be replicated by another researcher (Gethins, 2012). To achieve dependability, the researcher worked with her supervisors from beginning of the research to the end. She also provided detailed description of research setting, methodology and background of participants who were used in the study. All participants were interviewed with the same interview guide. Each transcript was subjected to the same method of arriving at themes and sub-themes. A peer was allowed to examine data and this data was also recoded to ensure accuracy. All documents were kept for audit trail.

The last criteria, confirmability, is the ability of the researcher to present findings that reflect participants' experiences and not that of the researcher (Shenton, 2004). To achieve confirmability the researcher sought in-depth experiences of spouses of women with mastectomy. The researcher used reflexivity by making any biases known or declared. Additionally observations made by the researcher during the interview were entered into field diary. The researcher strived to understand the realities of spouses of women with mastectomy and sensitise anyone reading it. In addition, interviews were transcribed immediately to prevent mixing information.

3.12 Data Management

The aim of managing qualitative data is to organise data in a way as to allow for easy accessibility and analysis (Padgett, 1998). Prior to data collection the researcher recorded the date, time and venue of the interview in a field diary. After the interview, which was recorded with the permission of the respondent, data was transcribed verbatim. Transcribed data was saved in a word document. Interviews carried out in Twi were also transcribed in English by the researcher according to the meaning got from participants' words. Each participant was assigned a number (P1 through P12) in order of recruitment into the study. To these transcripts pseudonyms were then assigned to that of each participant. After the transcription, hard copies of each interview, audio tapes, field notes, diaries and any documented information were locked in a cabinet for safe keeping. Demographic data was separated from transcripts and stored separately. This information was accessible only to the researcher and her supervisors and is being stored for five (5) years after which it will be destroyed. The transcribed data was stored on CD- Rom and duplicated to prevent data loss.

3.13 Data Analysis

Data analysis is the process of delving into data in order to bring out the meaning of the experiences of study participants (Hennink et al., 2011). Data analysis occurred concurrently

with data collection. This allowed the researcher to explore emerging issues deeper in subsequent interviews. A Thematic Content Analysis approach was used by the researcher in analysing the data and this is “ a descriptive presentation of qualitative data” (Anderson, 2007 p. 1). Thematic analysis of qualitative data is a type of analysis that is guided by pre-existing themes and sub-themes from the constructs of the theory or model being used as the conceptual framework for the study (Padgett, 1998). The transcripts were first read and then coded based on the pre-existing themes and sub-themes in the QoL model. Different colours were used to represent the various themes. The themes and sub-themes were then cut and pasted in a word document. The remaining data which did not belong to any of the pre-existing themes and sub-themes were then subjected to content analysis.

During content analysis, each transcript was read several times to understand and get a general idea of what it entailed to get the meaning and patterns. The researcher then searched for similar ideas, thoughts and words and labelled it as codes. Similar codes were grouped to form sub- themes. Sub- themes were then grouped under themes. In analysing data the researcher ensured that her thoughts and ideas were not reported and that, only those of the participants were reported. Quotes from participants were then used to support generated themes.

3.14 Ethical Considerations

Ethical approval was obtained from the Institutional Review Board at the Noguchi Memorial Institute for Medical Research, University of Ghana. Permission was then sought from the breast clinic of the Korle-Bu Teaching Hospital and RRG with an introductory letter from the School of Nursing and a copy of the ethical approval. The purpose, benefits and potential risks were explained to participant verbally and in the consent sheet. This was done a week before data collection. This allowed participants to assimilate information that has been given

them and consider participation. Only the participants who met the inclusion criteria and agreed to participate were given a consent form to sign or thumbprint to indicate their consent. Participants were informed that they could withdraw from the study at any point and such withdrawal will not in any way affect the care their wives were receiving. They were informed that the raw data will be used for only academic purposes and that only the researcher, supervisor, translator and independent coder had access to the raw data.

Anonymity was ensured by assigning pseudonyms to participant during the recruitment. The pseudonyms were used when the participants were being quoted in the findings chapter.

Privacy was assured during the interview. Participants were informed that data and other study documents such as consent forms , audiotapes and transcripts would be kept under lock and key for at least five years after the study. The sheet containing demographic data and other identifiable information were kept separately from transcripts under lock and key.

Participants were informed that appropriate ethical clearance will be sought if the data has to be used in future for any other purpose. The researcher arranged with a counsellor at no cost to participants to help participants who may become emotional and break down during the interview.

CHAPTER FOUR

4.1 Findings/Results

This chapter presents the results after analysis of data that was gathered from respondents on their experiences with their wives mastectomy. Analysis was done taking into consideration the field notes that was taken to provide context and also to give a deeper understanding of the experiences of spouses. Experiences that were common to respondents as well as peculiar are also presented. The findings were grouped according to the domains of the QoL Model Applied to Family Caregivers by Betty Ferrell, which was the organising framework for the study. The findings are also presented according to the objectives of the study. The four main themes according to the model are physical, social, psychological and spiritual well-being of spouses of women with mastectomy. The main themes and their corresponding sub-themes are presented with verbatim quotations. In addition to the themes and sub-themes stipulated by the QoL model, the new themes that emerged were support and spousal involvement in diagnosis and treatment. In total, there are six (6) themes and twenty three (23) sub-themes.

4.2 Demographic data

The sample size for the study was twelve spouses aged between 32 and 75 years. Two (2) were in their early thirties, three (3) in their early forties, one (1) in his late forties, one (1) in his early fifties, three (3) in their early sixties, one (1) in his late sixties and one (1) in his mid-seventies. Their educational backgrounds were Islamic Education (1), primary (3), secondary (5), technical (1) and tertiary (2). With regard to their religious affiliations, eight (8) of the men were Christians, three (3) were Muslims and one (1) Traditional believer. The men had been married for a period between 5 and 45 years and their wives had undergone mastectomy between five (5) months and 10 years. Eleven (11) of the men were involved in monogamous marriage and one (1) in a polygamous marriage. At the time of interview, eight of the men were employed and four were on retirement. Out of the eight men working, four

(4) were self-employed, three (3) were employed in private organisations and one (1) was employed in government service. Ten (10) of the men had children with their wives and two (2) did not have children with their wives. The number of children the men had ranged from 1 to 3. All the respondents resided in urban settlements within the Accra Metropolis and spoke English and Twi.

Table 1: Themes and Sub-themes

THEMES	SUB-THEMES
1. Physical Well-Being of spouses of women with mastectomy	• Sleep disruption • Fatigue
2. Social Well-Being of spouses of women with mastectomy	• Relationship • Sexual function • Financial Burden • Employment • Secrecy
3. Psychological Well-Being of spouses of women with mastectomy	• Fear • Anxiety • Distress • Concentration • Helplessness • Control • Surprise
4. Spiritual Well-Being of spouses of women with mastectomy	• Meaning • Hope • Positive change
5. Support	• Domestic support given to wife • Emotional support given to wife • Support received by spouse
6. Spousal involvement in diagnosis and treatment	• Knowledge of spouses on BC and mastectomy • Identification or confirmation of lump by spouse • Spousal acceptance and consent for mastectomy

4.3 Physical Well-Being of spouses of women with mastectomy

To find out the physical well-being of spouses of women with mastectomy, the predetermined sub-themes found are sleep disruption and fatigue. It was noted that only a few of the spouses reported these challenges. Majority of them reported no physical challenges because they were not involved in direct day-to-day care of their wives.

4.3.1 Sleep Disruption

Sleep disruption was reported by some of the spouses and it was for various reasons. Spouses could not sleep because their wives were in pain, also due to the side effects of chemotherapy their wives were experiencing. Others could not sleep because they were thinking about how quickly their wives would recover after the mastectomy.

“Oh because for me the way things were going with my wife when they said they will cut the breast.. it did worry me and we couldn’t sleep at night because of what my wife was going through” Kofi

“We don’t sleep at night so when she is coughing at night I have to hold her to help her vomit after the chemotherapy. We have a rubber container, I put water in it for her. She will then vomit and then I throw it away. I do that until she finishes vomiting ..we will not sleep till morning and when morning comes then she sleeps and then I also go to work” Paa Joe

“Oh it is not like first. I am not able to sleep like I used to at first because I think a lot. I am always thinking about how she will recover quickly” Fiifi

However, majority of the men reported they did not have issues with sleep and that even though they thought about their wives’ condition, they still slept. Also, the nature of the work of some spouses made them to sleep anyway because they felt tired from work.

“She didn’t stay too long in the hospital and when she came back we slept. I sleep, I think of what she is going through but I still sleep” Kuuku

“Oh I sleep. I sleep up to 10 O’Clock. She even wakes me up so I do not have any problem with sleeping. By the time it’s 8pm I’m asleep. I sleep for a long time. These days with the “dum-sor” (irregular power), and the heat that it brings, that is what makes me struggle a bit before I sleep. All the same I sleep” Paa Willi

“Oh after the surgery, with my work I go at dawn and come at night. I still work very hard so I am able to sleep because I come home tired” Kofi

4.3.2 Fatigue

Some of the spouses who were physically involved in the care of their wives during hospitalisation due to the mastectomy complained of being tired.

“I was very, very tired” Kwame

“I don’t fall ill often but as a human being you may feel weak sometime.. By all means you will feel a little weak and tired” Paa Joe

Other men also revealed that because it was their responsibility to care for their wives, they did not even allow themselves to get tired so that other people would carry out what they were supposed to do. Others did not see why they should be tired when their wives were sick.

“Oh no, I don’t feel tired because I know it is my responsibility. And I also did not want to burden others with my problem” Kofi

“I don’t really think about tiredness because when my wife is sick I don’t see why I should be tired. I don’t even remember being tired. That is the truth” Kwabena

4.4 Social Well-Being of Spouses of Women with Mastectomy

To answer the second research question “what is the social Well- Being of spouses of women with mastectomy” the sub-themes which emerged were relationship, sexual function/affection, financial burden, employment and leisure activities. Apart from these sub-themes which were stipulated by the QoL model, a new sub-theme was identified. This new sub-theme is secrecy.

4.4.1 Relationship

Analysis of the data revealed that for majority of spouses the experience with their wife’s mastectomy made their relationship better, for others their relationship remained the same

and for one man his relationship with his wife became more difficult. Spouses who indicated that their relationship with their wife became better or remained the same explained they felt they were the guardian of their wives and hence had to maintain their relationship in order not to break the heart of their wives. Others also thought they had been with their wives for far too long to allow the loss of breast to be the cause of a break-up and others still found their wives attractive hence their relationship did not change.

“Eei! We are rather more intimate than before (laughs). Yes. I don’t pretend. If the removal of breast has got any problem or effect on our relationship I will be candid and tell you. I’m seeing myself as her father and her mother because her mother is not here. I’m seeing myself as her everything. So if I do anything to break her heart then I want to kill her” Kwabena

“Our relationship was normal. No nothing has changed. We are ok. The way we use to joke is the same. Our love making is ok. We have been cool and nice and seriously there have been no problems and like I told you I don’t care about breast and stuff like that. Nothing has changed, I have moved with her for too long and I think I was about 17 years when I met her so nothing has really changed” Kuuku

“Nothing has changed. We live just as we lived before.. I mean there is no feeling like me finding her less attractive or less desirable because she lost that part of her body. There is no such thing. I still see her as she was before the operation” Fiifi

Most spouses were not bothered about their wife’s loss of breast and said that the life of their wives were more important than the breast and hence their relationship with their wives remained the same. The men revealed that it was more important for their wives to be alive than have both breasts and be sick or dead. This belief led them to think less of the situation and gave them strength and the will to continue to be with their wives and also to cope better with the situation.

“It does not bother me because there is something called like and love. With love whether the person loses both eyes or legs you still love the person and that is the love that I have for my wife so I don’t have any problem.. Even next year February we will be having our wedding. I do not bother that she has one breast. So this is nothing.” Kojo

“We have been cool and nice and seriously there have been no problem and like I told you I don’t care about breast and stuff like that. She had to live so she had to have the breast removed so we kept going on alright” Kuuku

“..but when I got to the house and she told me, she was crying and I felt bad for her, I was ok the most important thing was that I needed her alive not about breast being taken out.” Kwesi

Spouses also made it known in their narrations that they were not bothered about the loss of their wives’ breast because they had finished childbearing. This enabled them to maintain the relationship with their wives. They revealed that they would have been worried if they did not have children already.

“But one thing is that we have children and I don’t think we will have anymore. If we didn’t have children then it would have worried us. Thank God for the children and the fact that my wife is there to take care of them” Kofi

“I was not worried. I’m not thinking about having children anymore” Kwesi

Despite not having a child with his wife, Fiifi accepted the situation and had this to say;

“Oh I always say that it is God who knows what is good for his Children. So if after five years we can have a child fine, if it gets to that time too and the medications or the disease will not allow her have a child we will take it like that. It is God who gives so we have given it all to God” Fiifi

A participant was happy that his wife had finally been diagnosed and the breast was going to be removed and hence was not bothered about the loss of breast.

“In fact I was happy that they had seen the problem and it was going to be solved rather than not diagnosing the problem. Like I told you earlier it had taken us 3 years already. And maybe before we would have known she will be a dead person. So when it happened that way I told her it’s good that the doctors had seen the problem and were going to solve it. Because we had already met people who were living with mastectomy for over 28 years so for me it was not a problem.” Kwesi

Another participant was quite bothered about the removal of his wife's breast because he was not involved in the decision making process and hence his relationship with his wife became more difficult.

"To be truthful when they removed it, it really disturbed me. Let us say you are with a woman who has two breasts and then all of a sudden, one is removed. How will you feel? You will feel bad. To be frank, it worried me but my wife did not want to inform me about it.. i was disturbed." **Kweku**

He further narrated how difficult their relationship had become with frequent quarrel.

"There were some few changes. She even noticed and said that when her breast was not removed, that was not how I lived with her but after it was removed I have changed towards her..It got to a time I started quarrelling with her. I get angry easily, I told myself to forget about it. One day I fought with her and she told me because her breast has been removed that's the reason I'm quarrelling with her, but then I wasn't like that with her before the removal of the breast" **Kweku**

4.4.2 Sexual function/ Affection

Almost all the spouses (11) revealed that they felt more affection for their wives and they gave various reasons for the increased affection they felt for their wives. Some of the men who had increased affection for their wives attributed it to the pity they felt for their wives due to the loss of part of the body.

"After the operation I informed her that I really sympathize with her, I am the husband I love her and I will love her more" **Yoofo**

"As I felt sorry or pity for her, the love I had for her even increased. That is because I do not want it to affect her, so now we love each other even more than before. And because her breast has been cut I don't want her to get worried. So I now pay more attention to her" **Yaw**

Yaw further explained that apart from feeling pity for his wife he did not even notice that her breast has been removed:

“Oh the love went on, it went on very well. I don’t even see that her breast has been cut off. My mind is not even on it that her breast has been cut. Whatever I used to do with her is now even more. Everything is okay between us” Yaw

In describing the effect that the mastectomy had on their sexual function, spouses initially described the significance of the breast in their relationships with their wives. The breast was mainly seen as an arousal and sexual organ.

“Oh yeah the breast is very good. I put it in my mouth and suck it and I derive pleasure from that. We men we never stop sucking breast. Even at old age we still suck the breast. When you are with a woman and you suck the breast it is very delightful so it is very important” Kojo

“Oh you know that when a woman undresses, by looking at it alone gives you the appetite for the sex” Kwesi

“The breast is very useful (laughs out loud). As for a woman’s breast, even when you hold it, some magic comes from it. If you are lying naked on a bed with your wife and you have nothing to hold and you hold the breast everything is ok. So the breast is very useful” Paa Joe

One of the men however did not attach any significance to the breast and narrated that he was not keen on the breast:

“I am not too keen on the breast and she had small breasts so it didn’t show too much anyway when it was removed” Kuuku

Despite the above significance of the breast in the sexual intimacy for spouses, most spouses said they did not have problems with sexual intimacy after it was removed. Some of the spouses gave more attention to their wives and felt their wives needed intimacy the most after their mastectomy otherwise their wives will feel rejected.

“I now give her more attention. I want her to feel free, I don’t want her to think that because her breast has been cut off, I don’t want to have sexual relation with her” Yaw

“I am not sure there is any problem. There is no problem. Because I think this is the time she needs intimacy. This is the time that when I make up my mind to do otherwise she will think that I don’t have time for her because of her situation and when she starts thinking she will feel rejected” Kwesi

One of the men narrated that he did not have any problem with sexual intimacy because he had the other breast to satisfy him:

“I don’t have any problem. Like I said earlier when you are with a woman you play with both breasts but even then I don’t have any problem. I still suck the other one. These things make the woman happy” Kojo

Two (2) of the spouses had reduced sexual relations with their wives and this was due to lack of interest on the part of the couple.

“Now it is not always that we want to have sex. And we both don’t get the feeling all the time for sex. It is not like first. You know the feelings of a woman are found in the left breast. So when it happens like that and the woman does not allow you and also does not have the joy for it, you don’t have to worry. Because you also know what is going on with her already. It was not like that before but now it has happened so you have to have patience” Paa Joe

Paa Joe continued to explain that the lack of interest is mainly on the part of his wife and the fact that God had made his penis weaker had led to a reduction in their sexual relations.

“As I said earlier, it is my wife who does not have the feelings for sex anymore. So I don’t have to bother her with it. So if she is happy and she gives me the chance then it’s ok. When it happens that way God makes our penis weak and it does not function as it used to be. This is in order for you to be able to stay with the woman” Paa Joe

One of the men stayed completely away from sex for fear of hurting his wife. He explained it as follows:

“Now I don’t want to go near her at all in terms of romance. I don’t attempt it at all .. You know I will have to lie on her and I think about the scar site that I may lie on it. So I have told her to forget about sex because I imagine how the breast is. So you will think about doing something with her and human nature you may think everything is ok and that she is the way she used to be, but in the end it will become a problem for you. So because of that fear I don’t think about sex” Paa Willi

Another participant was not able to initiate intimate relations with his wife and explained:

“It is not like first when we used to play romance and other things because it really worries me. You know we men, it is the breast that we like to take. It’s really difficult. It is serious! You see how you sit with a woman and hold her and play romance with her, I am not able to do that. First I use to do that with her when I visit her”

4.4.3 Financial Burden

Financial burden had to do with the fact that spouses became financially constrained due to some costs that were incurred prior to the mastectomy and also after. These included cost of drugs and cost of laboratory investigations. Due to this, life became difficult for some of the men and some run out of money while others had to postpone other things that they had planned to do with their money.

“Hmmm, as for my finances it has affected it in so many ways. Because even the drugs that she has to buy were expensive. It’s all about money. It’s about me getting money to be able to purchase the prescribed drugs for her” **Fifi**

“I have to buy some medicine, one is 250 Ghana cedis and I had to buy five which is 1,250 cedis. That one is not chemo money. That one is to protect the heart. I have to buy it before chemo. With the chemo each cycle she has to pay. Can you imagine if you don’t have money?” **Kwabena**

“The tests were very expensive, very expensive and as at that time I had lost my job because our company was dissolved. So when it happened money issues became very difficult for us. Life became very difficult” **Paa Joe**

Due to the financial burdens, one of the spouses revealed he run into debt.

“As for the financial burden, it’s not easy at all. I have run into debt.. Because when we realized we had to go to Korle-Bu, all my money was finished” **Kofi**

Some of the spouses who bore the cost of treatment by themselves did not have any financial burden while others got financial support from their workplaces.

“In terms of money, since I started going to the hospital I haven’t had any problem with money. Rather, things are going on well with us and our children. We have three children and things are moving on well.” **Yaw**

“You know those times we were both working so my workplace which is customs bore the cost because she was my dependent. She was working too so later we realised money came from the two sides because whiles my company paid for it because I sought for it, she was paid too so it didn’t really affect our finances.” Kuuku

4.4.4 Employment

With regards to employment, some men had to change their work schedule, others were absent from work while one had to go on leave so he could be with his wife especially immediately before and after the surgery. Four (4) of the spouses had retired when their wives had the mastectomy therefore could not give any information on the effect the mastectomy had on their employment.

“The only effect I’ve got is that it stopped me from doing my normal rounds. In my normal business, someone can call me that I need this or that. I have to re-programme the person to meet me at another time because I may not have time at that moment. That person will call and we will keep changing the time. That is how my wife’s condition has affected me.” Kwabena

“Oh the time that she was sick and the children were younger, I could not go to work and I have to wake up early to go to the hospital because the distance is far. At that time I was not getting time to go to work so I considered looking after my wife as work.” Kofi

“During the time of the operation I took leave to be with her till she recovered before I resumed work. So it did not affect my attendance at work.” Kwesi

For some of the spouses, there was no effect on their employment because they were self-employed and worked from home.

“Yeah I work at home by her side so it has not affected me. It has not affected me or my work.” Yaw

One of the spouses expressed his ability to go to work even when he had not slept the previous night. He attributed it to his faith in God.

“It is faith that has been given us by God. Even when I do not sleep by morning he gives me enough strength to go to work.” Paa Joe

4.4.5 Secrecy

Secrecy was a new sub-theme that emerged from the data. It was about spouses not wanting relatives and friends to know about their wives' condition and hence kept it as a secret. Most of the spouses acknowledged this and added they did so for several reasons. These reasons included fear of being ridiculed, stigmatisation and negative remarks associated with mastectomy.

“I did not want people to know. You know people talk a lot and they will make you feel bad. People will talk and some will ridicule you and stuff like that. I didn't want to feel bad after all that I had gone through.” Kuuku

“Some people think it is a communicable disease but for me the moment she came home I have kept it to myself. I have not told anybody and nobody knows. I did that because we Ga's(a tribe) and human beings are very troublesome. I am an elder in society. People can insult me that as an elder look at what I have gone for. People may tease me with it” Kojo

“I kept this secret. I did not tell anybody. Not even my younger brother or mother. Telling them will not make any difference. They will only put it in a very negative way that people will even start avoiding you and that's our mentality here. So I refuse to tell anybody. I kept it to myself and decided to fix my own problems because God is still God.” Kwabena

One of the spouses also felt informing his relatives and friends was like “washing his dirty linen in public”;

“With this sickness it's only her mother, sister and brothers who know about it. Nobody else knows. In my family no one knows my wife has this condition. There is nobody, no friend, none of my family members know she has this sickness. I will not tell anybody because I cannot wash my dirty linen in public” Paa Joe

However, the few spouses who did disclose the news were more comfortable disclosing it to the relatives of their wives and not their own relatives. Some of the spouses did not reveal their wives condition to their family members because they thought they were judgemental and would stigmatise their wives;

“Some of her family members know, but not all of them just her parents. But with my family members, nobody knows ..We decided not to tell especially my family members because of how judgemental people can be.” Fiifi

“You see because of stigmatization for instance even my family doesn’t know about it. I think it’s not necessary. She is my wife and I think the best people to help her are her family and her mother who is supposed to know about it.” Kwame

Some of the spouses informed their wives’ relatives and other people they lived with because they did not want to be blamed in case anything happened during the surgery.

“I wanted them to be aware of what has happened. You know things like this, sometimes people read so many meanings into it that maybe it is spiritual. So I wanted them to know that it wasn’t and that anybody can get it. They have to know what is going on so that if something happens they shouldn’t think otherwise that it is somebody who has done something to her.” Kwesi

“We informed the people in the house. I also informed my close relatives and friends and they all expressed sympathy. You cannot hide such a thing. If something happens how will you tell them? So when something happens, God forbid, they will say that they knew she was in such a situation” Paa Willi

4.5 Psychological Well-Being of spouses of women with mastectomy

To answer the third research question “what is the psychological well-being of spouses of women with mastectomy”, analysis of the data revealed that spouses showed some of the dimensions of the psychological domain as stipulated by Ferrell’s QoL model. It was also evident that these emotions were temporary and was felt mostly at the beginning of the treatment process. These emotions were felt when the news of mastectomy was broken to spouses and their wives. The sub-themes generated from the data and which were consistent

with the QoL model were fear, anxiety, distress, loss of concentration, helplessness and control. A new sub-theme that emerged from the data was surprise.

4.5.1 Fear

All the spouses indicated some form of fear, and these fears were for various reasons. Some of the fear was related to the surgery. The spouses were afraid their wives could die during the surgery and also, have complications after the surgery.

“The time I feared a bit was when she was sent for the surgery.. that was the time I feared a bit” Kofi

“You know in time past when someone goes for operation you will only hear of the person’s death. No matter the situation, there will be that fear that only God can bring her back safely. So, that fear was there.” Paa Joe

“What worried me was that my first wife had passed away and I was still mourning her and then now they want to operate on my second wife. I was thinking whether she will die in the theatre or return.” Kojo

“Yes you will be thinking that what if there is complication? You will be thinking about a lot of things and that causes fear.” Kwabena

One of the spouses indicated his fear of recurrence of breast cancer after the surgery when he lamented;

“My problem is that the surgery has been done for her. I’m afraid it will affect the other breast so I ask her if she is okay. Every day I ask her if she is okay. That is my only problem. Once she is okay, I don’t want it to affect any part of her body. That’s my problem, because of that when she is doing something and she complains of pain I tell her to forget it or call me.” Kweku

4.5.2 Anxiety

Majority of spouses expressed anxiety. This anxiety was shown when the wives themselves were worried and the spouses were concerned for their wives. Thus, when they received a call from their wives at work and also when their wives were referred to KBTH, they were anxious.

“Before the surgery, she was worried and when she gets worried it bothers me a lot and I become anxious.. her worry is my worry. Yeah, her worry is my worry” Yaw

“At that time whenever I see her call I become anxious ..As I was saying I always think about the situation. What bothers me the most is when I receive her call at work. Maybe it is not even anything but I think otherwise that something has happened to her.” Kofi

“The doctor who attended to us said “Take your wife to Korle-Bu. I will give you referral note. I would have asked you to go to another hospital but they will charge you too much so go to Korle-Bu”. Then my heart started jerking.” Kwabena

4.5.3 Distress

Most spouses complained of some form of distress which was associated with the side effects of chemotherapy which made some of the spouses cry. Chemotherapy is inclusive in the treatment of BC with mastectomy therefore all the wives of the men had undergone chemotherapy either before or after the mastectomy.

“After that she has to enter what you call chemo. That thing is another thing all together. She is having diarrhoea and a whole lot. In fact, that thing should not happen to anyone again. I tell you the experience was too much. Bleeding started and with clots so I asked myself what was happening and I was distressed.” Kwabena

“That situation was not something small at all. I cried sometimes. When I see the pain that she is going through, I cried. It worried me and worried her. It is as if she is going to die any moment. It’s not a joke. That chemo is not a joke at all. She would vomit so much at night and as if she is about to die. It got to a time I got scared and called her relatives that her situation was bad. And this happened every night whenever she went for the chemo. It was not a small problem at all and I was distressed.” Paa Joe

Most (11) of the women had their chemotherapy before the surgery but one of the women had her chemotherapy after the mastectomy. A spouse explained his distress when his wife begun to lose her hair due to the effect of chemotherapy.

“I told you I felt terrible because I love hair so much so when she went bald, oh my God!..all the hair started falling off and I love hair so much so I wondered what was happening. Everything came off and she had to start wearing wigs and stuff like that and that was bad. It was even worse than the breast that went off. I was distressed. I love hair so much and all of a sudden she becomes bald.” **Kuuku**

However, one participant’s distress was about the fact that he will no longer have two breasts to play with. He said;

“The second one was that every woman has two breasts and it is the two breasts that a man touches and plays with. I have been playing with two breasts till now and all of a sudden I have to do with one. It was quite distressing and hence made me think a lot”. **Kojo**

4.5.4 Loss of Concentration

Some of the spouses revealed that their wives’ mastectomy did not allow them to concentrate when they were at work. This was because they were wondering if their wives were alright at home. Some also could not concentrate because they knew their wives were in pain at home

“Initially while working it crosses my mind and I will be asking myself “what’s she doing”. The moment I think about it I just call her to find out how she is doing.” **Kwame**

“It started when we had not yet gone to the hospital. When she was in pain at home, at that time when I went to work my mind was always at home and I could not concentrate.” **Kofi**

One of the men who worked for a private firm narrated how he could not concentrate at work because he was always thinking about his wife's condition.

"When you go to work, you don't get free mind to work..you see I was always thinking about her condition, today this problem, tomorrow too, another problem. Even right now there is a problem at work." **Kweku**

However some men felt they had things under control and therefore did not have any issues concentrating at work. This is because they came to visit their wives in the hospital when they had some free time and also due to the nature of their work, they had no choice but to concentrate.

"Oh I didn't have any problem. I was able to concentrate on my driving. I come to see how she was doing when I come back from a journey and then go back to work." **Paa Joe**

"At the airport you have to work. Those times arrival was not easy at all so you will not get time to be thinking about small things like that. Although it was not a small thing but she was alright.. yes I was working and I was even voted the best worker for three consecutive years during that time." **Kuuku**

4.5.5 Helplessness

Some of the spouses initially felt helpless about the diagnosis and subsequent treatment of their wives with mastectomy. This was because they felt the situation was out of their hand and that there was nothing they could do to reverse the situation however they also felt it was only God who could solve the problem.

"Oh I was thinking that I will no longer see her the way I used to see her before. But I took it easy that it has already happened and what can I do? It has come so ..Oh like I told you earlier, it is a condition that has happened and I cannot put the breast back so I have accepted it. There is nothing I can do about it. It is only God who can do something about it." **Paa Willi**

"I am helpless. I can't do anything so I have to take it like that." **Kofi**

"My reaction was to get hold of her and to make her stop crying. I wasn't thinking. All my mind was on her and how to calm her down. That was when I was asking myself what can I do? How can I help her? How can I be of assistance to her? This woman

needs me very bad and I'm the only one who can save this woman in the situation. I was helpless" **Kwabena**

4.5.6 Control

Even though some spouses felt helpless initially, they eventually demonstrated having control over the situation. They did this by suppressing their own emotions and not thinking about the situation. These spouses assumed the role of being the “head” and the “strong” one in order to spare their wives from more worry.

“My wife started crying at the hospital. As soon as they said they will cut her breast she cried and cried and cried. As a man I had to hold myself and take control of the situation.” **Kwabena**

“Whatever it is, it had already happened. She will rather be thinking about a part of her body not being there therefore, if I also start thinking about it, it will become unbearable so I have to control myself.” **Kofi**

“It came to a time I said I have to keep everything inside of me. Because if she gets to know it will worry her, so all the time I wanted to give her a free mind. I didn't want her to be thinking so I tried to control and suppress my own emotions”. **Kweku**

Some of the spouses felt that not taking everything their wives did seriously and having patience for them enabled them to have control over the situation instead of being overcome by it. They did this by being patient with their wives and not taking everything they did or said seriously.

“So if she gets angry I have to be patient with her because that thing may be worrying her. So I have to have patience with her in everything because if something is bothering her and I also don't have patience for her, the worry may drive her to cause suicide which will bring so many problems .. if I don't do that I may leave her. If something has led to the current situation I have to think back and also think that what if it had happened to me? The Qhuran says that “God lives with people who are patient in this world”. So no matter the situation, I should have patience in order to stay with my wife till death separates us.” **Paa Joe**

“Oh now, because she is easily angered I lie low for her. I don't respond to her anger. Unlike before when she was strong and does something I am able to reply her with anger but this time, it's out, I don't mind her. I control myself.” **Paa Willi**

4.5.7 Surprise

Surprise was a new sub-theme that emerged from the data. The study revealed that spouses were initially surprised upon hearing the diagnosis of their wives with BC and also the need for mastectomy. They indicated that they had heard something about BC and mastectomy but did not know it could happen to their wives. They therefore did not pay much attention to BC issues when it happened to others.

“I thought that this thing that we hear about on radio is actually not too far from me. Not knowing it was just close to me. We hear them saying that women should do some test on their breast. When you hear that you don’t think that it will happen to you so nothing is done. So all of a sudden when it came to my court, I was a bit surprised.”

Paa Willi

“I had heard about it a couple of times but I never knew it will be knocking on my door. I had read something about it but we didn’t think about it..You know from the beginning, it was a bit surprising. Imagine you have been with a woman for more than 30 years and all of a sudden she comes back with only one breast.” **Kuuku**

One of the men expressed his surprise when he came to visit his wife at the hospital and she had already been sent to the theatre.

“I was just praying for her return from the theatre. Everything was a surprise to me so when I came and she had already been sent to the theatre I was dumbfounded. The only thing I did was to entrust myself to God. All I was thinking about was for them to bring her back safely.” **Kojo**

4.6 Spiritual Well Being of Spouses of women with Mastectomy

In relation to the fourth research question “what is the Spiritual Well-Being of spouses of women with mastectomy”, the predetermined sub-themes that were found in participants were meaning, hope and positive change.

4.6.1 Meaning

Meaning had to do with spouses attributing the cause of their wives’ condition to God and therefore believed in Him for complete recovery of their wives. Attributing the condition to

God enabled spouses to cope better because they believed the situation was out of their hands and that God who allowed it will also see them through.

“Oh I took it as anything or trial that comes our way, it does not just come. It is God who allows it” Kofi

“Oh I told you earlier that my wife’s situation is the doing of God. I don’t have any strength. God tests us all the time.. It is God so you have to be patient with God so that everything will be alright” Paa Joe.

“I see it as God’s doing. God brought it. I know it is normal and it’s God who allowed it to happen” Yaw

However one spouse did not attribute his wife’s mastectomy to God because to him a lot of women have his wife’s condition.

“I don’t worry too much about this thing and God because I think a lot of people have it. Last week I picked a friend of mine, he is 72 and the wife is 68. They are in hospital now with breast cancer and the whole breast is sore and has gone bad. I didn’t believe it was God, I didn’t curse anyone, it was normal” Kuuku

Spouses also sought to find the meaning of what had happened to their wives by rationalising the situation. This had to do with the way the spouses explained and justified why their wives had to lose their breast. They thought the situation could have been worse with their wives dying instead of losing one breast. This rationalisation also helped them to cope better with the situation

“If she had died, then I don’t know how I would have coped. So as it is, it did not happen that way and she is alive. Even the Bible says if a hand worries you cut it off. If you have both breast but dead, of what use will it be. If one is there and she is alive then I’m OK we are all ok” Kofi

“If you look at some people two of the breasts have been cut, someone is dead. Something else has happened to someone but my wife is not dead. She has life and the only thing is that her breast has been cut. She has life and is able to do everything that a human being is able to do. So I have to thank God” Yaw

“It is the person who worships God who is tested. God does that to see if the person truly has faith in him. So every time you undergo trials. Even prophet Mohammed suffered before building Mecca. God loved him but see the trials he went through” Paa Joe

Because most of the spouses believed God allowed the mastectomy to be done for their wives and also provided healing for BC through the mastectomy, they also believed God sustained and helped them manage the situation.

“Yes. God has done a lot for me. Because through these things if it were not for God. I would not know what would have happened” **Kweku**

“Whatever happens go back to God. That is what gives me joy and enables me to move on. With prayer and supplication my wife is healed. That is what I have seen to be helping me. Yeah” **Yaw**

4.6.2 Hope

Spouses had hope in God for total healing for their wives after the mastectomy. Hope was expressed by spouses in various ways. Some hoped in God for total healing for their wives, provision of finances and hope in God for direction.

“So I took it easy because I have God or Jesus in my life. I take everything easy. So even though I was worried I was still confident because of God” **Paa willi**

“My faith saw me through. As soon as the doctor told me about the price, I said I will pay even though I was not having the money..Do you think when someone tells me to pay 6000 Ghana cedis and immediately I say no problem even though I was not having that money? But I believed that with God I will get that money” **Kwabena**

“I had hope that God will show the way and my wife will be healed.” **Kweku**

4.6.3 Positive Change

Spouses' experiences with their wives mastectomy drew majority of them closer to God because they believed their wives recovery was from God. Drawing closer to God to them was a positive change in their spiritual life. Some of them demonstrated this by praying more and worshipping God more.

“It has affected me in a very positive way because it has made me to know that God is wonderful. Even though I know it has been happening to other people, now it has happened to me. It makes me wake up at dawn and start praying seriously for at least

an hour or two. That is good and I like it. So it has affected me in a very positive way”
Kwabena

“Oh it has increased my worship of God. It has enabled me to know who God is.. Oh, I have seen that all is about God. I am lost in God with all that happened .God has taken my heart. There is no one in my heart except God .It is only a small space in my heart that I have given to my wife..So all the time I talk to her about God, for her to know that it is God who has brought her this far and that whatever comes is from God” **Yaw**

One of the spouses who was a traditional believer believed that his deities saved his wife therefore he had to continue worshipping his gods.

“My spirituality has increased because when I called on god he saved me. I believe my deities saved my wife so I have to continue to worship them” **Kojo**

For one participant there was no change in his spirituality. Things remained the same and he did not see the need to go to church more often because of what had happened to his wife.

“No it didn’t change much. I am the type of guy who believes in what happens in the world as a natural process so why should I blame God or stop going to church or go to church more because of this thing. It didn’t really make me go to church more. Everything was normal” **Kuuku**

4.7 Support (Giving and Receiving)

It was gathered from the narrations of spouses that providing support to their wives and receiving support from family and friends was a major part of the experiences they had with their wives’ mastectomy. Apart from spouses themselves giving support to their wives, they also received support from family members, friends and their church. The support received by spouses enabled them to cope better with the situation. Support given by spouses to wives included domestic and emotional support. Thus, the sub-themes domestic support given to wife, emotional support given to wife and support received by spouse emerged which was not part of the QoL model.

4.7.1 Domestic Support given to wife

The spouses gave domestic support to their wives by taking on household chores like washing clothes, cooking and cleaning the house. Spouses took over these roles to enable wives rest especially immediately after the surgery.

“I clean the room. Right now, I do most of the household chores. She only does things on Sunday because I go to work” **Kweku**

“Oh whatever help I had to give to her I did. Sometimes I just watch when the children’s clothes become dirty and she starts to wash, even though she does not want me to help, I will take a stool and go and wash with her. Sometimes she will ask me not help but I still do, when she washes then I rinse. So as for help I really do help her, if she is here she will even testify to it” **Kofi**

One of the participants apart from helping his wife with household chores also contracted a maid to help his wife.

“There are some household chores that I do not let her do. I do it for her or I bring someone to do it for her. Because I know she has lost a part of her body, and I do not want anything at all to bother her.” **Yaw**

4.7.2 Emotional Support given to wife

Emotional support was in the form of spouses encouraging their wives to accept the mastectomy. They did this by drawing the attention of their wives to the fact that other women had mastectomy but were living normal lives, also by informing them that they will be with them to the end and also the fact that everyone has a different destiny.

“She used to cry so I talked with her and even showed her some women who have cut both of their breasts but were okay. So she was consoled, she became fine” **Yaw**

“Before the surgery and after the surgery I gave her support emotionally. I gave her assurance. I said to her ‘every single word that comes out of my mouth I want you to believe it. I know that I can do it. I will be with you this day until you are through with this. I will not make a move. I will stay with you’ and she was ok” **Kwabena**

“I consoled her and told her that everyone has a different destiny so she should not be worried” **Kwesi**

Some of the spouses supported their wives emotionally by attending the hospital with them.

“I used to come with her for the chemotherapy. So I did not leave her alone at all. I used to come with her every day” **Kojo**

“I went to the hospital with my wife from the very first day the BC was detected. If she will go to hospital five times a day I will go with her, I did everything with her. At a time when they see her at the hospital they ask her ‘where is your body guard’? (laughs) then my wife will tell them I am sitting there” **Kwabena**

“Since she was referred to Korle- Bu I come with her every day” **Kwesi**

4.7.3 Support received by spouse

Support received by spouses enabled them to cope better with their wives’ condition. This support was received from family, friends and the church. The support received was financial and physical (caring for wife in the hospital).

Financial support was received mainly from the family of the wife.

“I must not fail to talk about my mother in-law. She’s been a great and wonderful support. She always asks me whether I need some money, or she should send some money and how much. So if I’m not getting the money on my own and I ask her she will give me. So you can see the support” **Kwabena**

“When you enter a house with a good mind when something happens to you they will help you. So her brothers helped us before everything went on well for us. She has younger brothers. At that time her brothers were working so they had some money to help us” **Paa Joe**

One of the spouses received financial support from his children, family, friends and the church

“God helped us and also friends give us money. One of my sons is abroad so he also helped us and also the little that people gave us. Church members, family and friends really helped us. Before she went for her last chemotherapy one of her friends even sent her 200 Ghana cedis. They have helped a lot. I give thanks to God” **Paa Willi**

Another spouse received financial help from his Church.

“The church helped with finances to and from the hospital. Even before she started attending Korle-Bu, it was the church that helped us financially” **Kofi**

Physical support involved family and friends helping the men in taking care of their wives whiles they were on admission immediately before and after the surgery. This included helping the men with bathing and preparing food for the wives on admission.

“Her mother came. So she was the one caring for her, or sometimes my mother. But it was mostly her mother. She gives her food and does everything for her” Kweku

“In fact on the morning of the surgery I made her younger sister come to be with her in the hospital. So I was calling her throughout to find out what was going on” Kwesi

“Her sisters, they live close to the hospital so they go and care for her. One of my son’s wife also cooks and sends to her” Paa Willi

4.8 Spousal involvement in diagnosis and treatment

This is a new theme that emerged. It had to do with the role played by spouses in the process of diagnosis and treatment of their wives’ BC. This included all the events that took place from the onset of the lump to the time the surgery was done. The sub- themes that emerged were knowledge of spouses on BC and mastectomy, identification or confirmation of lump by spouse and spousal acceptance and consent for mastectomy.

4.8.1 Knowledge of Spouses on BC and Mastectomy

Lack of knowledge was demonstrated by most of the spouses. Only a few spouses had some information about BC and mastectomy before their wives were diagnosed whiles majority did not have any information. From the narrations of the men, it was also evident that the information they had was inadequate. Information was mostly got from radio, friend, TV and the internet.

“I had read something about it on the internet but we didn’t think about it .Yeah I know they have surgery for BC. I know if it’s bad they will have to remove the breast and when it moves to the other breast they have to remove that one too” Kuuku

“I had heard about it on radio .How to test your breast for the lump at home but they did not talk about the side effects.. my friend told me that my wife will have to do

chemo. He told me about the side effects that will come. He told me that she will lose all her hair, she will lose her appetite, vomit but luckily my wife did not vomit. She lost appetite and could not eat” Paa Willi

“I knew very little about the disease. I had heard something about it on TV mostly about people refusing to have their cancerous breast removed and dying afterward” Fiifi

A participant did not have any information on BC and mastectomy until after his wife had one and expressed his displeasure when the nurses tried to educate him afterwards.

“Do you know that when I see all these nurses telling us about BC now I'm not interested? I never knew that will happen to my wife until now. I got to know some things but formerly I had no idea. I'm telling you 99% of people here have no knowledge about this and I am not happy they are now telling me about it” Kwabena

One of the spouses expressed the need for more information and education on BC and mastectomy. Also, the need for spouses to be educated in order for them to support their wives was stated by another participant.

“Government has to do more about the education and there is a need for it to start in the classroom. Everywhere even on the streets. Show the video for people to see..We need more education.” Kwabena

“If there is a way you can educate the men that will help. The men should try and accompany their wives, encourage them and give them the love they gave them when they met initially before the sickness.” Kwesi

One of the participants expressed his willingness to speak with other spouses who did not supportive of their wives during and after the mastcetomy.

“I want to be given a platform so that I can speak to men who have abandoned their wives because of the surgery. This is nothing and the woman is a human being. They have to be called so I can teach them for them to stop all that. It's a disease that has come that's all.” Kojo

4.8.2 Identification or confirmation of lump by spouse

All the spouses reported that their wives' BC started with a lump. Also, the men whose wives were in childbearing years when they had the mastectomy noticed appearance of the lump during pregnancy and childbirth. However spouses admitted they did not take the lump seriously because they thought the lump was pregnancy related.

"It happened when my wife had our last child. You know when a woman becomes pregnant and delivers a lot of changes take place in the breast. So we did not take it seriously" **Kofi**

"Her second child was normal with no problems with the breast, but when she had her third child, then she realised her breast was becoming hard" **Yaw**

"After my first child my wife had no breast milk. She did everything she could and still nothing. After sometime this round thing came and she called me and I touched it." **Kwabena**

One of the men narrated how the lump appeared and progressed with the pregnancy but did not take it seriously when they first noticed it.

"I noticed she was in pain whenever I held the breast then she told me that there is a small lump there but does not pain her. So I forgot about it. So the pregnancy too was progressing and she started ante natal. As the pregnancy progressed the lump also grew bigger. It came to a time the lump became so big in the breast" **Kweku**

Some spouses identified the lump themselves while others confirmed it after it was identified by their wives. From their narrations, it was evident that even though some spouses did not take the lump seriously initially, the decision to seek medical treatment was initiated by them.

"As her husband, I once noticed a lump in her breast and asked her if she felt pain. She said no and added that she sometimes feels those lumps too. The third time I felt those lumps, I advised her to go see a doctor" **Fiiifi**

"I think I saw some yellowish fluid coming out of my wife's breast. Sometimes by the time we slept and woke up it would have soiled the pillow. I did not understand so I made her go to the hospital" **Kwesi**

Some of the spouses confirmed the presence of the lump after their wives had noticed and told them about it.

“After sometime she told me that the breast was painful. I touched it. That was after about 2 or 3 months. I noticed it had become bigger than how it was. Then one day I called her and said ‘tomorrow morning we are going to the hospital to find out if it is a lump so it can be removed.’ **Kwabena**

“One day she came from the bath house and asked me to look at a lump in her breast. I looked at it and asked her how long it has been there. She said she just noticed it. I touched it and told her that if that is the case she should go to Korle-Bu for them to see how they can help her” **Paa Willi**

4.8.3 Spousal acceptance and consent for Mastectomy

Since spouses initiated the need to seek medical treatment, they were part of the decision making process from onset of the lump detection through diagnosis and finally the mastectomy. Spouses were informed about the diagnosis by the doctor and also the need for mastectomy.

“They asked her to do a scan and then later they told us she has breast cancer” **Paa Willi.**

“At Korle – Bu she was diagnosed of having Breast Cancer and then we were told the breast will be removed” **Kofi**

“They showed us the lab result that confirmed breast cancer. But the result showed that it was stage 3 and had not yet got to 4 or 5. Then the doctor said she had to go for surgery” **Kwabena**

After being informed about the diagnosis and the need for a mastectomy, spouses accepted it. Even though most spouses expressed initial worry and anxiety towards the mastectomy because they associated the surgery to death, they eventually accepted it because they knew that was the only way their wives would be cured.

“I was not even in the country, I was away when I was informed the breast has to be cut. I agreed so I provided money and God willing it was removed” **Yaw**

“Later they said for the cancer not to spread all over the body, they had to remove the whole breast.. Ahh if that is what will save her life you have no choice so I agreed to the surgery” Paa Willi

“I gave them the go ahead and they went and removed the breast” Kuuku

“I want you to go to that surgery and I’m ready to support you. And I will be there to support you with any amount” Kwabena

One of the men was not part of the decision making process. The decision for the mastectomy was made by his wife alone and therefore he was very disturbed after the mastectomy.

“To be frank, it worried me but my wife did not want to inform me about it. She was given a document to sign. She was told to inform her husband for his consent. By the time I went she had already signed it. She was okay. But then I was disturbed” Kweku

4.9 Summary

The findings of this study reveal the various dimensions of the experiences of spouses with their wives’ mastectomy in the Accra Metropolis. The findings revealed that some of the spouses, who were involved in caring for their wives physically, complained of sleep disruption and fatigue. Spouses were surprised on hearing the diagnosis of their wives with BC. The spouses did not want to disclose their wives’ surgery to others for fear of being ridiculed. Relationships of participants and their wives improved and most of the spouses did not have problems with their sexual function. They had some initial fears and anxiety related to the surgery. Spiritually, they found meaning and hope in God. Spouses supported their wives domestically and emotionally. The spouses also received support from family, friends and the church which helped them to cope and finally spouses were actively involved in the diagnosis and treatment of their wives.

CHAPTER FIVE

5.1 Discussion of Findings

This chapter discusses the findings in relation to the existing literature in order to integrate the findings into nursing knowledge. The discussion is organized under demographic characteristics followed by physical, social, psychological and spiritual well-being of the spouses, support and finally spousal involvement in diagnosis and treatment.

5.2 Demographic Characteristics

Most of the spouses in this study were above the age of forty (40) years and had finished childbearing. This perhaps led to the fact that they were not bothered about the loss of their wives breast and also only one of the spouses reported having problems with his relationship with his wife. This finding have also been reported by another study which found that older couples who have finished childbearing reported that mastectomy did not have negative effect on their relationship (Manganiello et al., 2011).

The spouses had been married to their wives for long periods (5-45 years) and therefore did not see the mastectomy as a threat to their relationship. Lewis et al. (2008) found that spouses who had been married for longer periods were more likely to be depressed which could translate to the marriage relationship. This finding could be used by breast care nurses to counsel couples with problems resulting from mastectomy that the marriage relationship may get better with increasing age and time.

All except for one of the spouses had some formal education. This perhaps accounted for the role the spouses played in the diagnosis and subsequent treatment of their wives. The spouses probably understood the importance of early detection and treatment and hence supported their wives and thus better adjusted to the mastectomy. This perhaps explains the absence of

depression reported by the spouses in the current study. Lewis, Fletcher, Cochrane, and Fann (2008) also found that husbands who were less educated were more likely to be depressed.

5.3 Physical Well-Being of Spouses of Women with Mastectomy

The physical well-being of spouses bothered on issues concerning sleep and fatigue. The spouses in this current study reported having fewer physical effects from their wives mastectomy. The physical effects reported by the spouses were inability to sleep and fatigue. Spouses in this study reported less physical problems probably because their wives were not having advanced BC in their terminal stages requiring help in maintaining activities of daily living like bathing and lifting, which could have a physical toll on them. Only two of the spouses complained of sleep disruption, which is consistent with the study by Zahlis and Lewis (2010) where some spouses complained of inability to sleep. The sleep disruption was probably due to the anxiety experienced by the spouses in relation to the prognosis of their wives after the mastectomy since BC and mastectomy is usually associated with death. Another physical effect reported was fatigue. This was reported by two of the spouses in this study who were actively involved in the physical care of their wives in the hospital immediately after the surgery. This finding is consistent with the findings from a systematic review by Glajchen (2012) who revealed that most caregivers of cancer patients complained of fatigue amongst other physical symptoms. Most of the spouses in this study did not report fatigue probably because within the socio- cultural context of Ghana, men are usually not involved in the day-to-day care of their loved ones. This role is usually delegated to female family members (Nukunya, 2003), thus the absence of fatigue being reported by spouses. Also, the minimal physical effect may imply that the spouses were physically ready to support their wives and also men in general are stronger and can handle more physical stress than women and therefore may not openly admit to having problems with fatigue.

Partners may be counseled to seek assistance from other family members to help in the physical care of their wives during the operative period.

5.4 Social Well-Being of Spouses of Women with Mastectomy

The social well-being of spouses entailed secrecy, relationship, sexual function, financial burden and employment. The spouses were secretive and did not want to disclose their wives mastectomy to others. They therefore wanted to handle the situation by themselves. The need to keep the mastectomy a secret and protect themselves and their wives from the mockery of others led the couple to become closer and thus had few problems with their relationships. The good and strong relationship men kept with their wives enabled most of them to continue to enjoy their sexual intimacy.

The spouses in this study did not want others to know about their wives mastectomy for fear of being ridiculed and embarrassed. If they had to disclose the mastectomy to someone, they preferred disclosing it to the family of their wives rather than their own family. Also, the spouses who did disclose to others were those that needed support from others especially in the form of financial support. This finding is similar to a study by Lewis, Fletcher, Cochrane, and Fann (2008) where husbands did not want to talk about wives surgery with others because they felt it was not in a man's place to discuss the surgery with others. The finding in this study is probably because the spouses knew that the relatives of their wives would be more concerned about their well-being than their own relatives. Also, informing their relatives about their wives mastectomy may invite insults from other family members. In this study, most of the spouses had few problems with their marital relationships and admitted that the mastectomy had even brought them closer. For one of the spouses, his relationship was the same and for another spouse, his relationship with his wife became more

difficult. This finding is consistent with other studies (Silva et al., 2010; Zahlis & Lewis, 2010). The mastectomy drew most of the spouses closer to their wives because most of them had been married to their wives for longer periods (5-45 years) and did not see why mastectomy should cause problems in their relationship and thus trivialized the loss of the breast. Also, the Ghanaian society cherishes marriage and hence couples would rather stay together than separate over issues such as breast surgery therefore couples may have consciously decided not to let the mastectomy affect their relationship.

The findings of this study show that most of the spouses did not have problems with sexual relations with their wives. The spouses in this study reported that the breast is a sexual organ and that it plays a role in their sexual relations with their wives. Despite the role of the breast in their sexual relations however, most of the spouses did not have problems with their sexual function. This is not consistent with most studies which suggest that mastectomy has negative effect on the sexual function of couples (Emilee et al., 2010; Lewis et al., 2012; Manganiello et al., 2011). This finding is also contrary to most studies; an example is a study in Brazil which found that spouses had problems with sexual relations due to changes in the physical appearance of their wives (Silva et al., 2010). The finding in this current study could be because the spouses saw the loss of breast as trivial compared to the life of their wives and therefore did not affect their sexual function. This finding could also be because most of the spouses interviewed were middle aged and therefore may be having reduced sexual relations anyway, hence did not see the loss of breast as a problem or a cause of reduced sexual function. One of the spouses however, reported having loss of interest and the ability to even initiate sex, which is consistent with other studies (Sandham & Harcourt, 2007; Silva et al., 2010).

Findings from this study indicate that the employment or work of few of the spouses was affected by their wives' mastectomy. The few who were affected had to alter their work

schedule to make time to be with their wives while others had to take leave from work especially immediately after the surgery. This finding is consistent with the study by Zahlis and Lewis (2010). Most of the spouses in this study did not have problems with their employment. This finding may be so because out of the twelve men interviewed, eight were employed at the time of the study. Four were self-employed. Thus, the spouses who were self-employed had the free will to organize their appointments and thus felt their work was not affected.

Some of the spouses in this study experienced financial burden as a result of their wives' BC and subsequent treatment by mastectomy. They linked this to the prolonged and expensive nature of the treatment and also the expensive laboratory investigations.

5.5 Psychological Well-Being of spouses of women with mastectomy

With regard to the psychological well-being of spouses of women with mastectomy, the spouses were surprised about their wives' with BC. They also experienced fear, anxiety, distress, loss of concentration, helplessness, and control. Some of the spouses were surprised about the diagnosis of BC. Their fears and anxiety about the situation resulted in distress, poor concentration at work and helplessness. However, some managed to be in control of the situation.

The spouses were initially surprised when they were informed about the news of their wives' diagnosis of BC. Most of them were aware of the disease but never thought their wives would ever suffer from BC. This is an indication that most spouses do not suspect their healthy wives would ever suffer from such a chronic and debilitating disease such as BC. According to Karbani et al. (2011), most people regard BC as a taboo. As a result of this most spouses are unlikely to make concerted efforts to get their wives breasts screened for early detection and treatment of BC. This explains why, in this study, the wives' diagnoses of BC came as a

surprise to spouses. This is consistent with the finding by Zahlis and Lewis (2010) in which partners expressed shock and surprise at the diagnosis of BC and how fast their wives had changed.

Fear and anxiety were expressed by spouses of the women who had mastectomy in this study. Although fear and anxiety are sometimes used interchangeably, there are some differences. Fear is described as an emotional arousal in response to actual or imminent danger (Barlow, 2000). In this study, fear among the spouses was related to the surgical removal of their wives' breasts. This suggests that the spouses were not comfortable with the removal of their wives' breasts. There were also fears about their wives dying during the surgical procedure or from complications after surgery. Fletcher et al. (2010) also had a similar finding where spouses of women with mastectomy had fears due to uncertainty about worsening of their wives' condition and cancer recurrence after surgery. In Washington, Zahlis and Lewis (2010) found that spouses were anxious about BC and its effect on their wives' physical and mental health.

One of the spouses expressed fear of recurrence of the BC after the surgery. This finding confirms findings of other studies where spouses of women who have undergone mastectomy after BC diagnosis expressed fear about the recurrence of the cancer (Fletcher et al., 2010; Zahlis & Lewis, 2010). It is also an indication that those who have these fears about cancer recurrence might have some misconceptions or might have read or learnt something about BC and were aware of the possibility of cancer recurrence. According to the findings of Marshall and Kiemle (2005) on the impact of breast reconstruction following cancer and its effect on patients and their partners, fear and anxiety in some men resulted from how they viewed mastectomy.

Majority of spouses were anxious about the health statuses of their wives. This is because most of them were uncertain about the outcome of their wives' condition. People whose loved ones are diagnosed as suffering from cancer associate it with pain and death (Silva et al., 2010). The uncertainty of the outcome of their wives' BC may contribute to anxiety among loved ones. This confirms the findings of other studies where men whose wives had BC or mastectomy expressed anxiety (Hasson-Ohayon et al., 2010; Lambert et al., 2013; Mitchell et al., 2013; Nakaya et al., 2010). This anxiety also suggests a sense of responsibility and genuine concern for their wives' well-being. Although anxiety is described as a nonspecific response to actual or potential threat (Steimer, 2002). It may also be described as an elaborate form of fear (Barlow, 2002). This anxiety can be linked to fears expressed by the spouses and this is likely to make the men worry so much about their wives health leading to an increase in their anxiety state. Even in some cases, levels of anxiety were found to be higher among men than their wives who were the actual sufferers (Mitchell et al., 2013).

Most spouses were distressed about the side effects of chemotherapy being received by their wives. This represents the extreme anxiety, sorrow or pain that these spouses went through with their wives. One spouse was distressed when his wife begun to lose her hair due to the effect of chemotherapy. This probably represents a sign of loss of control and inability to adapt to the stress associated with the suffering and the dramatic changes that were going on in their wives. This finding is consistent with that of several other previous studies where suffering was not only limited to the woman. However, psychological distress was experienced by the men because of their wives' disease and it's treatment by mastectomy (Brandão et al., 2014; Kayser et al., 2010; Lewis et al., 2008).

One of the spouses was distressed about the denial of the chance to play with all two of his wife's breasts due to the loss of one of his wife's breasts. This may suggest difficulty in

coping with the loss of the woman's breast due to the inability to bring oneself to the reality of the situation and to accept the loss of the woman's breast. Similarly, Zahlis and Lewis (2010) found difficulty in coping among men who found it difficult to accept the diagnosis of BC in their wives making them mourn over the loss of their wives' breast after surgical removal. Secondly, this can also be distressful due to the fact that the loss of the breast, which also functions as a sexual organ, may affect sexual activities between the couple (Abasher, 2009; Emilee et al., 2010; Manganiello et al., 2011). Distress, as expressed by the men in this study may be a sign of poor coping and makes them unable to support their wives well (Silva et al., 2010). This may make them lose concentration.

The spouses in this study exhibited some loss of concentration. Concerns about the health condition of their wives when they were away from home affected the spouses' level of concentration at work in this study. Being aware and concerned about the fact that a loved one is sick and in pain makes it difficult for one to fully concentrate on whatever he or she is doing. This is likely to make them helpless and lose control. In a study, Fletcher et al. (2010) found that spouses felt helpless and lost control due to intense pre-occupation with thoughts about their wives' condition becoming worse. The spouses were thinking about their wives and working at the same time, which is likely to affect their work output and relationship with co-workers. Zahlis and Lewis (2010) also observed a similar situation where spouses whose wives had BC were not able to cope well with home and work responsibilities and this sometimes affected their relationship with co-workers. Some of the spouses in this study however, by virtue of the nature of their work were able to find some free time to visit their wives in the hospital. This helped them to be able to cope with the situation and concentrate well on their work because they were always abreast with the state of their wives' condition and as such, had no need to worry.

Helplessness was a feeling that was experienced by the participants. Some of the spouses initially felt helpless about their wives' diagnosis of BC and subsequent removal of their wives' breasts. This feeling they said was as a result of the realization that there was nothing they could do about the situation. Helplessness may also be as a result of lack of knowledge about actions to take to help their wives and inability to cope with their wives' condition. This confirms the findings of Zahlis and Lewis (2010) where some spouses felt useless and powerless because they were unable to help their wives. Another finding that can be linked to this study's findings is that of Lethborg et al. (2003), in which some spouses felt helpless because they were not able to relieve the pain their wives went through during the course of treatment. Helplessness almost always leads to loss of control. However, most of the spouses in the current study reported that they were eventually able to maintain some control.

With control, the spouses in this study demonstrated control over the situation by suppressing their own emotions and assuming the role of being the "head" and the "strong" one in order to prevent their wives from worrying about them also. This represents suppression, a form of psychological defence mechanism, whereby one copes with a situation by making a conscious effort to suppress unpleasant feelings and emotions and makes a conscious decision not to think about them (Kline, 2014). By so doing, the spouses did not express their own expressions of grief and sorrow in order to be strong on the outside for the women to look up to. According to the findings of Lethborg et al. (2003) men are concerned about the need to be in control whilst their wives try to come to terms with the diagnosis and treatment of BC. Others exercised control by being patient in dealing with their wives' responses to the situation. This might also be due to the fact that they realised they were the main source of care for their wives (Cebeci et al., 2012; Romito et al., 2013; Silva et al., 2010).

5.6 Spiritual Well-Being of Spouses of Women with Mastectomy

The fourth objective of the study was to explore the spiritual well-being of spouses of women with mastectomy. The themes that emerged were meaning, hope and positive change. The spouses sought meaning for their wives' condition by attributing the cause of the mastectomy to God. The belief that it was God who brought this upon them led them to have hope and eventually made a positive change in their lives by drawing them closer to God.

All the spouses in this study regardless of their religious beliefs, except one believed that it was part of God's divine plan for their wives to have a mastectomy; a belief that helped them to cope with their wives' mastectomy. This is consistent with the findings from Silva et al. (2010) where husbands similarly believe that God had brought the BC and mastectomy upon their wives. The finding from this study is probably because Nukunya (2003) indicates that the Ghanaian society is a highly religious one, as most of the people believe in either the supreme God or lesser gods/deities. There is therefore the tendency to attribute occurrences that cannot be explained by people experiencing it, to a supreme being. Kim and Given (2008) also found similarly that spouses needed to find meaning in God. A study by Colgrove, Kim and Thompson (2007) also indicated similarly that participants who had faith and found meaning in a supreme being regarding the care they were giving were able to overcome the stress of caregiving on their mental health. Breast care nurses in counselling spouses could emphasize the need of spirituality in coping with BC diagnosis and treatment to partners. Though majority of the spouses in this study saw it as God's will, one of the spouses believed it was a common health problem in women. Spouses also found meaning by rationalising their wives' diagnosis and treatment. This rationalisation is a defence mechanism that was used by the spouses to help them cope.

Another way of expressing their spiritual well-being was in the form of 'Hope'. The spouses hoped in God for total healing of their wives after mastectomy. This hope for total healing for their wives was as a result of spouses believing it was the will of God for their wives to have BC and mastectomy. This finding is consistent with that of Levy (2011) who revealed that spouses had hope in God that cancer will vanish at the end of treatment and life would return to normal.

Because BC and mastectomy in their wives was attributed to a supreme being and also they hoped that their wives would be healed, the experience drew spouses closer to God. To the spouses, drawing closer to God was a positive change in their lives. The positive change made them prayed and read the Bible more. A similar finding was reported by Lethborg et al. (2003) where partners said their experience with their wives' BC and treatment impacted their lives positively because it made them appreciate life more. The men in the study had a positive change because they believed God had given their wives total healing after the mastectomy.

5.7 Support

Support was one of the new themes emerging in this study. The support was either that given to wives by their husbands or that which was received by the husbands from family, friends and the church. Husbands supported their wives in domestic duties. The provision of assistance with domestic duties usually amounts to a change of role on the part of husbands (Lambert et al., 2013; Silva et al., 2010). This domestic support was mainly in the form of assisting with washing, cooking and cleaning at home. This is consistent with the findings of Zahlis and Lewis (2010) where spouses in the US took up household chores to support their wives after mastectomy. This is also similar to the findings of Sandham and Harcourt (2007) where husbands in England assisted with the physical care of their wives and took care of

some household chores such as washing and cleaning the house. One of the participants went further to employ a house help him to assist his wife at home.

Husbands also gave emotional support by encouraging their wives and helping them to be optimistic about the outcome of the surgery. This was in an attempt to restore hope and confidence for recovery in their wives. They also gave their wives the assurance that they will forever remain beside them. Emotional support given by husbands is similarly reported by Harrow et al. (2008). These assurances may go a long way to strengthen the resolve of their wives to be optimistic about their health and recovery. It also helps them mentally to have reason to live. This can be linked to the findings of Fouladi et al. (2013) where Iranian women had better and sound mind after going through the stress of mastectomy due to emotional support they received from their husbands.

Another way the spouses supported their wives was by accompanying them to the hospital. This is consistent with findings from the study by Harrow et al. (2008) where husbands accompanied their wives to hospital consultations. This suggests that the husbands served as a source of encouragement for their wives throughout the course of their treatment. This is likely to play a significant role in promoting compliance with treatment regimen among their wives, which will help facilitate their recovery (Aziato, 2009; Cebeci et al., 2012; Fouladi et al., 2013). The supportive role played by the husband and the positive effect it has on the wife helps the couple to cope with the stress of cancer diagnosis and treatment (Brandão et al., 2014; Kayser et al., 2010).

Spouses in this study received financial assistance from friends, family and church to help them support their wives better. Family and friends also assisted the husbands in bathing and preparing food for their wives immediately before and after the surgery. This also assisted the spouses to provide the needed support for their wives. This finding is consistent with findings

from Salonen et al., (2014) where spouses received support in the form of aid from family and friends and the support they received improved their QoL and well-being. With the provision of such support from their husbands, women will have enough time to rest after undergoing mastectomy and this will help promote smooth recovery (Aziato, 2009; Cebeci et al., 2012; Fouladi et al., 2013).

5.8 Spousal Involvement in Treatment and Diagnosis

Another theme that emerged was spousal involvement in treatment and diagnosis. The spouses in this study were actively involved in the diagnosis and treatment of their wives. The sub-themes that emerged were knowledge of spouses on BC and mastectomy, identification or confirmation of lump by spouse and spousal acceptance and consent for mastectomy.

Regarding knowledge on BC and mastectomy, most of the spouses in this study demonstrated a lack of knowledge. This was shown in their inability to explain what BC and mastectomy was though they had heard about screening for BC on TV and did not pay much attention to it. This lack of knowledge is similarly reported by Silva et al. (2010) where spouses did not have knowledge on BC and mastectomy and had misconceptions and viewed it as a death sentence. Education on BC is probably not reaching husbands perhaps due to educational material for BC being mostly directed at the women. As a result, spouses may not understand the information being given on BC and mastectomy. Spouses could also consciously ignore the education being given due to the association of BC and mastectomy with pain and death. Also, lack of knowledge is so because spouses did not think their wives would ever be diagnosed of BC and have a mastectomy therefore did not pay attention when information on BC was being discussed. Some of the spouses in this study got some information after the diagnosis of their wives and wished they had received more information prior to diagnosis of

their wives. The wish for information has been reported by other authors (Rowland & Metcalfe, 2014; Woloski-Wruble & Kadmon, 2002) where spouses' wish for information helped some of them to take part in the decision for treatment.

For the spouses who had some knowledge, the source of information was from radio, TV, internet, family, friends and by reading books. This finding is consistent with other studies (Beaver & Witham, 2007; Sandham & Harcourt, 2007). These sources from which information was derived in this study are probably due to the fact that most spouses in Ghana are not actively involved in the diagnosis and treatment process. Due to this, most spouses do not come in contact with health personnel in order to get information about their wives' condition directly from them therefore they resorted to sources like radio and TV.

All the spouses reported that their wives' BC was as a result of a lump in the breast and the lump was associated with pregnancy and childbirth by spouses and their wives. This finding is similar to that of Ohene-Yeboah and Adjei (2012) where majority of women diagnosed with BC is as a result of a lump. Woo , Yu , and Hurd (2003) reported that BC is common with increasing age. Breast cancer diagnosis is probably associated with pregnancy because women are increasingly delaying childbirth. Some of the spouses in this current study identified the lump themselves while others confirmed it after identification by their wives. This finding is consistent with findings from Aziato and Clegg-Lamprey (2015) where spouses confirmed the lump in their wives' breast. Spouses were able to identify the breast lump perhaps because spouses in this current study alluded to the fact that the breast is a sexual organ and therefore might have chanced upon it during sexual intimacy.

Majority of spouses initiated the need for their wives to seek medical treatment therefore they willingly accepted and gave consent for the mastectomy to be done. One of the spouses did not willingly accept and give consent to his wife. This was because his wife did not discuss

the mastectomy with him before giving consent herself. He therefore reported having difficulty in his relationship with his wife after the mastectomy. Aziato and Clegg-Lamprey (2015) found similarly that some spouses accept and encourage their wives to have a mastectomy while others do not. Involvement of most of the husbands in the decision making process probably led to better coping with their wives BC and mastectomy. The spouses gave consent for the mastectomy probably because most of the men associated BC to death therefore may have believed that the surgery would save the life of their wives. Also because the spouses believed the lives of their wives were more important compared to the breast, they willingly accepted and gave consent.

Previous studies have looked at the domains of the the QoL Model Applied to Family Caregiver separately (Ferrell & Baird, 2012; Glajchen, 2012; Otis-Green & Juarez, 2012; Yeh, Wierenga, & Yuan, 2009). This study however looked at the total well-being of spouses of women with mastectomy in Accra Metropolis by considering the physical, social, psychological and spiritual well-being.

CHAPTER SIX

6.1 Summary, Implications, Limitations, Conclusion and Recommendations

This chapter presents the summary of the study, implications of the study to nursing practice, education, research and management. It also includes the limitation, conclusion and recommendations of the study.

6.2 Summary of the study

A qualitative exploratory descriptive method was employed to explore the experiences of spouses of women with mastectomy as a result of BC. The study was carried out in the Accra Metropolis and participants were recruited at the breast clinic of the KBTH and RRG. Data collection begun after ethical approval was given by the Institutional Review Board at the Noguchi Memorial Institute for Medical Research, University of Ghana. The researcher sought for approval at the KBTH and RRG. Participants were purposefully recruited and data was saturated on the 12th participant. The interview guide was pretested at the 37 Military Hospital to ensure that participants understood it and that it was able to elicit data needed. Interviewing of participants and transcription occurred concurrently in December 2014 and ended in March 2015. The participants who agreed to take part in the study signed a consent form. All the interviews were audio taped and transcribed verbatim. Thematic content analysis was used in analysing the data.

The key findings indicated that most of the spouses did not have physical problems as a result of their wives' mastectomy. Thus, only two of the spouses who were involved in the physical care of their wives during the operative period complained of sleep disruption and fatigue.

Most of the spouses wanted to keep their wives' BC and mastectomy to themselves for fear of being ridiculed and stigmatised. The BC diagnosis and mastectomy led to an improvement

in the marital relationship of the couple with most of the spouses having more affection for their wives. Majority of spouses did not have problems with their sexual relations with their wives but the cost of treatment posed a financial burden to some of the spouses.

The spouses were surprised about the diagnosis of their wives with BC and the need for mastectomy. Spouses were afraid their wives could die during the surgery and also complications after the surgery. The spouses were anxious when their wives were worried. Also, they were anxious when they received calls from their wives at work. Most spouses were distressed when their wives were in pain and lost their hair due to the side effects of chemotherapy. One of the spouses was however distressed about the fact that he could not play with both of his wife's breast.

Spirituality helped the spouses in coping with their wives' mastectomy. The spouses, both Muslims and Christians found meaning to their wives' BC and mastectomy by believing it was God who had brought this upon them and their wives. They hoped in God for healing and drew closer to God. One of the participants who was a traditional believer also found meaning and hope in his deities (god).

Spouses gave support to their wives in the form of domestic and emotional support. They also received support from family, friends and the church which helped them to cope. Friends and family helped them with the physical care of their wives when they were on admission and also financially. The church helped two (2) of the spouses financially.

Most spouses did not have knowledge on BC and mastectomy and wished more education could be given on it. Some of the spouses identified the lump in their wives' breast and others confirmed presence of the lump. The lump was associated or seen during pregnancy and childbirth. Most of the spouses accepted and gave consent for the mastectomy.

6.3 Implications

The findings of the study revealed several implications that need to be addressed. These implications are in relation to nursing education, nursing practice, nursing research and nursing administration.

6.3.1 Nursing Education

Courses in medical-surgical nursing on oncology must be expanded to meet the needs of not only the patient but also that of patient's family who may be caregivers. Tutors of oncology specifically BC, must teach a comprehensive and holistic approach to cancer management and treatment to include caregivers of cancer patients especially the husband. Oncology nursing curriculum must be developed to train nurses. This training will provide nurses with specialised skills to give a holistic care to patients with BC and their spouses.

6.3.2 Nursing Practice

This study indicated that spouses play an important role in the recovery of their wives from BC by giving wives physical and emotional support which help them with coping and recovery after treatment. Breast care nurses should acknowledge the role of spouses hence endeavour to encourage spouses to be part of the diagnosis and treatment of their wives. This can be achieved by providing a spouse friendly environment for spouses to get involved with diagnosis and treatment. This study also revealed that the psychological well-being of spouses was the most compromised therefore more counselling needs to be given to spouses to help them cope better with their wives' BC and mastectomy. This will enable spouses provide their wives with the needed support during BC diagnosis and treatment.

6.3.3 Nursing Research

Spouses who took part in the research were those who perceived themselves to be supportive of their wives, therefore further research could be carried out involving partners perceived not to be supportive. Also, partners of women with advanced BC could be studied because their experiences may be different from those in this study. The perspectives of children whose mothers have BC and mastectomy could also be explored in future studies to better understand the impact of BC and mastectomy on the family.

6.3.4 Nursing Administration

The findings from the study revealed that spouses did not have knowledge on BC and mastectomy therefore the policy on public education should be modified to make the education more acceptable or reach spouses and the populace.

6.4 Limitations

The researcher in this current study was a female. Since the breast is a sexual organ and discussions of sex arose during interviews, participants may not have felt comfortable and therefore may not have disclosed entirely issues relating to their sexual function. Partners who took part in the study viewed themselves as being supportive and this could have affected the findings of this study. Because a qualitative method was employed, few spouses were interviewed and therefore the findings of this study may not be generalizable but transferability may be achieved if the context and setting is the same.

6.5 Conclusion

This study explored the experiences of spouses of women with mastectomy resulting from BC, which will contribute to the provision of a holistic care to women with BC and their spouses. Some of the findings of the study were consistent with the constructs of the QoL

Model Applied to Family Caregivers and also findings from other studies. In addition, two new themes emerged from the narrations of the spouses. These were support and spousal involvement in treatment and diagnosis. The study brought to light some of the issues relating to the physical, social, psychological and spiritual well-being of spouses of women with mastectomy. From the findings, it was apparent that the most compromised domain was that of the psychological well-being with spouses experiencing surprise fear, anxiety, distress, helplessness and loss of control at the initial stages of diagnosis. The general well-being and hence the QoL of the spouses in this study was good because the mastectomy was perceived to draw spouses closer to their wives and made their relationship with their wives stronger. The study also revealed that older spouses who have finished childbearing and have been married for longer periods were able to cope with their wives' mastectomy. Support was an integral part of the experiences of the spouses. They gave support to their wives and also received support from family, friends and the church. The support received by spouses helped them to cope. The findings of this study will be used to develop educational materials for spouses of women with mastectomy as a result of BC.

6.6 Recommendations

Based on the findings from the study, the following recommendations have been made to the spouses of women with BC and mastectomy, breast care nurses, KBTH and the Ministry of Health.

Spouses of women with BC and Mastectomy

1. Spouses should endeavour to take part in the diagnosis and treatment of their wives with BC.

2. There should be a concerted effort on the part of spouses and other stakeholders to form a support group for men that could help them address some of their fears and other issues related to their wives BC and mastectomy. This support group will also enable those who are better adjusted to help spouses of newly diagnosed women.

Breast Care Nurses

1. Counselling should be offered to spouses especially in the domain of psychological well-being in order to allay the fears and anxieties of spouses to make them better prepared to cope with their wives' mastectomy. This will enable them give the needed support to their wives.
2. Breast care nurses should educate spouses more about BC and mastectomy.
3. Religious leaders should be involved in the provision of care to spouses since the study has indicated that spirituality helped the spouses in coping

Korle-Bu Teaching Hospital

1. Free breast screening should be carried out more often in order to detect lumps promptly.
2. The hospital and management should prepare educational material tailored to suit the spouses' needs and make it available at the breast clinic.
3. Routine workshops or in-service training should be given to breast care nurses on oncology nursing to discuss spousal involvement in diagnosis and treatment for BC, which will encourage spouses to be involved.
4. Opportunity for further education of breast care nurses in oncology nursing and counselling should be made available to the breast care nurses.

Ministry of Health

1. The ministry of health and other stake holders should lobby for the government to cover the total cost of BC treatment in the National Health Insurance Scheme.
2. Policy should be made to include breast screening for lumps in the current existing antenatal schedule.
3. Educational materials tailored to meet the needs of spouses should be prepared by the Ministry of Health in collaboration with stakeholders and made available in the breast clinics.
4. Health education on BC and mastectomy should be intensified by the Ministry of Health and other stakeholders.

References

- Abasher, S. M. (2009). Sexual health issues in Sudanese women before and during hormonal treatment for breast cancer. *Psycho-Oncology*, 18(8), 858–865.
<http://doi.org/10.1002/pon.1489>
- Aebi, S., Davidson, T., Gruber, G., & Cardoso, F. (2011). Primary breast cancer: ESMO Clinical Practice Guidelines for diagnosis, treatment and follow-up. *Annals of Oncology*, 22(suppl 6), vi12–vi24. <http://doi.org/10.1093/annonc/mdr371>
- Alliance, F. C. (2001). Fact sheet: Selected caregiver statistics. *San Francisco, CA: Family Caregiver Alliance*. Retrieved October, 19, 2011.
- Anderson, R. (2007). Thematic content analysis (TCA). *Descriptive Presentation of Qualitative data*. [Online] Available from: [Http://www. Wellknowingconsulting.org/publications/pdfs/ThematicContentAnalysis. Pdf](Http://www.Wellknowingconsulting.org/publications/pdfs/ThematicContentAnalysis.Pdf) (Accessed 8 December 2011). Retrieved from [http://www.wellknowingconsulting.org/publications/pdfs/ThematicContentAnalysis.p df](http://www.wellknowingconsulting.org/publications/pdfs/ThematicContentAnalysis.pdf)
- Arroyo, J. M. G., & López, M. L. D. (2011). Psychological Problems Derived from Mastectomy: A Qualitative Study. *International Journal of Surgical Oncology*, 2011. Retrieved from <http://www.hindawi.com/journals/ijso/2011/132461/abs/>
- Avci, I. A., & Kumcagiz, H. (2011). Marital Adjustment and Loneliness Status of Women With Mastectomy and Husbands Reactions. *Asian Pacific Journal of Cancer Prevention*, 12, 453–459.
- Aziato, L. (2009). Post-Mastectomy Experiences of Women with Breast Cancer in the Accra Metropolis. *West African Journal of Nursing*, 20(1).

- Aziato, L., & Clegg-Lampitey, J. N. A. (2014). Breast Cancer Diagnosis and Factors Influencing Treatment Decisions in Ghana. *Health Care for Women International*, (just-accepted), 00–00.
- Aziato, L., & Clegg-Lampitey, J. N. A. (2015). Breast Cancer Diagnosis and Factors Influencing Treatment Decisions in Ghana. *Health Care for Women International*, 36(5), 543–557. <http://doi.org/10.1080/07399332.2014.911299>
- Baider, L., & De-Nour, A. K. (1984). Couples' reactions and adjustment to mastectomy: A preliminary report. *The International Journal of Psychiatry in Medicine*, 14(3), 265–276.
- Ballinger, R. S., Mayer, K. F., Lawrence, G., & Fallowfield, L. (2008). Patients' decision-making in a UK specialist centre with high mastectomy rates. *The Breast*, 17(6), 574–579. <http://doi.org/10.1016/j.breast.2008.08.001>
- Barlow, D. H. (2000). Unraveling the mysteries of anxiety and its disorders from the perspective of emotion theory. *American Psychologist*, 55(11), 1247.
- Beaver, K., & Witham, G. (2007). Information needs of the informal carers of women treated for breast cancer. *European Journal of Oncology Nursing*, 11(1), 16–25. <http://doi.org/http://dx.doi.org/10.1016/j.ejon.2006.01.006>
- Bigatti, S. M., Wagner, C. D., Lydon-Lam, J. R., Steiner, J. L., & Miller, K. D. (2011). Depression in husbands of breast cancer patients: relationships to coping and social support. *Supportive Care in Cancer*, 19(4), 455–466. <http://doi.org/10.1007/s00520-010-0835-8>
- Blitzblau, R. C., & Horton, J. K. (2013). Radiotherapy After Mastectomy. *Surgical Oncology Clinics of North America*, 22(3), 563–577. <http://doi.org/10.1016/j.soc.2013.02.012>

- Borstelmann, N. A., Rosenberg, S. M., Ruddy, K. J., Tamimi, R. M., Gelber, S., Schapira, L., ... Partridge, A. H. (2015). Partner support and anxiety in young women with breast cancer. *Psycho-Oncology*. <http://doi.org/DOI: 10.1002/pon.3780>
- Brandão, T., Schulz, M. S., & Matos, P. M. (2014a). Psychological intervention with couples coping with breast cancer: A systematic review. *Psychology & Health*, 29(5), 491–516. <http://doi.org/10.1080/08870446.2013.859257>
- Brandão, T., Schulz, M. S., & Matos, P. M. (2014b). Psychological intervention with couples coping with breast cancer: A systematic review. *Psychology & Health*, 29(5), 491–516.
- Bray, F., Ren, J. S., Masuyer, E., & Ferlay, J. (2013). Global estimates of cancer prevalence for 27 sites in the adult population in 2008. *International Journal of Cancer*, 132(5), 1133–1145. <http://doi.org/10.1002/ijc.27711>
- Brédart, A., Dolbeault, S., Savignoni, A., Besancenet, C., This, P., Giami, A., ... Copel, L. (2011). Prevalence and associated factors of sexual problems after early-stage breast cancer treatment: results of a French exploratory survey. *Psycho-Oncology*, 20(8), 841–850. <http://doi.org/10.1002/pon.1789>
- Burkitt, H. G., Quick, C. R. G., & Reed, J. B. (2007). *Essential Surgery: Problems, Diagnosis & Management* (4th ed.). London: Churchill Livingstone.
- Carlson, L. E., Bultz, B. D., Specia, M., & St. Pierre, M. (2000). Partners of Cancer Patients. *Journal of Psychosocial Oncology*, 18(2), 39–63. http://doi.org/10.1300/J077v18n02_03
- Cebeci, F., Yangin, H. B., & Tekeli, A. (2012). Life experiences of women with breast cancer in south western Turkey: A qualitative study. *European Journal of Oncology Nursing*, 16(4), 406–412. <http://doi.org/10.1016/j.ejon.2011.09.003>

City of Hope | Improving Quality of Life and Quality of Care for Oncology Caregivers.

(n.d.). Retrieved April 30, 2014, from <http://www.cityofhope.org/family-caregiver-project>

Clegg-Lamprey, J. (2009). Why do Breast Cancer Patients Report late or Abscond During Treatment in Ghana? A Pilot Study. *Ghana Medical Journal*, 43(3), 127–130.

Clegg-Lamprey, J. N. A., Dakubo, J. C. B., & Attobra, Y. N. (2009). Psychosocial aspects of breast cancer treatment in Accra, Ghana. *East African Medical Journal*, 86(7). Retrieved from <http://www.ajol.info/index.php/eamj/article/view/54152>

Colgrove, L. A., Kim, Y., & Thompson, N. (2007). The effect of spirituality and gender on the quality of life of spousal caregivers of cancer survivors. *Annals of Behavioral Medicine*, 33(1), 90–98. http://doi.org/10.1207/s15324796abm3301_10

Creswell, J. W. (2014). *Research Design, International Student Edition: Qualitative, Quantitative, and Mixed Methods Approaches* (4th ed.). London: SAGE Publications, Inc.

D'Ardenne, P. (2004). The couple sharing long-term illness. *Sexual and Relationship Therapy*, 19(3), 291–308.

DeSantis, C., Ma, J., Bryan, L., & Jemal, A. (2014). Breast cancer statistics, 2013. *CA: A Cancer Journal for Clinicians*, 64(1), 52–62. <http://doi.org/10.3322/caac.21203>

Dirbas, F., & Scott-Conner, C. (2011). *Breast Surgical Techniques and Interdisciplinary Management*. Springer Science & Business Media.

Dorval, M., Guay, S., Mondor, M., Mâsse, B., Falardeau, M., Robidoux, A., ... Maunsell, E. (2005). Couples Who Get Closer After Breast Cancer: Frequency and Predictors in a Prospective Investigation. *Journal of Clinical Oncology*, 23(15), 3588–3596. <http://doi.org/10.1200/JCO.2005.01.628>

- Dow, K. H., Ferrell, B. R., Leigh, S., Ly, J., & Gulasekaram, P. (1996). An evaluation of the quality of life among long-term survivors of breast cancer. *Breast Cancer Research and Treatment*, 39(3), 261–273. <http://doi.org/10.1007/BF01806154>
- Drageset, S., Lindstrøm, T. C., Giske, T., & Underlid, K. (2011). Being in suspense: women's experiences awaiting breast cancer surgery. *Journal of Advanced Nursing*, 67(9), 1941–1951. <http://doi.org/10.1111/j.1365-2648.2011.05638.x>
- Emilee, G., Ussher, J. M., & Perz, J. (2010). Sexuality after breast cancer: A review. *Maturitas*, 66(4), 397–407. <http://doi.org/10.1016/j.maturitas.2010.03.027>
- Fang, S.-Y., Shu, B.-C., & Fetzer, S. J. (2011). Deliberating Over Mastectomy: Survival and Social Roles. *Cancer Nursing*, 34(2), E21–E28. <http://doi.org/10.1097/NCC.0b013e3181efebaf>
- Ferrell, B., Grant, M., Schmidt, G. M., Rhiner, M., Whitehead, C., Fonbuena, P., & Forman, S. J. (1992). The meaning of quality of life for bone marrow transplant survivors Part 1. The impact of bone marrow transplant on quality of life. *Cancer Nursing*, 15(3), 153–160.
- Ferrell, B. R. (1994). Ethical and professional issues in pain technology: a challenge to supportive care. *Supportive Care in Cancer*, 2(1), 21–26. <http://doi.org/10.1007/BF00355236>
- Ferrell, B. R., & Baird, P. (2012). Deriving Meaning and Faith in Caregiving. *Seminars in Oncology Nursing*, 28(4), 256–261. <http://doi.org/10.1016/j.soncn.2012.09.008>
- Ferrell, B. R., & Mazanec, P. (2009). Family Caregivers. In A. Hurria & L. Balducci (Eds.), *Geriatric Oncology* (pp. 135–155). Springer US. Retrieved from http://link.springer.com/chapter/10.1007/978-0-387-89070-8_7

- Fletcher, K. A., Lewis, F. M., & Haberman, M. R. (2010). Cancer-related concerns of spouses of women with breast cancer. *Psycho-Oncology*, 19(10), 1094–1101.
<http://doi.org/10.1002/pon.1665>
- Fouladi, N., Ali-Mohammadi, H., Pourfarzi, F., & Homaunfar, N. (2014). Exploratory Study of Factors Affecting Continuity of Cancer Care: Iranian Women's Perceptions. *Asian Pacific Journal of Cancer Prevention*, 15(1), 133–137.
- Fouladi, N., Pourfarzi, F., Ali-Mohammadi, H., Masumi, A., Agamohammadi, M., & Mazaheri, E. (2013). Process of Coping with Mastectomy: a Qualitative Study in Iran. *Asian Pacific Journal of Cancer Prevention*, 14(3), 2079–2084.
- Foy, S., & Rose, K. (2001). Men's experiences of their partner's primary and recurrent breast cancer. *European Journal of Oncology Nursing*, 5(1), 42–48.
- Fujinami, R., Otis-Green, S., Klein, L., Sidhu, R., & Ferrell, B. (2012). Quality of Life of Family Caregivers: Challenges Faced in Care of the Lung Cancer Patient. *Clinical Journal of Oncology Nursing*, 16(6), E210–E220.
<http://doi.org/10.1188/12.CJON.E210-E220>
- Gethins, M. (2012). Breast Cancer in Men. *Journal of the National Cancer Institute*.
<http://doi.org/10.1093/jnci/djs172>
- Gilbert, E., Ussher, J. M., & Hawkins, Y. (2009). Accounts of disruptions to sexuality following cancer: the perspective of informal carers who are partners of a person with cancer. *Health*, 13(5), 523–541. <http://doi.org/10.1177/1363459308336795>
- Glajchen, M. (2012). Physical Well-Being of Oncology Caregivers: An Important Quality-of-Life Domain. *Seminars in Oncology Nursing*, 28(4), 226–235.
<http://doi.org/10.1016/j.soncn.2012.09.005>
- Globocan (2012). Cancer Factsheet. Retrieved from
<http://www.globocan.iarc.fr/factsheet.asp>, accessed 20th May 2014.

Globocan (2012). Cancer Factsheet. Retrieved from

http://www.globocan.iarc.fr/pages/fact_sheets_population.aspx, accessed 3rd August 2014.

Harrow, A., Wells, M., Barbour, R. S., & Cable, S. (2008). Ambiguity and uncertainty: The ongoing concerns of male partners of women treated for breast cancer. *European Journal of Oncology Nursing*, 12(4), 349–356.

<http://doi.org/10.1016/j.ejon.2008.04.009>

Hasson-Ohayon, I., Goldzweig, G., Braun, M., & Galinsky, D. (2010). Women with advanced breast cancer and their spouses: diversity of support and psychological distress. *Psycho-Oncology*, 19(11), 1195–1204. <http://doi.org/10.1002/pon.1678>

Hawkins, Y., Ussher, J., Gilbert, E., Perz, J., Sandoval, M., & Sundquist, K. (2009). Changes in Sexuality and Intimacy After the Diagnosis and Treatment of Cancer: The Experience of Partners in a Sexual Relationship With a Person With Cancer. *Cancer Nursing*, 32(4), 271–280. <http://doi.org/10.1097/NCC.0b013e31819b5a93>

Hawley, S. T., Griggs, J. J., Hamilton, A. S., Graff, J. J., Janz, N. K., Morrow, M., ... Katz, S. J. (2009). Decision Involvement and Receipt of Mastectomy Among Racially and Ethnically Diverse Breast Cancer Patients. *Journal of the National Cancer Institute*, 101(19), 1337–1347. <http://doi.org/10.1093/jnci/djp271>

Hennink, M., Hutter, I., & Bailey, A. (2011). *Qualitative Research Methods*. California: SAGE Publications, Inc.

Hoga, L. A. K., Mello, D. S., & Dias, A. F. (2008). Psychosocial perspectives of the partners of breast cancer patients treated with a mastectomy: an analysis of personal narratives. *Cancer Nursing*, 31(4), 318–325.

<http://doi.org/10.1097/01.NCC.0000305748.43367.1b>

- Joulaei, A., Joulaei, S., Kadivar, M., & Hajibabaei, F. (2012). Living with breast cancer: Iranian women's lived experiences. *International Nursing Review*, 59(3), 362–368.
<http://doi.org/10.1111/j.1466-7657.2012.00979.x>
- Juarez, G., Ferrell, B., Uman, G., Podnos, Y., & Wagman, L. D. (2008). Distress and quality of life concerns of family caregivers of patients undergoing palliative surgery. *Cancer Nursing*, 31(1), 2–10.
- Kadmon, I., Woloski-Wruble, A., Yongqin, J., Wan-Min, Q., & Dekeyser, F. (2004). Social support as experienced by Chinese and Israeli husbands of women with breast cancer: a comparative study. *European Journal of Oncology Nursing*, 8(2), 131–137.
[http://doi.org/http://dx.doi.org/10.1016/S1462-3889\(03\)00071-1](http://doi.org/http://dx.doi.org/10.1016/S1462-3889(03)00071-1)
- Karbani, G., Lim, J. N., Hewison, J., Atkin, K., Horgan, K., Lansdown, M., & Chu, C. E. (2011). Culture, attitude and knowledge about breast cancer and preventive measures: A qualitative study of South Asian breast cancer patients in the UK. *Asian Pacific Journal of Cancer Prevention*, 12, 1619–1626.
- Kayser, K., Feldman, B. N., Borstelmann, N. A., & Daniels, A. A. (2010). Effects of a Randomized Couple-based Intervention on Quality of Life of Breast Cancer Patients and Their Partners. *Social Work Research*, 34(1), 20–32.
<http://doi.org/10.1093/swr/34.1.20>
- Khanam, A. (2013). Stresses in Women After Mastectomy. *Fatima Jinnah Medical College Journal*, 6(3). Retrieved from
<http://journalfjmc.com/index.php/journalfjmc/article/view/18>
- Kim, Y., & Given, B. A. (2008a). Quality of life of family caregivers of cancer survivors. *Cancer*, 112(S11), 2556–2568. <http://doi.org/10.1002/cncr.23449>
- Kim, Y., & Given, B. A. (2008b). Quality of life of family caregivers of cancer survivors. *Cancer*, 112(S11), 2556–2568. <http://doi.org/10.1002/cncr.23449>

- King, C. R., & Hinds, P. S. (2011). *Quality of Life: From Nursing and Patient Perspectives*. Jones & Bartlett Publishers.
- Kline, P. (2014). *Psychology and Freudian Theory: An Introduction*. Routledge.
- Kudel, I., Edwards, R., Raja, S., Haythornthwaite, J., & Heinberg, L. J. (2008). The Association of Perceived Partner-related Social Support with Self-reported Outcomes in Women Post-mastectomy. *Journal of Health Psychology*, 13(8), 1030–1039. <http://doi.org/10.1177/1359105308097968>
- Lambert, S. D., Girgis, A., Lecathelinais, C., & Stacey, F. (2013). Walking a mile in their shoes: anxiety and depression among partners and caregivers of cancer survivors at 6 and 12 months post-diagnosis. *Supportive Care in Cancer*, 21(1), 75–85. <http://doi.org/10.1007/s00520-012-1495-7>
- Lebow, J. L., Chambers, A. L., Christensen, A., & Johnson, S. M. (2012). Research on the treatment of couple distress. *Journal of Marital and Family Therapy*, 38(1), 145–168.
- Lethborg, C. E., Kissane, D., & Burns, W. I. (2003). “It”’s not the easy part’: the experience of significant others of women with early stage breast cancer, at treatment completion. *Social Work in Health Care*, 37(1), 63–85. http://doi.org/10.1300/J010v37n01_04
- Levy, R. (2011). Core Themes in a Support Group for Spouses of Breast Cancer Patients. *Social Work With Groups*, 34, 141–155. <http://doi.org/10.1080/01609513.2010.538010>
- Lewis, F. M., Fletcher, K. A., Cochrane, B. B., & Fann, J. R. (2008a). Predictors of Depressed Mood in Spouses of Women With Breast Cancer. *Journal of Clinical Oncology*, 26(8), 1289–1295. <http://doi.org/10.1200/JCO.2007.12.7159>
- Lewis, F. M., Fletcher, K. A., Cochrane, B. B., & Fann, J. R. (2008b). Predictors of Depressed Mood in Spouses of Women With Breast Cancer. *Journal of Clinical Oncology*, 26(8), 1289–1295. <http://doi.org/10.1200/JCO.2007.12.7159>

- Lewis, P. E., Sheng, M., Rhodes, M. M., Jackson, K. E., & Schover, L. R. (2012). Psychosocial Concerns of Young African American Breast Cancer Survivors. *Journal of Psychosocial Oncology*, 30(2), 168–184.
<http://doi.org/10.1080/07347332.2011.651259>
- Lewis, S. L., Mclean Heitkemper, M., Ruff Dirkson, S., Graber O'Brien, P., & Bucher, L. (2007). *Medical Surgical Nursing: Assessment and Management of Clinical Problems* (7th ed.). Missouri: Mosby Inc.
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic Inquiry*. Newbury Park, CA: SAGE Publications.
- Lu, L., Pan, B., Sun, W., Cheng, L., Chi, T., & Wang, L. (2010). Quality of life and related factors among cancer caregivers in China. *Psychiatry and Clinical Neurosciences*, 64(5), 505–513. <http://doi.org/10.1111/j.1440-1819.2010.02131.x>
- Manganiello, A., Hoga, L. A. K., Reberte, L. M., Miranda, C. M., & Rocha, C. A. M. (2011). Sexuality and quality of life of breast cancer patients post mastectomy. *European Journal of Oncology Nursing*, 15(2), 167–172.
<http://doi.org/10.1016/j.ejon.2010.07.008>
- Marshall, C., & Kiemle, G. (2005). Breast reconstruction following cancer: its impact on patients' and partners' sexual functioning. *Sexual and Relationship Therapy*, 20(2), 155–179.
- Mitchell, A. J., Ferguson, D. W., Gill, J., Paul, J., & Symonds, P. (2013). Depression and anxiety in long-term cancer survivors compared with spouses and healthy controls: a systematic review and meta-analysis. *The Lancet Oncology*, 14(8), 721–732.
[http://doi.org/10.1016/S1470-2045\(13\)70244-4](http://doi.org/10.1016/S1470-2045(13)70244-4)

- Moreira, H., & Canavarro, M. C. (2013). Psychosocial Adjustment and Marital Intimacy Among Partners of Patients with Breast Cancer: A Comparison Study with Partners of Healthy Women. *Journal of Psychosocial Oncology*, 31(3), 282–304.
- Nakaya, N., Saito-Nakaya, K., Bidstrup, P. E., Dalton, S. O., Frederiksen, K., Steding-Jessen, M., ... Johansen, C. (2010). Increased risk of severe depression in male partners of women with breast cancer. *Cancer*, 116(23), 5527–5534.
<http://doi.org/10.1002/cncr.25534>
- Nasiri, A., Taleghani, F., & Irajpour, A. (2012). Men's Sexual Issues After Breast Cancer in Their Wives: A Qualitative Study. *Cancer Nursing*, 35(3), 236–244.
<http://doi.org/10.1097/NCC.0b013e31822d48e5>
- Northouse, L. L., Katapodi, M. C., Schafenacker, A. M., & Weiss, D. (2012). The Impact of Caregiving on the Psychological Well-Being of Family Caregivers and Cancer Patients. *Seminars in Oncology Nursing*, 28(4), 236–245.
<http://doi.org/10.1016/j.soncn.2012.09.006>
- Nukunya, G. K. (2003). *Tradition and Change in Ghana: An Introduction to Sociology* (2nd ed.). Accra: Ghana Universities Press.
- Odigie, V. I., Tanaka, R., Yusufu, L. M. D., Gomna, A., Odigie, E. C., Dawotola, D. A., & Margaritoni, M. (2010). Psychosocial effects of mastectomy on married African women in Northwestern Nigeria. *Psycho-Oncology*, 19(8), 893–897.
- Ohene-Yeboah, M., & Adjei, E. (2012). Breast cancer in Kumasi, Ghana. *Ghana Medical Journal*, 46(1), 8.
- Otis-Green, S., & Juarez, G. (2012). Enhancing the Social Well-Being of Family Caregivers. *Seminars in Oncology Nursing*, 28(4), 246–255.
<http://doi.org/10.1016/j.soncn.2012.09.007>

- Padgett, D. K. (1998). *Qualitative Methods in Social Work Research*. California: SAGE Publications.
- Pinar, G. (2012). Feelings and Spiritual Practices of Patients with Mastectomy: A Qualitative Study from Turkey. *Journal of Cancer Therapy*, 3, 793.
- Piot-Ziegler, C., Sassi, M.-L., Raffoul, W., & Delaloye, J.-F. (2010). Mastectomy, body deconstruction, and impact on identity: A qualitative study. *British Journal of Health Psychology*, 15(3), 479–510. <http://doi.org/10.1348/135910709X472174>
- Romito, F., Goldzweig, G., Cormio, C., Hagedoorn, M., & Andersen, B. L. (2013). Informal caregiving for cancer patients. *Cancer*, 119, 2160–2169. <http://doi.org/10.1002/cncr.28057>
- Rowland, E., & Metcalfe, A. (2014). A systematic review of men's experiences of their partner's mastectomy: coping with altered bodies. *Psycho-Oncology*, n/a–n/a. <http://doi.org/10.1002/pon.3556>
- Rowland, J. H., Desmond, K. A., Meyerowitz, B. E., Belin, T. R., Wyatt, G. E., & Ganz, P. A. (2000). Role of Breast Reconstructive Surgery in Physical and Emotional Outcomes Among Breast Cancer Survivors. *Journal of the National Cancer Institute*, 92(17), 1422–1429. <http://doi.org/10.1093/jnci/92.17.1422>
- Sabo, D., Brown, J., & Smith, C. (1986). The male role and mastectomy: Support groups and men's adjustment. *Journal of Psychosocial Oncology*, 4(1-2), 19–31.
- Salani, B., Barrett, J., Ricci, M. D., Bevilacqua, J. L. B., & Riera, R. (2014). Skin-sparing mastectomy for the treatment of breast cancer. In *Cochrane Database of Systematic Reviews*. John Wiley & Sons, Ltd. Retrieved from <http://onlinelibrary.wiley.com/doi/10.1002/14651858.CD010993/abstract>
- Salonen, P., Rantanen, A., Kellokumpu-Lehtinen, P.-L., Huhtala, H., & Kaunonen, M. (2014). The quality of life and social support in significant others of patients with

- breast cancer—a longitudinal study. *European Journal of Cancer Care*, 23(2), 274–283.
- Sandham, C., & Harcourt, D. (2007). Partner experiences of breast reconstruction post mastectomy. *European Journal of Oncology Nursing*, 11(1), 66–73.
- Schmid-Büchi, S., Halfens, R. J. G., Dassen, T., & van den Borne, B. (2011). Psychosocial problems and needs of posttreatment patients with breast cancer and their relatives. *European Journal of Oncology Nursing*, 15(3), 260–266.
<http://doi.org/10.1016/j.ejon.2009.11.001>
- Shannon, C. S. (2015). “I Was Trapped at Home”: Men’s Experiences with Leisure While Giving Care to Partners During a Breast Cancer Experience. *Leisure Sciences: An Interdisciplinary Journal*, 37(2). <http://doi.org/DOI:10.1080/01490400.2014.973128>
- Shenton, A. K. (2004). Strategies for ensuring trustworthiness in qualitative research projects. *Education for Information*, 22(2), 63–75.
- Shrestha, K. (2012). Psychological impact after mastectomy among Nepalese women: a qualitative study. *Nepal Medical College Journal: NMCJ*, 14(2), 153–156.
- Silva, T. B. de C. e, Santos, M. C. L., Almeida, A. M. de, & Fernandes, A. F. C. (2010). The perception of mastectomized women’s partners regarding life after surgery. *Revista Da Escola de Enfermagem Da USP*, 44(1), 113–119. <http://doi.org/10.1590/S0080-62342010000100016>
- Sjövall, K., Attner, B., Lithman, T., Noreen, D., Gunnars, B., Thomé, B., ... Englund, M. (2010). Sick leave of spouses to cancer patients before and after diagnosis. *Acta Oncologica*, 49(4), 467–473. <http://doi.org/10.3109/02841861003652566>
- Steimer, T. (2002). The biology of fear-and anxiety-related behaviors. *Dialogues in Clinical Neuroscience*, 4(3), 231.

- Sun, M., Iqbal, J., Singh, S., Sun, L., & Zaidi, M. (2010). The crossover of bisphosphonates to cancer therapy. *Annals of the New York Academy of Sciences*, 1211(1), 107–112. <http://doi.org/10.1111/j.1749-6632.2010.05812.x>
- Takahashi, M., & Kai, I. (2005). Sexuality after breast cancer treatment: Changes and coping strategies among Japanese survivors. *Social Science & Medicine*, 61(6), 1278–1290.
- Tighe, M., Molassiotis, A., Morris, J., & Richardson, J. (2011). Coping, meaning and symptom experience: A narrative approach to the overwhelming impacts of breast cancer in the first year following diagnosis. *European Journal of Oncology Nursing*, 15(3), 226–232. <http://doi.org/10.1016/j.ejon.2011.03.004>
- Tongco, M. D. C. (2007). Purposive sampling as a tool for informant selection. Retrieved from <http://scholarspace.manoa.hawaii.edu/handle/10125/227>
- UK, C. R. (2013, July 3). Number stages of breast cancer [Document]. Retrieved July 30, 2014, from <http://www.cancerresearchuk.org/cancer-help/type/breast-cancer/treatment/number-stages-of-breast-cancer>
- UK, C. R. (2014, May 29). Breast cancer Key Facts [Document]. Retrieved June 10, 2014, from <http://www.cancerresearchuk.org/cancer-info/cancerstats/keyfacts/breast-cancer/?script=true>
- Ussher, J. M., Perz, J., & Gilbert, E. (2012). Changes to sexual well-being and intimacy after breast cancer. *Cancer Nursing*, 35(6), 456–465.
- Ussher, J. M., Wong, W. K. T., & Perz, J. (2011). A qualitative analysis of changes in relationship dynamics and roles between people with cancer and their primary informal carer. *Health*, 15(6), 650–667. <http://doi.org/10.1177/1363459310367440>
- Wagner, C. D., Bigatti, S. M., & Storniolo, A. M. (2005). Quality of Life of Husbands of Women with Breast Cancer. *Psycho-Oncology*, 15, 109–120. <http://doi.org/10.1002/pon.928>

- Wagner, C. D., Bigatti, S. M., & Storniolo, A. M. (2006). Quality of life of husbands of women with breast cancer. *Psycho-Oncology*, 15(2), 109–120.
<http://doi.org/10.1002/pon.928>
- Woloski-Wruble, A. C., Dekeyser Ganz, F., Jiang, Y., Qiang, W.-M., & Kadmon, I. (2012). Israeli and Chinese partners of women with breast cancer: a cross-cultural view of marital issues. *Psycho-Oncology*, 21(3), 324–331.
- Woloski-Wruble, A., & Kadmon, I. (2002). Breast cancer: reactions of Israeli men to their wives' diagnosis. *European Journal of Oncology Nursing*, 6(2), 93–99.
<http://doi.org/10.1054/ejon.2001.0167>
- Woo JC, Yu T, & Hurd TC. (2003). Breast cancer in pregnancy: A literature review. *Archives of Surgery*, 138(1), 91–98. <http://doi.org/10.1001/archsurg.138.1.91>
- Yeh, P.-M., Wierenga, M. E., & Yuan, S.-C. (2009). Influences of Psychological Well-being, Quality of Caregiver-patient Relationship, and Family Support on the Health of Family Caregivers for Cancer Patients in Taiwan. *Asian Nursing Research*, 3(4), 154–166. [http://doi.org/10.1016/S1976-1317\(09\)60027-X](http://doi.org/10.1016/S1976-1317(09)60027-X)
- Zahlis, E. H., & Lewis, F. M. (2010). Coming to grips with breast cancer: the spouse's experience with his wife's first six months. *Journal of Psychosocial Oncology*, 28(1), 79–97.

Appendix A: Background Information Form**Section A****Demographic Information****Pseudonym.....**

1. Age.....
2. Number of years married.....
3. Number of children.....
4. Time since surgery.....
5. Number of wives.....
6. Employment status.....
7. Type of employment.....
8. Religion.....
9. Tribe.....

Appendix B: Interview Guide

Section B

Guiding Questions

1. Please tell me about the events that led to the need of your wife to have a mastectomy.
2. Please tell me what you knew about mastectomy before your wife was scheduled for one.
3. Tell me about your reaction when you heard your wife was scheduled for mastectomy.
4. How did you feel after your wife's mastectomy?
5. How did your wife's mastectomy affect your relationship with your wife?
6. In what ways has the mastectomy affected your work?

Probes:

-Financial

-Concentration at work

-Energy to work

7. How did you support your wife immediately after the surgery?

Probes:

-physical

-psychosocial

-spiritual

8. Tell me about the support you are providing your wife now.

Probes:

-physical

-psychosocial

-spiritual

9. How are you coping with your wife's mastectomy?

Probes:

-support from family

-support from friends/others

10. Tell me about how your wife's mastectomy has affected your faith/ spiritual life/belief

11. What else would you like to tell me?

Appendix C: Information Sheet and Consent Form

Title: Experiences of Spouses of Women with Mastectomy Resulting from Breast Cancer in Accra
Metropolis

Principal Investigator: Brenda Adei Kotei

Address: School of Nursing, College of Health Sciences, University of Ghana

General Information about Research

I will like to seek information about your experiences with the surgical removal of your wife's breast as a result of her breast cancer. The information that will be given by you will help others to understand how spouses feel about the removal of their wife's breast, the effect of the removal of your wife's breast on your relationship with your wife, and the strategies you use in coping.

I will have a conversation with you in English or Twi which will last between forty five to sixty minutes. There is no right or wrong answer and you will not be judged for your answers therefore you should be comfortable in answering any question asked you. You will be asked to sign a consent form before the interview begins. The interview will be audio taped with your full permission.

Possible Risks and Discomforts

It is not foreseen that your participation in the research will cause you any physical harm, however if you become emotional during the interview, the researcher will provide you with a professional counsellor at no cost to you.

Possible Benefits

The research will enable you share your experiences and voice out matters that you wish to share with others which may be of use to you. Your participation will also enable the researcher understand the effect of the removal of your wife's breast on you. The study will enable you tell me about the methods you use to cope with your wife's situation. This information will help in the teaching of breast care nurses on how to provide care for spouses who may be in your situation. Also your participation will provide useful information that

can be used in preparing educational materials for spouses of women whose breast have been removed surgically as a result of breast cancer.

Confidentiality

Although the interview will be audio taped, your name and any other information that will identify you will be deleted. However, you will be given a code number or a coined name that will be attached to the information you give during the interview. Only my supervisors will have access to the information.

Voluntary Participation and Right to Leave the Research

Your participation in this study is voluntary and therefore, you have the right to withdraw at any point during the interview without any explanation. Withdrawal will not affect the care your wife is receiving.

Contacts for Additional Information

Brenda Adei Kotei
School of Nursing, University of Ghana,
Phone Number: 0244861405
Email: brendakotei@yahoo.com

Ms Patricia Avadu
School of Nursing, University of Ghana
Phone Number: 0244560130
Email: patavad65@yahoo.co.uk

Dr. Lydia Adziato; PHD,
School of Nursing, University of Ghana
Phone Number: 0244719686, 0208552719
Email: laziato@yahoo.com

Your rights as a Participant

This research has been reviewed and approved by the Institutional Review Board of Noguchi Memorial Institute for Medical Research (NMIMR-IRB). If you have any questions about your rights as a research participant you can contact the IRB Office between the hours of 8am-5pm through the landline 0302916438 or email addresses: nirb@noguchi.mimcom.org

VOLUNTEER AGREEMENT

The above document describing the benefits, risks and procedures for the research title **(name of research)** has been read and explained to me. I have been given an opportunity to have any questions about the research answered to my satisfaction. I agree to participate as a volunteer.

Date

Name and signature or mark of volunteer

If volunteers cannot read the form themselves, a witness must sign here:

I was present while the benefits, risks and procedures were read to the volunteer. All questions were answered and the volunteer has agreed to take part in the research.

Date

Name and signature of witness

I certify that the nature and purpose, the potential benefits, and possible risks associated with participating in this research have been explained to the above individual.

Date
Obtained Consent

Name Signature of Person Who

Appendix D: Table 2. General Profile of Participants

Number	Pseudonym	Age	No. of years married	Time since wife's mastectomy/ months	Employment status	Religion	No. of children	Educational level
1	Kofi	47	15	12	Employed (private)	Christian	3	Primary
2	Kweku	33	5	13	Employed (self)	Christian	1	Secondary
3	Yaw	45	8	12	Employed (self)	Muslim	3	Primary
4	Kwabena	44	12	5	Employed (self)	Christian	4	Secondary
5	Kwame	32	6	7	Employed (private)	Christian	1	Technical
6	Fiifi	42	8	15	Employed (self)	Christian	-	Primary
7	Yoofi	60	20	8	Employed (private)	Muslim	2	Tertiary
8	Kwesi	53	28	13	Employed (government)	Christian	2	Secondary
9	Kojo	75	5	4	Pensioner	Traditional Believer	-	Secondary
10	Paa Joe	63	17	7	Pensioner	Muslim	-	Islamic Education
11	Paa Willi	69	35	5	Pensioner	Christian	2	Secondary
12	Kuuku	62	45	10	Pensioner	Christian	3	Tertiary

Appendix E: Ethical Approval Letter

NOGUCHI MEMORIAL INSTITUTE FOR MEDICAL RESEARCH
Established 1979 *A Constituent of the College of Health Sciences*
University of Ghana

INSTITUTIONAL REVIEW BOARD

Phone: +233-302-916438 (Direct)
+233-289-522574
Fax: +233-302-502182/513202
E-mail: nirb@noguchi.ug.edu.gh
Telex No: 2556 UGL GH

Post Office Box LG 581
Legon, Accra
Ghana

My Ref. No: DF.22
Your Ref. No:

3rd September, 2014

ETHICAL CLEARANCE

FEDERALWIDE ASSURANCE FWA 00001824 **IRB 00001276**

NMIMR-IRB CPN 010/14-15 **IORG 0000908**

On 3rd September 2014, the Noguchi Memorial Institute for Medical Research (NMIMR) Institutional Review Board (IRB) at a full board meeting reviewed and approved your protocol titled:

TITLE OF PROTOCOL : Experiences of spouses of women with mastectomy resulting from breast cancer in Accra Metropolis

PRINCIPAL INVESTIGATOR : Brenda Adei Kotei, MPhil Cand.

Please note that a final review report must be submitted to the Board at the completion of the study. Your research records may be audited at any time during or after the implementation.

Any modification of this research project must be submitted to the IRB for review and approval prior to implementation.

Please report all serious adverse events related to this study to NMIMR-IRB within seven days verbally and fourteen days in writing.

This certificate is valid till 2nd September, 2015. You are to submit annual reports for continuing review.

Signature of Chair:
Mrs. Chris Dadzie
(NMIMR – IRB, Chair)

cc: Professor Kwadwo Koram
Director, Noguchi Memorial Institute
for Medical Research, University of Ghana, Legon

Appendix F: Introductory Letter to Korle-Bu Teaching Hospital

SCHOOL OF NURSING
COLLEGE OF HEALTH SCIENCES
UNIVERSITY OF GHANA
LEGON

Telephone: 0302-513255 (Dean)
Ext. 6206
0302-513250 } Secretary
028 9531213 }

Fax: 513255
E-mail: nursing@ug.edu.gh

Our Ref: SON/A.12
Your Ref:



P. O. Box LG 43
LEGON, GHANA

August 14, 2014

NMIMR - IRB
P.O. Box LG 581
Univ. of Ghana
Legon.

Dear Sir/Madam,

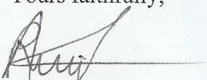
DEPARTMENTAL APPROVAL LETTER
BRENDA ADEI KOTEI

This is to introduce to you Brenda Adei Kotei, an M.Phil student of the above School and to inform the Institutional Review Board of the approval of the thesis topic: **"Experiences of Spouses of Women with Mastectomy Resulting from Breast Cancer in Accra Metropolis"** by the department of Adult Health, School of Nursing.

Counting on your usual co-operation.

Thank you.

Yours faithfully,



(Miss Patricia Avadu)
SUPERVISOR

Appendix G: Introductory Letter to Reach for Recovery Ghana

**SCHOOL OF NURSING
COLLEGE OF HEALTH SCIENCES
UNIVERSITY OF GHANA
LEGON**

Telephone: 0302-513255 (Dean)
Ext. 6206
0302-513250 } Secretary
028 9531213 }
Fax: 513255
E-mail: nursing@ug.edu.gh



P. O. Box LG 43
LEGON, GHANA

Our Ref: SON/F.11
Your Ref:

December 1, 2014

The Director
Reach for Recovery Ghana
P.O. Box CT 3096
Cantoment

Dear Sir/Madam,

INTRODUCTORY LETTER

I write to introduce to you Brenda Adei Kotei, an M.Phil student of the School of Nursing, University of Ghana, Legon. She is conducting a research project on **"Experiences of Spouses of Women with Mastectomy Resulting from Breast Cancer in the Accra Metropolis"**.

I should be most grateful if you could kindly assist her with the information that she may require.

Thank you.

Yours faithfully,

Patricia Avadu (Ms)
SUPERVISOR

INTEGRI PROCEDAMUS