A Two-Stage Exploratory Study of the Coping Patterns of Arab Women with Breast Cancer Residing in the United Arab Emirates

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Statement of Original Authorship

I, the researcher, undertook all aspects of this study under the guidance of my supervisors. This involved choosing an appropriate study design and arranging for the engagement of the participants. I personally performed all data collection (questionnaire and interviews) with the participants, undertook all analysis and drew appropriate conclusions.

The work contained in this thesis has not been previously submitted to meet requirements for an award at this or any other higher education institution. To the best of my knowledge and belief, the thesis contains no material previously published or written by another person except where due reference is made.

Signature:

Date:
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List of Abbreviations

ANOVA Analysis of variance
CBE Clinical breast examination
GDP Gross domestic product
HBM Health-belief model
JCS Jalowiec coping scale
KSA Kingdom of Saudi Arabia
SF-36 Medical Outcomes’ Study 36-item Short-Form Survey
MBSS Miller behavioural style scale
MOH Ministry of Health
QOL Quality of life
RMIT Royal Melbourne Institute of Technology University
SPSS Statistical Package for the Social Sciences
TTM Trans-theoretical model
UAE United Arab Emirates
UK United Kingdom
US United States
USA United States of America
WHO World Health Organization
WHOQOL World Health Organization QOL
Abstract

**Background**

Breast cancer is the world’s second most common malignancy affecting many women from varying cultural and economic backgrounds. Cancer is the third leading cause of death in the United Arab Emirates (UAE) after cardiovascular disease and traffic accidents. It was estimated that at least 50 per cent of cancer deaths—if detected early—and 40–50 per cent of cancer cases are preventable in the UAE. Several studies confirmed that Arab women suffering from breast cancer present themselves late to health facilities for treatment. Considering the high rate of breast cancer diagnosed every year, it is imperative that insight is shed into the various ways women cope with and adapt to life changes when cancer strikes. Examining both the social environment and the level of support received from family, friends and medical practitioners are essential if understanding is to be gained to assist health professionals with Arab women’s capacity to rebuild their lives.

**Objectives**

In respect to women with breast cancer residing in the UAE, there is a need to: (1) identify the current self-care practices, (2) examine the coping patterns after being diagnosed with breast cancer, (3) compare and contrast coping patterns of Arab women of different nationalities, and (4) propose breast-cancer health education and management programs tailored to suit the specific subpopulation of Arab women living in the UAE.
Design

A two-phase, exploratory mixed-method design was employed, using a questionnaire and individual, face-to-face semi-structured interviews. The first phase of the study utilised a questionnaire that consisted of the demographic data incorporating the Jalowiec coping scale. The second phase involved a semi-structured face-to-face interview with a purposively selected sample of 20 participants, which was informed by the results of phase one of the study.

Sampling

A convenient sample of 250 adult (eighteen years and over) Arab women diagnosed with breast cancer were recruited from the UAE National Breast Cancer Registry during the period of 2005–2010. Twenty women who responded to the questionnaire also volunteered to participate in the semi-structured face-to-face interviews.

Methods

In phase one, all participants completed a piloted questionnaire ascertaining their (a) demographic and clinical characteristics, and (b) Jalowiec coping scale (which consisted of 60 coping-pattern questions). In phase two, the 20 participants who scored (a) the highest and (b) the lowest scores on the previous coping-scale questionnaire from phase one were invited to undertake face-to-face semi-structured interviews in order to provide more detail regarding the context of their coping-pattern assessments and how helpful these patterns were to them. Content data analysis involving a constant-comparison design was employed.

Results

In the quantitative phase of the study, the seven hypotheses were addressed. Women from different age groups, marital status, parities, nationalities, educational levels,
employment histories before and/or after the diagnosis of breast cancer, and with or without a family history of cancer ‘mostly used’ and perceived ‘the supportant coping style’ as ‘mostly effective’. Faith in God was identified by 98 per cent of the Arab breast-cancer survivors as their most important coping pattern.

In phase two, the content analysis revealed eight broad conceptualisations including reducing threats to identity; coping with changes in one’s self; seeking a healthy identity; coping by engaging in religious practices; overcoming the stigma and isolation; support in facing uncertainty; accepting support in achieving autonomy and independence; and accepting changes to identity.

**Recommendations**

UAE women with breast cancer, regardless of their nationality, need enhanced and specifically targeted cultural knowledge and appropriate psychosocial support in order to manage the challenges that they face in their everyday lives. There is an urgent need to develop strategic psychosocial components within the current breast-cancer support services and to strengthen the role of the self-help groups through structured organisational support. The UAE needs specific tailored undergraduate and postgraduate education on the spiritual and religious beliefs of their Arab female patients. It is imperative to include spiritual awareness within medical and nursing education.
Chapter 1: Introduction

The aim of this chapter is to provide the context and structural outline of the thesis. An overall rationale for the study is provided together with an overview of the setting of the study. In addition, this chapter introduces the theoretical and ethical underpinnings of the study.

1.1 Context of the Study

Breast cancer is the world’s second most common malignancy (Parkin, 2001) affecting many women from varying cultural and economic backgrounds. In 2007, the American Cancer Society stated that breast cancer was the most common cancer among women, accounting for more than one-in-four cancer cases diagnosed in the United States of America (USA). In the USA during 2000–2004, the median age of women at the time of breast-cancer diagnosis was 61 years (Ries, Melbert & Krapcho, 2007), the contention being that approximately 50 per cent of American women who developed breast cancer were aged 61 or younger and 50 per cent were older than 61 years of age when they were diagnosed.

The death rate from breast cancer in women has decreased since 1990, especially among younger age groups. From 1990–2004, the death rates from cancer in the USA decreased by 3.3 per cent per year among women younger than 50 and by two per cent per year among women 50 years and older (Ries et al., 2007). The decline in breast-cancer mortality has been attributed to both improvements in breast-cancer treatment and early detection (Berry, Cronin & Plevritis, 2005). The relative survival rates for United States (US) women diagnosed with breast cancer were: 89 per cent at five years after diagnosis, 81 per cent after ten years and 73 per cent after fifteen years. The five-year relative survival rate was slightly lower among women diagnosed with breast cancer before the age of 40 years (82 per cent) compared to women diagnosed at age 40 and older (89 per
cent), probably because tumours diagnosed in younger women tend to be more aggressive and less responsive to treatment (Michaelson, Silverstein & Wyatt, 2002).

Advances in early detection and treatment of cancer have led to an increasing number of long-term survivors. The increase in the number of survivors has been in parallel with the expansion of research into the psychosocial adaptation and coping patterns of the survivors. Such a trend has, in turn, been emulated by focused attention and extended scientific inquiries into women’s health, social systems, lifestyles and personalised behaviours (Allen & Phillips, 1997). In addition, there was an increasing interest in how health beliefs, practices and behaviours are shaped by socio-cultural and ethnic identities including race, religion and language and how these manifested in times of such health stressors as cancer.

As in many other Arab countries, breast cancer is the most common cancer in the female population. Several studies have confirmed that Arab women suffering from breast cancer present themselves late to health facilities for treatment (Abulkair, Al-Tahan, Young, Musaad & Jazieh, 2010; Najjar & Easson, 2010). To increase the awareness of the importance of breast-cancer treatment and early detection, researchers need to identify the manner in which women deal with threatening diseases such as cancer. Thus, research is required to identify the coping patterns adopted by women upon diagnosis with breast cancer.

1.2 Background

Breast cancer is the third leading cause of death in the UAE after cardiovascular disease and traffic accidents (UAE Ministry of Health [MOH] Annual Report, 2005). Data from the UAE MOH indicates that cancer accounts for approximately 500 deaths per year. As in many other Arab countries, breast cancer is the most common cancer in the female population. Currently in the UAE, breast cancer accounts for approximately 37 per cent of all cancer cases across men and women (UAE MOH Annual Report, 2005). Data
from the MOH show 39 per cent of all females with cancer suffer from breast cancer and 78 per cent are below the age of 55.

Cancer trends closely follow global trends. Cancer of the lungs and breast are the leading cancers among males and females, respectively. The Department of Health educational guidelines for current prevention and control measures is multifaceted, targeting different groups of the population through different methodologies (conferences, courses, lectures and workshops, national awareness weeks, e.g. Breast Cancer National Awareness Week, outreach activities, sporting events, publications and media use). It is important to note that there is no referral centre for health education of the community in the UAE, nor any radio or television production units that broadcast health-awareness programs via the various media channels as is a common occurrence in other countries. Due to the diversity of nationalities and languages, public communication is a challenge.

Although health education has been recognised as an essential element to support health-care services, it still lacks a proper definition in terms of how this is to be conducted in the UAE, resulting in isolated and uncoordinated activities for the health-education programs that are currently in existence. The information and telecommunication infrastructure in health-care institutions is weak. Most hospitals, primary health-care centres, medical colleges and other health facilities do not have the necessary infrastructure to deploy e-health solutions due to the low penetration rate of the Internet in the health-care institutions. Health information on the Internet and the use of the Internet for delivery and promotion of health-care services are still very much underutilised.

The first international scientific account of cancer in the UAE dates back to 1981 when Bate and colleagues (1981) described five cases of primary hepatoma among 209 patients with liver disease who attended Al-Qassimi Hospital in the Sharjah emirate. One year after the Tawam Hospital started its services in September 1979, radiotherapy became available for the first time in the UAE. In February 1983, oncologists in the
UAE and the MOH recommended Tawam Hospital as the cancer referral hospital for the whole country. In 1998, the Tumour Registry of Tawam Hospital developed into the official UAE National Cancer Registry charged with the primary aim of examining all cancer incident rates in the Emirates. Shortly thereafter, a Ministerial Decree made notification of cancer cases mandatory. The UAE National Cancer Registry staff regularly visit UAE hospitals and collect cancer-related information from patients’ charts.

Breast cancer is shrouded in fear, myths and connotations reaching far beyond the objective clinical understanding of the disease due to its special nature (Golden-Kreutz, Gregorio, Frierson, Jim & Carpenter, 2005). The literature contends that women in many countries do not use the available breast-screening services and commonly present with advanced symptoms (Berry et al., 2005). Structural barriers to attending for screening include socio-economic factors such as lack of health insurance, distance to medical facilities and inability to take time off from work, while organisational barriers include difficulty in navigating complex health-care systems and in interacting with medical staff (Gerend, Leona, Stephen & Mindy, 2004). Psychological and socio-cultural barriers include poor health motivation, denial of personal risk, fatalism, mistrust of cancer treatments and the fear of becoming a burden on family members. These barriers can often preclude proactive breast screening or rapid response to symptoms, even when breast cancer awareness is rather high (Zaza, Sellick & Hillier, 2005). Moreover, in cultures such as the Arab culture, women’s decisions and actions are seldom autonomous; instead, these decisions are determined by men, who may be unaware of or even disapprove of breast-cancer screening (Chiedozi, El-Hag & Kollur, 2003).

1.3 Situating the Study: The UAE

Arabs—a name originally applied to the Semitic people of the Arabian Peninsula—is now used also to describe populations of countries whose primary language is Arabic, even though in some of these countries Arabic is only spoken by a minority of people. There are 24 Arab countries: Algeria, Bahrain, Comotos, Djibouti, Egypt, Eritrea, Iraq,
Jordan, Kuwait, Lebanon, Libya, Mauritania, Morocco, Oman, the Palestinian Authority, Qatar, Saudi Arabia, Somalia, Sudan, Syria, Tunisia, the UAE and Yemen (Dawisha, 2003). Though different areas in the Arab countries use local dialects of Arabic, all share the use of the standard classical language. The linguistic and political denotation inherent in the term ‘Arab’ is generally dominant over genealogical considerations. Arab leaders have attempted to unite the Arabic-speaking world into an Arabic nation. Since 1945, Arab countries have joined the Arab League, a political organisation intended to unify the Arabic world, which defines an Arab as ‘a person whose language is Arabic, who lives in an Arabic speaking country, who is the citizen of an Arabic country, whose father is an Arab, and who is in sympathy with the aspirations of the Arabic speaking peoples’ (Dawisha, 2003, p. 6).

The goal of the Arab League is to politically unify the Arab populations. The majority of the people in the Arab world adhere to Islam and the religion has official status in most countries. Shariah law exists partially in the legal system in some countries, especially in the Peninsula, while others are secular. The majority of the Arab countries adhere to Sunni Islam. Iraq, however, is a Shia majority country (65 per cent), while Lebanon, Yemen, Kuwait, Saudi Arabia and Bahrain have large Shia minorities. There are sizable numbers of Christians, living primarily in Egypt, Syria, Lebanon, Iraq, Jordan, Palestine and Sudan. Formerly, there were significant minorities of Arab Jews throughout the Arabic world; however, the establishment of the State of Israel prompted their subsequent mass emigration and expulsion within a few decades. Today, small Jewish communities remain in Bahrain, Morocco and Tunisia (Hopkins, 1997). This overview is intended to provide the reader with an idea about the demographic distribution of Arab people and, hence, the high percentage of Islamic participants in the study.

The UAE was formed from the group of tribally organised Arabian Peninsula Sheikhdoms along the south coast of the Persian Gulf and the north-western coast of the Gulf of Oman. This area was converted to Islam in the seventh century. It became known as the ‘Pirate Coast’ as pirates were based in this area, although both European
and Arab natives patrolled the area from the seventeenth century to the nineteenth century.

In 1971, the United Kingdom (UK) announced its decision to end its treaty relationships with the seven Trucial Sheikhdoms and with Bahrain and Qatar, under British protection. The nine attempted to form a union of Arab Emirates, but by mid-1971 they were unable to agree on the terms of their union, even though the termination date of the British treaty relationship was the end of 1971. Bahrain became independent in August and Qatar in September 1971. On 2 December 1971, Dubai, Abu Dhabi, Sharjah, Fujairah, Ajman and Umm-al Quwain entered into a union called the UAE and the city of Abu Dhabi became the capital. The seventh Sheikhdom—Ras al-Khaimah—joined in early 1972 (Saint-Pot, 2003).

The setting for this study was the UAE, which is a small country located along the southern coast of the Persian Gulf and the north-west coast of the Gulf of Oman with a population of around 3,769,080. The UAE population has an unusual sex distribution with males being at twice the level of females. The UAE has one of the most diverse populations in the Middle East. Only 19 per cent of the population is Emirati, whereas 23 per cent are other Arabs and Iranians and the rest are Indians, Pakistanis, Bangladeshis, Afghans, Filipinos and western Europeans. Eighty-five per cent of the population is comprised of ‘non-citizens’ (Annual Report, 2005).

The majority (96 per cent) of the UAE citizens are Sunni Muslims with a very small Shi’a minority. Many foreigners also are Muslims, although Hindus and Christians make up a portion of the UAE foreign population. The official language is Arabic, but the English language is the most common language among the multi-nationality population, with some other languages such as Hindu, Urdu and Persian being spoken.

The average life expectancy for all residents in the UAE is 73 years, with males living around 71.3 years and females 75.1 years. The majority of the population consists of males, who represent 67.7 per cent of the total population, while females represent 32.3
per cent, owing to the preponderance of male expatriates. Since more than 80 per cent of the population in the UAE is made up of expatriates who come for the reason of employment, the national statistics show that 68.8 per cent of the total population is between the ages of 15 and 49 (MOH, 2005).

The UAE is a small high-income country with rich natural resources. The UAE has a gross domestic product (GDP) per capita of 22,000 US dollars. It is not only the world’s fourth largest oil producer after Saudi Arabia, Iran and Venezuela, but is also the richest state per head of population and the new commercial hub of the Middle East (Abu Dhabi National Oil Company, 2011). The UAE has experienced rapid far-reaching change over the past few decades as, only 50 years ago, when oil exploration started, there was no electricity, plumbing, public hospitals or modern schools, no bridges and only a handful of cars. In the years before the discovery of oil, the health situation in the Emirates was poor.

1.4 Development of the Health-Care System in the UAE

Traditionally, the UAE residents who could not afford to obtain modern treatment abroad had to manage with traditional remedies due to the lack of treatment facilities inside the country. In 1949, the British government built Al Maktum Hospital in Dubai and appointed a British physician from the Indian Medical Service to initiate a modern medical service. In 1965, the Abu Dhabi government employed one physician and three others were in the private sector. After the constitution of the Federation in 1971, rapid growth in the health system started in each emirate with a lack of coordination between the public and the private sectors. In the early 1990s, the UAE had a modern health-care system with facilities and expatriate professionals capable of providing excellent care and performing advanced procedures such as organ transplants and complex heart surgeries (Saint-Prot, 2003).

Compared to other countries in the Arab world, the level of health in the UAE was considered high according to the World Health Organization (WHO, 2006).
Nevertheless, the government was concerned with the cost of services, the scarcity of choice and the quality of the service in general (MOH Report, 2009). Health services in the country were provided by six different authorities, five of which were governmental and the sixth was provided by the private health sector, with each authority having its own system and staff. The biggest change in health policy was the withdrawal of the MOH from direct health-care delivery; and this is when the Abu Dhabi emirate established a health authority to deliver health services. Nevertheless, the relationship between the different health-care providers and the MOH needed greater clarification and streamlining. According to the annual Statistical Report 2002, the UAE had fifteen hospitals in urban areas, which represented 57.7 per cent of the total number of hospitals in the country, and eleven hospitals in rural areas, which represented 42.3 per cent of the total hospitals in the country. In addition, there were 106 primary health-care centres distributed between urban and rural areas.

The UAE Federal Department of Maternal and Child Health implemented the Breast-Cancer Screening Program in 1995 as a pilot project in a primary health-care centre in Abu Dhabi. It was expanded to Al Ain, Dubai, Sharjah, the Western Region and Ras Al Khaimah. The program provided three levels of services: health education and training on breast self-examination to all women eighteen years or older, annual clinical breast examination (CBE) screening of women of 40 years and over and a bilateral-two-view mammogram of those age groups on a biennial basis. Moreover, the UAE government has started to request a mammogram as a part of the requirements to renew medical insurance for UAE female citizens older than 40. Although the UAE government has paid a lot of attention to physical treatment, it failed to include any programs that focus on the psychological aspect of this disease.

1.5 Rationale for the Thesis

Considering the high rate of breast cancer diagnosed every year, it is imperative to examine various ways in which women cope with and adapt to life changes when diagnosed and treated for breast cancer. Examining the social environment and the level
of support received from family, friends and health-care providers are essential if understanding is to be gained for professionals to support and enhance women’s capacity to rebuild their lives. It is crucial to understand and address the cultural meaning of cancer and an individual’s capacity to cope if we are to dispel destructive myths and stereotypes linked to the affliction of cancer.

1.5.1 Coping with Breast Cancer

The term ‘coping’ has been interchanged with words such as adaptation, mastery, resiliency, management and adjustment (Aldwin, 2007). The concept of coping has been linked closely with stress, in that coping involves a process by which a person attempts to restore equilibrium in response to a stressful life event (Dewe, O’Driscoll & Cooper, 2010; Jerlock, Gaston-Johansson, Kjellgren & Welin, 2006). Coping has always been a process through which individuals deal with stress, solve problems and make decisions (Aldwin, 2007). Lazarus and Folkman (1984) defined coping as ‘constantly changing cognitive and behavioural efforts to manage specific external and/or internal demands that are appraised as taxing and that exceed the resources of the person’ (p. 141), while Roy and Andrews (1999) viewed coping only as an innate or learnt behavioural response to environmental changes. While Compas (1998) conceptualised coping as purposeful responses to internal and external environmental threats, McHaffie (1992), however, contends that coping is an ever-changing process that is not static but that allows individuals to work through situations and events. Therefore, all researchers have pointed out that coping with internal or external stress such as chronic disease, particularly cancer, occurred through a process of using strategies for physical or emotional relief, serenity and equilibrium (Zabalegui, 1999). The coping models and theories are more fully critiqued in Chapter 2.

When women are forced to undergo changes in their physical appearance, body image can be severely tarnished. Mastectomy surgery, for example, can result in feelings of inadequacy, vulnerability and weakness (Boughton, 2000). Potter and Ship (2001, p. 309) claim that ‘at least 80 percent of survivors of breast cancer report some
psychological distress, including problems with body image and self image, sexual problems, and effects on relationships, priorities and goals for the future’. Considering the sexual significance of the breast in modern society, where attractiveness is often tied to visible consumer models of femininity, women who do not fit the mould can feel ashamed of their bodies. A woman disfigured from surgery or, who has only one breast can feel humiliated and embarrassed about her appearance (Kantor & Houldin, 1999).

Overwhelming fears tied to the uncertainty of the prognosis of the disease may lead to maladaptive approaches to everyday life, and these can soon set in, rendering the victim emotionally labile, unsure of their fate, anxious, uncomfortable and in a state of existential uncertainty (Johnson & Spilka, 1991). Clearly, there are numerous psychosocial and emotional uncertainties when faced with an illness that seeks to destroy healthy bodily tissue. Therefore, how individuals choose to view their illness and the types of social pressures placed upon them will determine not only their quality of life (QOL), but also their ability to cope in a productive and meaningful way.

1.5.2 Influence of Culture and Coping Mechanisms

In social sciences, culture has been defined in numerous ways. Most definitions refer to a set of contexts (structures and institutions, values, traditions, and ways of engaging with the social and non-social world [Shweder & LeVine, 1984]) that are shared among members of a society and are transmitted across generations through social learning (Richerson & Boyd, 2005). The definitions of culture are typically broad and it is often difficult to decide how the concept of culture should be included in empirical work. Therefore, psychologists have proposed features of cultures to be used as organising constructs. The most commonly used constructs to account for observed cultural differences and similarities in human psychology are individualism and collectivism (Hofstede, 1980; Kagitcibasi, 1997; Triandis, 1995). These constructs have been particularly useful for understanding cultural differences in terms of how people view themselves and their relationships with others. These differences are important in understanding cultural differences in health- and illness-related experiences.
In individualistically oriented cultures, such as the UK or the USA, the dominant model of the self is one of independence, self-characterised by self-defining attributes that serve to fulfil personal autonomy and self-expression (Hofstede, 1980; Kim & Sherman, 2007; Markus & Kitayama, 1991; Oyserman, Coon & Kemmelmeier, 2002). People are seen as agentic and thus responsible for their own decisions and actions. Moreover, in cultures shaped by individualism, individuals favour not missing chances over not making mistakes, focusing on the positive outcomes they hope to achieve rather than the negative outcomes they hope to avoid (Lee, Aaker & Gardner, 2000). Relationships are freely chosen and are relatively easy to enter and exit (Adams, 2005).

By contrast, in collectivistic cultures such as many East Asian cultures, the dominant model is interdependent, self-embedded within the social context and defined by social relations and memberships in groups (Markus & Kitayama, 1991; Triandis, 1995). People are seen as relational or communal and their decisions and actions are seen as heavily influenced by social mutual obligations and the fulfilment of in-group expectations (Hofstede, 1980; Oyserman et al., 2002). In such cultures, individuals tend to be motivated to fit in with their group and maintain social harmony; they focus on their responsibilities and obligations while trying to avoid behaviours that might cause social disruptions or disappoint significant others (Markus & Kitayama, 1991). They favour not making mistakes over not missing chances, focusing on the negative outcomes they hope to avoid rather than the positive outcomes they hope to achieve (Elliott, Cirkov, Kim & Sheldon, 2001; Lee et al., 2000; Lockwood, Marshall & Sadler, 2005). Relationships are seen as less voluntary and are relatively more difficult to leave (Adams, 2005).

When investigating how women cope with a diseased body it was imperative to consider the role of social and cultural domains. Clearly, culture plays a vital role in establishing frameworks that mould our perceptions of what a diseased body actually means. Gifford (1999), a renowned anthropologist contends:

> Experiences of cancer are culturally shaped and although it is impossible to know about all specific beliefs, we must recognise that differences exist. Cultural beliefs play an important role in whether people seek early diagnosis,
how they understand their disease, the kind of support they are willing to accept, decisions about treatment and how they experience the process of getting well and dying. (Gifford, 1999, p. 174)

The consequences of a breast-cancer diagnosis for younger Western women are well documented and include a range of emotional, social, physical and spiritual difficulties (Bloom, Stewart, Chang & Banks, 2004; Whilks, White & Beale, 2002). Although the coping patterns used by Western women diagnosed with breast cancer were increasingly reported in research, there exist few health-care practices and health-promotion strategies and programs that examine the specific cultural beliefs and health practices for women post-diagnosis of cancer (Tones & Tilford, 2001). Further, the coping patterns post-diagnoses with cancer adopted by women living in Middle Eastern countries have not been well investigated, as highlighted in Chapter 2. Such culturally specific knowledge was particularly important in order for health-care professionals to determine appropriate ways to support women recovering from breast cancer whether they were in their own countries, living far from their homelands or in destination countries where frequently Westernised biomedical health-systems operate.

In many cultures, especially Arab countries, cancer is viewed as a stigma that wreaks havoc in the victim’s life (Doumit, Huijer & Nassar, 2010). Kolb (1975) states that individuals who have been disfigured or deformed in any way will often be treated negatively by society. A diagnosis of breast cancer can bring with it multiple surgery, chemotherapy, surgical scars and alopecia. During the impact phase of a diagnosis of breast cancer, feelings of disorientation, fear, helplessness and loneliness have been reported to overwhelm the individual (Roakach, 2000). Further, situational factors such as the site of cancer, the stage of the disease, whether one is in treatment and the time since first being diagnosed are additional influences that affect how people with cancer perceive their illness (Parsa & Kandiah, 2005). Moreover, breast cancer has been shown to produce a variety of adjustment problems including depression (Burgess et al., 2005), anger or hostility (Conde et al., 2005), helplessness (Alawadi & Ohaeri, 2009) and feelings of shame and worthlessness (Remennick, 2006).
Entwined within this cultural framework is an elaborate network of codes of conduct derived from culture and religion that determine specific perceptions of illness. The cultural mosaic of meaning through which we understand and make sense of our world also provides standards of behaving in the presence of disease. Shared concepts, rules and regulations that are underlined in our societies and are expressed in the way we live, will either assist or inhibit the coping patterns we adopt when we face crises. Further, understanding the interplay between themes such as coping strategies, faith, body image and identity can highlight new and innovative ways of approaching and addressing illness.

1.5.3 Religion and Coping

Coping is both culturally and religiously specific. Given the centrality of Islam in the region under study it was deemed important that the religious practices and experiences of Arab women with breast cancer were examined. As with other serious illnesses, cancer poses profound physical and psychological challenges. Religion is a common way to cope with these challenges (Zaza et al., 2005). For example, Johnson and Spilka (1991) reported that 85 per cent of Western women with breast cancer turned to religion to cope. Religion as a method of coping can be conceptualised in different ways, as many studies have assessed the frequency of visiting religious places of worship or the frequency of prayer with the assumption that these behaviours were a response to the stressors in question (Harrison, Koenig, Hays, Eme-Akawari & Pargament, 2001). The problem with this assumption was that global measures of religious involvement might have reflected dispositional religiousness rather than how people could draw from religion during crises (Darnell, Chang & Calhoun, 2006). Finally, some scales assessed a range of coping methods that could be categorised as positive or negative (Pargament, Koenig & Perez, 2000). Positive religious coping reflecting a secure relationship with God has been associated with improved QOL in persons with cancer (Tarakeshwar et al., 2006). In contrast, negative religious coping was shown to be reflected in a tenuous relationship with God and was associated with worse wellbeing in people with cancer (Gall, 2000). Hebert, Zdaniuk, Schulz & Scheier (2009) conducted a study and the
results were consistent with other studies showing that negative religious coping predicts worse psychological adjustment. Negative religious coping was associated with more depression in medically ill patients over a two-year period while positive religious coping was not (Zwingmann, Wirtz, Muller, Korber & Murken, 2006).

The sensitive nature of this study necessitated establishing a research design that was also open to the social pressures and cultural restraints that permeated the lives of the women and enabled the exposure of their hidden truths. Further, it provided an avenue whereby women could assert their own interpretations of spirituality, faith, health and sexuality, so that they may be able to experience a new level of self-consciousness and self-understanding. In analysing women’s inner strengths and spiritual powers, King (1989) stated that:

Open up decisive moments of revelation which point to transcendence and spiritual liberation … To share other women’s experiences, struggles and thoughts is a catharsis, a cleansing and strengthening process whereby a woman can gain greater clarity of vision and become more transparent to herself. (King, 1989, p. 87)

The coping mechanisms employed by women are closely aligned to their spirituality, which motivates them to live through their experience and overcome their weaknesses and their feelings of uncertainty.

1.5.4 Identity and Coping

For many conditions, medical risk is predicted by personal traits or behaviours that could form an important part of one’s identity such as lifestyle (e.g. lung cancer or sport injuries), profession (e.g. stress-induced diseases or work-related hazards), age (e.g. diabetes or osteoporosis) or gender (e.g. breast or ovarian cancer). The dearth of research in the area of breast cancer is worrisome because many theoretical perspectives predict unfamiliar effects. For example, theories based on cognitive accessibility (Raghubir & Menon, 1998), personal relevance (Mandel, 2003) and perceived similarity (Gerend et al., 2004) concurred in predicting an identity congruency effect (Shang, Reed & Croson, 2008). As a result, the salience of a particular identity should increase
associated risk perceptions. The negative effects were the result of defence mechanisms triggered by a feeling of threat to a central identity (Cramer, 2000).

Defence mechanisms have been found to serve as a protecting agent to the self-esteem (Cramer, 2000) by helping people to maintain a positive image about themselves and are probably important for mental health (Aldwin, 2007). However, in the domain of health-behaviour and health-risk perceptions, defensive reactions were most often maladaptive (Menon, Block & Ramanathan, 2002). Two prominent streams of research that explored defence mechanisms in health settings were those on mortality salience and on motivated reasoning. The first group of women would behave from the perspective that breast cancer was a fatal disease, so they were going to die sooner or later. The other group of women with breast cancer tried to find reasons in their lives to keep them going and encourage them to fight cancer, even if they had to use unhealthy coping mechanisms such as denial or avoidance. Therefore, the primary terror-management literature (Pyszczynski, Solmon Greenberg, Arndt & Schimel, 2004) has shown that existential threats could lead to a wide range of maladaptive behaviours such as unsafe driving or unprotected sex aimed at protecting self-esteem. Recent studies also showed that heightened mortality salience reduced women’s intentions to carry out breast self-examination, except when feelings of discomfort could be attributed to a different source (Goldenberg, Arndt, Hart & Routledge, 2008). Second, several studies provided evidence that threatening health messages tended to be processed defensively. For example, one study showed that heavy coffee-drinking women discounted a health message linking caffeine consumption to breast cancer more than did lighter coffee-drinking women (Sherman, Nelson & Steele, 2000). Breast-cancer communications often made gender identity salient through textual information, colours, symbols or images. Moreover, women were often exposed to breast-cancer communications in situations when their gender identity was especially salient. Breast cancer is a disease that attacks both genders, so there should be no need to put pink ribbons when giving health education about breast cancer.
Consequently, health-care providers should be aware that heightened gender salience during health-education or health-awareness campaigns could trigger defence mechanisms that could interfere with their goals.

1.6 Aims of the Study

The aims of the study are to examine the coping patterns and to provide a detailed assessment of the inter-connections between coping and certain cultural concepts adopted by Arab women living in a multicultural community. Moreover, the purpose was to examine how identity was shaped by cultural influences and how this, in turn, may impact upon coping in Arab women with a diagnosis of breast cancer. Examining social environments and the level of support received from family, friends and health-care practitioners was essential if understanding was to be gained into how women cope. It was deemed important to understand what coping meant from a Middle Eastern perspective if we were to effect culturally appropriate outcomes that would address popular myths and stereotypes linked to the affliction of cancer. In the absence of a relevant local literature as discussed in Chapter 2, there was an urgent need to conduct a study that would give a clear picture on coping patterns revealed by Arab women suffering from breast cancer and living in the UAE. The results of this study are intended to provide information to underpin specific health-promotion and health-service delivery post-cancer for women as well as educational materials for a range of practice-specific nurses.

Moreover, this study intended to address the role cultural factors play in respect to a specified cohort of Arab women’s coping abilities after a diagnosis of breast cancer in the UAE. A secondary aim of the study was to determine the nature, availability and suitability of current health-promotion educational materials and programs provided in the UAE. The long-term outcome for another study would be to develop and evaluate culturally based health-education programs to equip women with specific coping abilities and to provide culturally specific guidelines for future interventions. Such programs would assist these women to cope better when faced with the diagnosis of
breast cancer as well as for health-care practitioners and organisations to develop culturally appropriate primary, secondary and tertiary interventions for Arab women suffering from breast cancer.

1.7 Objectives of the Study

To examine the coping patterns of Arab women living in the UAE post-diagnosis of breast cancer, the researcher needs to:

1. Identify the current self-care practices of the women with breast cancer.
2. Examine the coping patterns after being diagnosed with breast cancer.
3. Compare and contrast coping patterns of Arab women of different nationalities living in the UAE.
4. Design breast-cancer health-education and management programs tailored to suit the specific subpopulation of Arab women living in the UAE.

This descriptive, exploratory, two-phase mixed-method study design analyses was conducted to examine the association as well as the cultural context of the adopted coping patterns of Arab women.

1.8 Setting of the Study

Tawam Hospital is a general hospital located in Abu Dhabi emirate, the largest emirate in the UAE. The National Cancer Registry is located in this hospital. The inclusion of all Arab women living in the UAE was purposeful in order to have a convenient sample of 250 Arab women who met the eligibility criteria of the study. The pilot study conducted to test the research instruments will be discussed in Chapter 4.
1.9 Ethical Considerations

Ethics approval from the higher research ethics committee in the Royal Melbourne Institute of Technology University (RMIT) was granted in September 2008 (appendix 1). In the UAE, permission from the undersecretary of curative medicine in the Federal MOH, and the Director of SOHA (the Health Authority in the Abu Dhabi emirates) were granted and attached to the application for ethics approval in the UAE (appendix 2). The approval of the ethics committee was added to the application submitted to the National Breast Cancer Registry in Tawam Hospital (appendix 3).

The major ethical principles and rights of participants (Polit & Hungler, 1999) were adhered to throughout the study. Participation in the study was voluntary. Women were given the freedom to participate and withdraw at any point in time with no pressure exerted on them. Before any contact with the researcher, an informed-consent form was obtained (appendix 4). All participants were informed in detail about the aim of the research, data collection, methods, participant selection, the prolonged involvement and how the findings would be reported (appendix 5). This study did not propose to influence the participants in any way. The purpose of the study was to gain an understanding of the changes in coping patterns that the Arab women will exhibit when diagnosed with breast cancer in the UAE. The researcher, with a mental-health nursing background, conducted all the interviews. Should the participant become distressed or indicate that emotional assistance was needed, referral mechanisms for support and safety were utilised—as previously stated in the informed-consent form—and the interviews were ceased. Participants were not required to write their names on the personal details’ sheet and a coding system was utilised on their particular questionnaires. In this way data did not contain any identifiable names. In the qualitative interview, pseudonyms were used on the transcript data corresponding with the personal details on the consent form. Only the researcher had access to the coding key, which was kept in a locked filing cabinet in the Health Sciences Department in RMIT University.
1.10 Organisation of the Thesis

The thesis starts with an introductory chapter that includes the context, the rationale, a brief discussion of the setting and the ethical considerations of the study. The researcher provides a critique of the literature review relevant to the thesis; that is, coping with breast cancer and the coping models and theories in Chapters 2 and 3. Chapter 4 discusses the methodology of the study with an overview of the variety of methods employed within the thesis and a discussion of the psychometric principles adopted during data collection and analysis. Chapter 4 provides a critical discussion of phase one (the quantitative data) and phase two (the qualitative data) of the study. The results of the quantitative data are presented in Chapter 5 and the results of the qualitative data are revealed in Chapter 6. The analysis of the results from both chapters (5 and 6) and a critical comparison between both data sets are presented in Chapter 7 together with the establishment of the conceptual framework. In Chapter 8, limitations are presented and a summary of the major findings are developed as well as recommendations.

1.11 The Thesis as an Applied Study

The thesis contributes to an applied study, that is ‘the practice of nursing is deeply rooted in nursing knowledge, and nursing knowledge is generated and disseminated through reading, using, and creating nursing research’ (Houser, 2008). The ethos of applied research within nursing originates from Florence Nightingale, who wrote:

> In dwelling upon the vital importance of sound observation, it must never be lost sight of what observation is for. It is not for the sake of piling up miscellaneous information or curious facts, but for the sake of saving life and increasing health and comfort. (Florence Nightingale, 1959)

The thesis serves to examine the coping patterns of Arab women having breast cancer and living in the UAE, hence ‘saving life and increasing health and comfort’.
Chapter 2: Literature Review

The aim of this chapter is to critically examine the literature related to the experience and coping patterns of Arab women with breast cancer. In addition, a review of the research-based literature pertaining to the role of Arab women within their families and society will be critiqued from the perspective of Arab women’s responses to illness. The effect of culture, religion and feeling of uncertainty on women with breast cancer will also be explored: the chapter aims to review the subjects listed below:

- 2.1 Literature Search Strategy
- 2.2 Breast Cancer in the UAE
- 2.3 UAE Status of Women and Nature of Health Beliefs
- 2.4 Arab Women and Illness
- 2.5 Breast Cancer and Uncertainty
- 2.6 Breast Cancer and Culture
- 2.7 Breast Cancer and Religion
- 2.8 Summary

2.1 Literature Search Strategy

The researcher would like to clarify the reasons behind choosing this research before exploring the search strategy. The researcher worked as a coordinator when the MOH decided to establish the National Breast-Cancer Screening Program in the UAE in 1995. The program focused on screening and referring women with positive results to hospitals for treatment. As a nurse clinician I felt that the existing program omitted much needed psychological services related to this disease.

The literature search strategy focused on the purpose of the research; that is, to explore psychological coping involved with breast cancer. Inclusion and exclusion criteria were
defined prior to commencing the search. Studies included in the review related to ‘adult women’ with ‘breast cancer’ and ‘coping patterns’. The justification was to explore the current practices and efficiency of the coping patterns so that a program could be developed with appropriate modalities to support Arab women with breast cancer. There are different kinds of resources including: books, journal articles (both academic and professional), polices, directives and web sources. All these types of resources are important in the research process, but they differ in many ways. It is also crucial to verify the accuracy and reliability of any data sources. The researcher used the reliable online Nursing Sources CINAHL Plus that provided access to virtually all English-language nursing journals and primary journals from thirteen allied health disciplines. The second online site used was Medline Plus that has extensive information from the National Institute of Health and other trusted sources on over 650 diseases and conditions. The third reliable used source was PubMed, an online service of the National Library of Medicine that provides access to over eleven million Medline citations. Moreover, a vast number of books on nursing research and theories were read.

The key search terms that were entered in Ebsco Host were ‘breast cancer’ and ‘coping patterns’ for the years 2005–2010 in order to get the most recent information about the topic. It generated a significant number of articles. After going through the articles, the researcher found few articles that were conducted about Arab women coping with breast cancer and none in the UAE. The researcher had to expand the search parameters and included more terms such as ‘body image’, ‘spirituality’ and ‘culture’ and went back to the year 2000 to find more research about Arab women with breast cancer. When more parameters were added, a significant number of articles were generated. After going through the articles and the national statistics that emphasised the fact that Arab women develop breast cancer younger than Western women, the search focused primarily on research discussing young (< 50 years) women’s coping with breast cancer.

Searches made use of database key-word headings as well as title and abstract searches. Truncation symbols were used to find synonyms and plurals. In addition, a variety of journals accessed via computerised archives were searched. A hand search of evidence-
based publications included: nursing journals, multidisciplinary journals and allied health-profession journals. Reference lists and conference proceedings were searched. The reference lists from related articles and eligible studies were also searched. Full-text eligible studies were examined to determine whether they met the criteria.

Once the researcher reached this stage of investigation, other parameters and terms were repeatedly raised within most of the selected articles and it became apparent that some key themes were related to women with breast cancer. These themes were: ‘body image’, ‘culture’, ‘religion’ and ‘uncertainty’. The literature review is organised according to themes that emerged during the literature search.

2.2 Breast Cancer in the UAE

Breast cancer is the second most common malignancy in the world (Parking, 2001), affecting one-in-eight women during their lives with millions of dollars being spent annually on the disease (Brown, Riley, Schussler & Etzioni, 2002). Although there is no exact ratio of Arab women having breast cancer, Denic and Al-Ghazali (2003) believed that the incidence of breast cancer in Arab women was low compared with other Western populations.

Breast-cancer control strategies, as described by Donegan and Spratt (2002), apply to the existing knowledge on approaches designed to actively prevent, cure or manage cancer. Such approaches range from prevention, to screening for early detection, to treatment encompassing rehabilitation, pain relief and other forms of palliative care. It has been estimated that at least 50 per cent of cancer deaths and 40–50 per cent of cancer cases are preventable if current knowledge were to be fully and effectively applied (UAE MOH Annual Report, 2004).

Very few studies on risk factors for breast cancer in Arab women have been reported. Fakhro, Fateha, Al-Asheeri and Al-Ekri (1999) undertook a study to identify the patient characteristics and to compute the survival rates among 93 Bahraini (Gulf country)
breast-cancer patients discharged from hospital. The majority of the patients were between 40 and 49 years of age (33.3 per cent) and 48.4 per cent of the women were below 50 years of age. This is in contrast to the findings from industrialised countries, where increased risk of breast cancer is associated with increase in age (Henderson, Gore, Davis & Condon, 2003). The higher incidence of patients in stages II and III demonstrated that most cancer patients in Bahrain visited the physician late in the progression of the disease. Fakhro et al. (1999) also conducted survival analyses on these patients in relation to tumour size, lymph-node involvement, clinical stage, line of management and age group. The cumulative survival rates for the Bahraini patients after five, seven and ten years were 64.31 per cent, 54.31 per cent and 36.44 per cent, respectively. The sample size was small and could not identify the reason behind participants’ late presenting for treatment, nor the high percentage of young women with breast cancer. The researchers stressed the urgent need for improved screening techniques for early detection and to improve women's awareness of breast cancer in Bahrain.

In 2003, Al Saweer, Yacoub and Mohammed, performed a prospective study on the prevalence of risk factors associated with breast cancer in patients with breast cancer living in Bahrain. A review of the medical records showed that the majority of women between 41 and 60 years of age were either of low or middle educational level and had their menarche below the age of thirteen years. Most of the patients did not show any family history of the disease and most of them breast fed their children. This study is significant because Bahrain is a Gulf country that has a population demography similar to that of the UAE.

In 2004, two retrospective studies were conducted by Al Moundhri et al. and Al Bahrani, Khalifa, Faris and Khan to determine the outcome of treatments and the pattern of relapse of women with breast cancer in Oman, another Gulf country. Both studies highlighted that the majority of attendees were young women who presented in an advanced stage of the disease, resulting in them advising an increase in the awareness of
both patients and health providers through health education so as to diagnose the disease at an earlier stage.

In summary, as in many other Arab countries, breast cancer is the most common cancer in females in the UAE (MOH Annual Report, 2004). The exact incidence is difficult to report as the majority of the population is migratory; that is, people from many countries come to the UAE on work residency, so they have to leave the country once they leave their jobs. However, it is well known that Arab nationals including those from the UAE tend to develop breast cancer at least a decade earlier than nationals of the Western countries. Due to social customs, many Arab women do not present themselves for regular medical examination because Arab women do not accept being examined by a male doctor, usually resulting in late presentation. Moreover, the Arab culture has traditionally been reluctant to talk about the breast, which is a private part of a woman’s body and therefore a taboo.

2.3 Women and the Nature of Health Beliefs in the UAE

While the UAE is less conservative than the Gulf countries such as Saudi Arabia, Sharia law is a part of the country’s legal framework and as such it legislates through a personal status code and gender discrimination built into citizenship laws means women cannot have full rights. The UAE Women’s Federation, headed by H. H. Sheikha Fatima bint Mubarak, wife of the late president (Sheikh Zayed bin Sultan Al Neihyan), was founded in 1975 to encourage the women in the country to play a full role in society. The belief that women are entitled to take their place in society is grounded in the UAE Constitution that states the principles of social justice should apply to all. Despite a major increase in the number of educated women, all legislation in the UAE is based on Sharia and many laws and national policies continue to restrict women to their traditional roles as wives and mothers rather than supporting their equality with men across all aspects of society.
Azaiza and Cohen (2006) conducted a quantitative study to examine the relationship between health beliefs and participation in breast-cancer screening among Arab women. A random sample of 568 Arab women, aged 20–60, belonging to three religious groups—Muslim, Christian and Druze—were recruited. Participants answered a telephone questionnaire regarding attendance for mammography screening and CBE and health beliefs. More Christian women had accessed mammography screening and CBE than Druze and Muslim women. They perceived more benefits and fewer barriers to screening practices and had greater perception of the severity of breast cancer. The barriers that were significant for the Druze and Muslim women were a feeling of discomfort and embarrassment, the belief that there was no cure in the case of positive findings, and perceiving mammography as hazardous to health and CBE as painful. Logistic regression revealed that age group, and having a first-degree relative with breast cancer predicted participation in early detection screening. The research did not control or include in the questionnaire the educational programs given to the participants before the study. Remennich (2006) reviewed the sociological view of barriers experienced by women from traditional cultures, both in their native countries and as immigrants and minorities in multicultural Western societies, in preventive care generally and in breast cancer particularly. The women who perceived breast cancer as a fatal disease and who considered that there was no hope in treatment did not agree to participate in the breast-cancer screening program and presented late for treatment.

Epidemiological observations indicate that environment and lifestyle are the major determinants of the geographical patterns of cancer. During the last two decades, the UAE, like other Arabian Gulf countries, witnessed rapid development in many aspects of life. Increased development has led to a parallel increase in major public-health problems. The rapid socioeconomic changes have positively affected the prevalence and pattern of cancer (Al Moundhri et al., 2004). The widespread availability of modern medical facilities and increasing public awareness of cancer have made possible the early detection and reliable diagnosis of breast cancer in the UAE.
2.4 Women and Illness

Many authors argue that for most families, the women assume the role of nurturers and are central in the role of educators, counsellors and organisers within the family (Bloom, Stewart, Johnston, Banks & Fobair, 2001; Friedman, Bowden & Jones, 2003). This is an important consideration when exploring the family unit’s response during breast cancer, as the disease trajectory and treatment influences what the women are feeling and may have a positive influence on the other family members. In reality, mothers in particular tend to assume the sick role only when absolutely necessary and with a degree of emotional turmoil (Friedman et al., 2003; Walsh, Manuel & Avis, 2005). Consequently, in the case of prolonged or serious disease states, there may be significant repercussions within the family if the woman is unwell. Conversely, the psychological adjustment for the woman is likely to be influenced by the family interaction around her (Shands, Lewis & Hooper, 2000). If the family interaction is supportive and flexible, research has demonstrated that women were more likely to positively adjust to the changed roles (Mellon & Northouse, 2001; Walsh, F., 2003).

In the case of a younger family group with child-rearing responsibilities, the family roles and functions may be moderately disrupted when the mother has a diagnosis of breast cancer or other chronic illness (Golden-Kreutz et al., 2005). Consequently, one of the resulting effects on the family when the woman is diagnosed with breast cancer can be the change within the family as they reorient the roles and functions of the family unit.

Moreover, Bloom et al. (2004) found that women under age 50 are especially vulnerable to physical and psychosocial late effects of their treatment due to having more aggressive treatment and their relative youth. Face-to-face interviews were conducted with 185 women who were under 50 at diagnosis and were cancer-free five years later. Women who remained cancer-free were re-interviewed five years later to determine whether there were changes in the issues of concern to them following diagnosis and whether new QOL issues had surfaced as well. The participants were identified through rapid case ascertainment and were reported to the Greater Bay Area Cancer Registry,
which is a part of the California Cancer Registry. QOL in the physical, psychological, social and spiritual domains were assessed and compared with results obtained a few months after diagnosis. Five years after diagnosis, 92 per cent rated their health as good or excellent and only ten per cent said their health was getting worse. Between the baseline and five years, there were significant improvements in surgical symptoms, body image, worry about the future and patient–physician communication. There were significant decreases in emotional support and the size of social networks. More women were now menopausal (75 per cent due to treatment) and there were fewer children at home. There were no significant changes in employment status, marital/partner status, sexual activity or problems, self-esteem, and attendance at religious services or frequency of prayer. A greater increase in physical QOL was associated with reporting fewer chronic conditions, being part of the workforce, having been treated by chemotherapy and with fewer of them having children under the age of eighteen living at home. A greater increase in mental QOL was associated with fewer chronic conditions and a smaller decrease in emotional support. Young breast-cancer survivors who remain cancer-free after five years enjoyed good health and improved QOL. Nonetheless, physical, social and psychological concerns must be addressed so that young breast-cancer survivors will continue to be resilient as they age. There were some limitations in the design of this study that reduced its generalisability. First, they considered women who did not have a recurrence or another cancer. Thus, the findings of relative mental and physical health of the participants cannot be generalised to the situation of all women diagnosed at the age of 50 years or younger.

Conde et al. (2005) conducted a study to evaluate the QOL and identified its associated factors in women who lived at high altitudes with a history of breast cancer. A cross-sectional study was performed at the Women’s Hospital, Universidade Estadual de Campinas, Sao Paulo, Brazil, including 75 breast-cancer survivors aged 45–65 years who underwent complete oncologic treatment and were nonusers of hormone therapy or tamoxifen in the last six months. Socio-demographic and clinical characteristics, in addition to the prevalence of climacteric symptoms were evaluated. The QOL was evaluated by the Medical Outcomes’ Study 36-item Short-Form Survey (SF-36)
questionnaire, including eight components that can be condensed into two summaries: a physical-component summary (physical functioning, role-physical, body pain and general health) and a mental-component summary (vitality, social functioning, role-emotional and mental health). Generalised linear models were used to analyse the data, allowing the identification of factors affecting the QOL, adjusting for confounding variables. Breast-cancer survivors reported good QOL. The most prevalent symptoms were nervousness (69 per cent) and hot flushes (56 per cent). Factors associated with poorer QOL were dizziness, postmenopausal status and breast-conserving therapy (physical component), as well as insomnia and marriage difficulties (mental component). Given the impact of the various factors, health professionals and patients must discuss choices for alleviating climacteric symptoms and consider explanations for the potential repercussions of breast-cancer treatment. Interpretation of the data must consider some limitations (e.g. sample size and study design). The cross-sectional design allowed identification of several factors associated with QOL, although casual inferences could not be made. Another limitation was the failure to evaluate the intensity of climacteric symptoms and to correlate this with the QOL.

Kessler (2002) conducted a descriptive and non-experimental study to determine the relationship between contextual variables, emotional state and current QOL, and expectations for the future in survivors of breast cancer. The researcher obtained a convenience sample comprising of 148 women diagnosed with breast cancer. The participants were recruited through the American Cancer Society’s Reach to Recovery Program in a large city in the USA. Most participants were middle-aged women, married and had graduated with high-school certificates. Seventy-four per cent of the participants had been diagnosed more than five years previously, 54 per cent were not receiving any treatment and 66 per cent had localised breast cancer. At home, participants completed a self-report survey for personal and contextual variables based on a positive- and negative-affect scale, QOL measurement and global life-satisfaction scale. Despite the stress and negative outcomes that may result from the diagnosis and treatment of breast cancer, the women in this study reported more positive than negative affect, a high AOL and life satisfaction. Time since diagnosis and extent of disease were related minimally
to negative affect and QOL. Positive and negative affect were related moderately to QOL and life satisfaction. Current personal-life satisfaction was significantly greater than breast-cancer survivor’s estimates for ‘most people’, and survivors expected life satisfaction to increase significantly in five years. It was logical and expected to find significant differences in QOL between those who were diagnosed recently and those who were diagnosed ten or more years before. As a result, despite being diagnosed with breast cancer, over time women reported positive affect, good QOL and life satisfaction.

Contextual variables were related weakly to outcomes; emotions were related more strongly to outcomes. Survivors were more satisfied with life than they estimated others to be and expected satisfaction to increase in the future. Nurses may use these findings to encourage patients who are newly diagnosed with breast cancer. Women with breast cancer adapt well despite potential negative outcomes, and survivors even report better QOL than they estimate for most people. The limitation of the study can be summarised into two main areas: first, the majority of women (84 per cent) had breast cancer that had not spread beyond the local lymph nodes. Second, the sampling technique may have led to differences in respondents and non-respondents, so the results cannot be generalised to populations other than to women with similar characteristics.

Rees and Bath (2001) conducted a study that employed sequential between-methods triangulation—a method that involves combining qualitative and quantitative research methods for confirmation and completeness of findings. Dual methods were used to gain a more complete picture of the topic of inquiry than that provided by either method alone. A mailed survey was conducted to examine the information-seeking behaviours of 156 British women with breast cancer. Three focus groups were employed to collect in-depth data on the views of 30 women with breast cancer concerning their information-seeking behaviours. Women with breast cancer were identified and recruited to the survey study through outpatient breast clinics at two large teaching hospitals in the UK over an eight-month period. Women with breast cancer completed the Miller behavioural style scale (MBSS). The information-seeking behaviours of women with breast cancer, as measured by the monitoring subscale of MBSS, were not
significantly associated with their demographic (e.g. age, socioeconomic class) and illness-related characteristics (e.g. months since diagnosis, surgery, therapeutic regimens). The focus-group discussions suggested that the information-seeking behaviours of women with breast cancer were highly individualistic. Although some women actively sought information, others avoided information. In addition, women sometimes fluctuated between seeking and avoiding information. Women who sought information on how to cope with breast cancer regained their sense of control and feelings of confidence, which helped facilitate their decision-making process. Women who avoided information to escape from worry and fear had feelings of negativity and depression. Therefore, the results reported in this study may not be representative of women with breast cancer from ethnic minorities. Moreover, the participants were all members of a support group and, as such, were more likely to be white middle-class people who use social resources of all kinds compared with non-members. Therefore, by using members of the support group, self-selection bias possibly was introduced in the study.

Therefore, in general, QOL is related to life satisfaction. Although the increase in self-confidence helps women with breast cancer in increasing their QOL, it decreases with time. On the contrary, young breast-cancer survivors who remain cancer free after five years enjoy good health and an improved QOL.

2.5 Breast Cancer and Uncertainty

At the point where a doctor informs the patient about their diagnosis it often transforms their life from general wellbeing and confidence to enormous anxiety and uncertainty about the future. This pervasive sense of uncertainty probably characterises the journey with cancer more than anything else. It often lessens when things are going well, but it is a feeling that never completely goes away. Wonghongkul et al. (2006) conducted a descriptive study in the USA and recruited a convenience sample of 150 breast-cancer American survivors of more than three years from time of diagnosis. Research instruments included the Mishel uncertainty in illness scale, the stress-appraisal index,
ways of coping questionnaire, and QOL: breast-cancer version questionnaire and demographic data questionnaire. Results revealed that breast-cancer survivors had moderate levels of uncertainty during their illness. Survivors appraised their illness and found a high level of challenge, a moderate level of threat and a low level of harm. Overall, QOL was found to be moderate. Ways of coping strategies were seeking social support that was used the most and confrontational coping that was used the least. A confrontational coping strategy is when the women face their disease and try to find ways to solve their problems. Using hierarchical multiple regression, the variables influencing QOL were years of survival, uncertainty in illness and harm appraisal. All three variables explained 21.8 per cent of the variance in QOL. Uncertainty and harm appraisal influenced the QOL in breast-cancer survivors. The age group was not identified in this study, although it is a major factor, and neither was the effect of the social support with respect to the feelings of uncertainty.

The relationship between perceived social support, uncertainty and QOL in older survivors with breast cancer was investigated by Sammarco (2003). The hypotheses predicted a significant positive correlation between perceived social support and QOL, and a significant negative correlation between uncertainty and QOL. It was also hypothesised that perceived social support and uncertainty, if considered together, could explain the QOL variance more than either variables when considered independently. A sample of 103 breast-cancer survivors older than 50 years completed the social-support questionnaire, the Mishel uncertainty in illness scale-community form and the Ferrans and Powers QOL index: cancer version. Data were analysed using the Pearson product-moment correlation, $t$-tests, analysis of variance, and stepwise multiple regression. All the hypotheses were supported. Additional findings showed significant positive correlations between age and uncertainty, and between support-network size and social support. Significant negative correlations were found between age and perceived social support, and between age and size of support network. Uncertainty increased in the presence of other diseases, which were associated with poorer QOL. The study results emphasised the importance of social support in reducing illness, uncertainty and improving the QOL for older survivors of breast cancer.
Patients with cancer and their families were more likely than others to pass through various stages of shock, self-denial and depression leading to poor coping (Golden-Kreutz et al., 2005). Generally, family attitudes and perceptions are integral parts of the proper psychological development and self-esteem of the patient. Family members usually modify their coping tasks and related strategies as clinical events such as diagnosis, side-effects or death occur. This process of adaptation is dynamic and consists of five components: confronting treatment, maintaining family integrity, establishing support, maintaining emotional wellbeing and searching for spiritual meaning (Fervers et al., 2011).

In respect to the cultural and spiritual meaning of life, populations of the Middle Eastern region have a far more philosophical approach to life and death than do many Westerners (Iranmanesh et al., 2009). Muslims believe that the present life is a trial in preparation for the next realm of existence. The Quran states that this life is a preparation for the eternal life after death. The Quran discusses the importance of accepting any difficulty as a way to test the patience of the believers and those who bear the difficulties will be rewarded. Muslim people also believe that the cure and treatment for any disease is in the hands of God and that the health-care professionals are only tools in the hands of God. This attitude enables most of the people to accept diagnosis and treatment of cancer with less anxiety, especially when many of the cancers that were formerly considered universally fatal are now entirely curable (Eapen & Revesz, 2003).

Therefore, breast-cancer survivors have moderate levels of uncertainty, which increases in the presence of other diseases. The assumption here is that when women are diagnosed early, they will be able to challenge the feeling of uncertainty due to the higher chances of surviving and with the presence of social support.

2.6 Breast Cancer and Culture
Hall et al. (2007) conducted a study to determine the effectiveness of a multifaceted, culturally sensitive and linguistically appropriate breast-cancer education program for Hispanic women. The study was carried out in the parish hall of a local Roman Catholic Church in north-eastern Arkansas, USA. The sample consisted of 31 Hispanic women aged 25–56 years. The experimental group received a multifaceted, culturally sensitive and linguistically appropriate breast-cancer education program; the control group received general health information. Both groups completed the breast-cancer knowledge test and breast-cancer screening brief scales so that the researchers could measure dependent variables. Data were analysed with t-tests. The experimental group scored significantly higher on the breast-cancer knowledge test than did the control group. The control group scored significantly higher than the experimental group on the barriers to mammography scale and the benefits of breast self-examination scale of the breast-cancer screening brief scale. Education may change the knowledge and beliefs of Hispanic women about breast cancer.

Such nursing programs should focus on helping Hispanic women understand their personal risks related to breast cancer and reduce barriers they perceive to early screening and detection. This study has several limitations. First, the term ‘Hispanic’ refers to a number of diverse subpopulations. Whether the findings of the study would generalise to Hispanic women of different backgrounds is unknown. In addition, the sample was a convenience sample of women willing to attend an advertised intervention at a local church. Second, although knowledge and beliefs can be predictors of screening, actual screening behaviours were not examined. Third, although the translation of the tools showed acceptable reading levels and internal consistencies, the validity of the measurements with Hispanic populations was not evaluated. The major limitation of this study lies in the lack of randomisation and the small size of the population under study.

2.7 Breast Cancer and Religion
Several Arabic studies agreed on a clear pattern of spiritual coping by all Arab breast-cancer survivors, which implicated culture in choices of coping response (Dumit, 2010; Awadi & Ohaeri, 2009). Over 20 years ago, Pearlin (1989) argued that coping is ‘of sociological interest because important elements of coping may be learnt from one’s membership and reference groups in the same ways as other behaviours are leaned and internalized’ (p. 250).

Coward and Kahn (2004) conducted a study to describe the experience of restoring and maintaining spiritual equilibrium over a fourteen-month period by newly diagnosed women with breast cancer. A longitudinal design and phenomenological approach were used with a subset of women from a quasi-experimental pilot study. Ten women were initially recruited, one to five months from diagnosis. Five participants attended an eight-week, self-transcendence theory-based breast-cancer support group. Audio-taped interviews were conducted within five months of diagnosis, two to three months later and one year after that. Narratives were analysed using Colaizzi’s phenomenological procedural-steps approach. Spiritual-disequilibrium characteristics, as described in several studies of women with breast cancer, were fear of dying and a sense of aloneness in a struggle to maintain self-identity. Disequilibrium triggered all participants to reach outwardly for information and support from other people and faith resources and to reach inwardly to examine life values. Shortly after diagnosis, and continuing throughout the study period, most participants also reached outwardly to support others and conduct breast-cancer advocacy work. Resolving spiritual disequilibrium for women with newly diagnosed breast cancer means restoring a sense of connection to self, others or to a higher power. Self-transcendence views and behaviours evolving over time help women to restore their sense of connectedness, to maintain hope for the future and to find renewed purpose and meaning.

Although each woman’s breast-cancer experience is unique, other women do share similar concerns. Sharing experiences related to breast cancer not only helps women to normalise their experience but also provides them with opportunities to assist others to achieve better spiritual and physical outcomes.
The management of emotional distress following a breast-cancer diagnosis may well be analysed within coping research (Avis, Crawford & Manuel, 2005). Nevertheless, little is known about what happens when the treatment is over and patients are expected to have recovered. Suffering owing to breast cancer, related to physical, psychological, social and existential issues needs to be observed, assessed and documented. Health-care providers need to disclose needs, identify attitudes and provide a deeper understanding of women’s requirements and expectations regarding development of health-care services.

Following this review of the literature, several gaps in existing knowledge regarding the coping mechanisms of Arab women with breast cancer have been identified. Specifically, this study will explore the following areas:

- Most of the studies in the Arab countries had very small samples, hence lessened generalisability. The sample size in the current study exceeded 250 participants in the quantitative phase and 20 participants in the qualitative phase.
- Lack of qualitative data to provide context. Hence, the mixed-method used in the current study will enrich the data with reliable information about the coping patterns used by Arab women with breast cancer.
- No studies were found investigating coping patterns. Hence, the current study is the first one exploring the coping patterns used by Arab women living in the UAE.
- Lack of subpopulation ethnic grouping. Hence, this study compares the different coping patterns adopted by Arab women from different Arab countries.
- No previous study has examined the effect of family support in helping Arab women to overcome their feelings of uncertainty after being diagnosed with breast cancer.

2.8 Summary
This chapter presented an explanation of the search strategy followed by the presentation of the women’s status and prevalent health beliefs in the UAE. The incidence of cancer in the UAE was examined with a specific reference to breast cancer in the UAE. The primary role of Arab women in their families was discussed and the effect of illness, specifically breast cancer, on the development of the family was explored.

The relationship between breast cancer and uncertainty was explored; in particular, the relationship between breast cancer and culture. Most of the studies emphasised the importance of receiving a multifaceted, culturally sensitive and linguistically appropriate breast-cancer education program. Finally, in respect to the Arab world, the relationship between breast cancer and religion reflected the centrality of faith in an Islamic society when confronted with a disease. At the end of the chapter, an identification of the gaps in the existing knowledge was revealed, and the researcher explained the main areas of focus in the current study. The next chapter will examine frequently cited models of coping in order to identify the most applicable theoretical framework.
Chapter 3: Conceptual Framework

The aim of this chapter is to critique the current theoretical models of coping in order to locate the research problem within a broader conceptual framework. The evolution of coping theory, the barriers to coping and strategies used in implementing the coping patterns are discussed. The application of the theoretical frameworks to health services studies is reviewed in light of social, cultural, and familial influences on women. Few studies were conducted in the Gulf region that have utilised the theoretical frameworks for cancer and coping strategies, but the researcher found no studies that have examined from a theoretical perspective the coping patterns of Arab women with breast cancer who are living in the United Arab Emirates.

The chapter aims to review the subjects listed below:

- 3.1 Concept of Coping
- 3.2 Coping Models
  - 3.2.1 Lazarus’s Coping Model
  - 3.2.2 Antonovsky’s Salutogenic Model
  - 3.2.3 Trans-Theoretical Model of Change
  - 3.2.4 Adaptation Model
- 3.3 Uncertainty in Illness Theory
- 3.4 The Theory of Illness Trajectory
- 3.5 Health-Belief Model
- 3.6 Theoretical Framework
- 3.7 Conceptual Framework

Over the past half-century, psychologists, clinical investigators and scholars have developed and refined theoretical frameworks for the concept of coping with crises. A large body of work is evident that examines the adequacy and applicability of such
models. Much of the work however, has focused on individuals suffering from chronic non-malignant diseases as their primary condition (for example: coping with diabetes, coping with hypertension and coping with cardiovascular diseases). In contrast, the experience of coping with uncertainty posed by cancer in term of self- identity and change in body image remains a prevalent yet relatively untapped phenomenon, despite the widespread implications and its potential to compound distress and isolation (Helms, O’hea & Corso, 2008). In respect to coping with cancer, little is known about the complexity of coping patterns and theoretical relationship to isolation, depression and feelings of uncertainty (Avis et al., 2005).

In order to identify the most appropriate framework for this study, the researcher reviewed the psychological, sociological, nursing and allied health literature of the theories and models of coping in light of the previously identified literature and the nature of the design of the proposed study with a particular focus on culture, religion and uncertainty identified in Chapter 2.

3.1 Concept of Coping

Coping can be identified as a deliberate, planned and psychological effort to manage stressful demands (Boyd, 2008). The coping process may inhibit or override the innate urge to act. Positive coping leads to adaptation, which is characterised by a balance between health and illness, a sense of wellbeing and maximum social functioning. When the person does not cope positively, maladaptations occur that can shift the balance towards illness, a diminished self-concept and deterioration in social functioning.

3.2 Coping Models

Many theorists have critiqued coping from a variety of perspectives. In the following, the researcher included the coping theories and models that were adopted by the key international and regional research examined in chapter two.
Lazarus (1966) was instrumental in pioneering the focus on psychodynamic defence-related mechanisms and directed attention towards active-appraisal processes. Antonovsky’s salutogenic model (1979, 1987) explains that people facing major crises like breast cancer typically need to do much more than deal with the immediate problem and its emotional results. On the other hand, Rosenstock (1966) developed the health-belief model (HBM) to predict behavioural response to the treatment received by acutely or chronically ill patients. The trans-theoretical model (TTM) of change (Prochaska & Velicer, 1997)—a theoretical model of behaviour change—explains the struggles every individual passes through before getting ready to cope with a major problem. A brief review and a critique of each model are presented to inform the choice of the most applicable model to be used as the conceptual framework in this study.

3.2.1 Lazarus’s Coping Model

Lazarus and Folkman postulated a new approach to understanding stress, arguing that stress is much more complicated than a stimulus response. Lazarus and Folkman focused on the cognitive processes, defining stress as a relationship between the person and the environment that is appraised by the person as taxing or exceeding biopsychosocial resources and endangering his or her wellbeing (Lazarus, 1999; Yeager & Roberts, 2003).

Two important antecedents or precursors to the stress response are the person–environment relationship, which involves many factors, and the person’s cognitive appraisal of the risks and benefits of the situation, which mediates or moderates the interpretation of its meaning. The appraisal of the relationship determines the manifestation of stress and the potential for coping.

Stressors are demands made by the internal and external environment that upset balance, thus affecting physical and psychological wellbeing and requiring action to restore balance (Lazarus & Cohen, 1977). Beginning in the 1960s and 1970s, stress was considered to be a transactional phenomenon dependent on the meaning of the stimulus
Lazarus and Cohen’s (1977) approach to understanding coping was the notion of how the person appraises the situation. Appraisal is posited to occur when the perceiver encounters situations that are interpreted as excessive relative to the resources (i.e. stressors). In this model, a person utilises two levels of appraisal in selecting coping responses. The first level is primary appraisal, where an individual evaluates whether the situation is potentially harmful (i.e. personal injury), threatening (i.e. potential for harm), blocking of a goal, creating a void or presenting a challenge (i.e. a mastery opportunity). In other words, the person determines that something important is or is not at risk in a particular situation. This decision reflects a cognitive evaluation of the particular stressful event and how important it is to the person’s wellbeing. When the event is perceived as harmful or threatening, the individual enters into secondary appraisal, where the available resources for coping are examined. Depending on the person’s evaluation of these two cognitive-appraisal processes, the individual then decides which coping strategies to implement.

There are two types of coping: problem focused, which actually changes the person–environment relationship, and emotion focused, which changes the meaning of the situation. In problem-focused coping, the person attacks the source of stress by eliminating it or changing its effects. In emotion-focused coping, the person reinterprets the situation, reducing the stress and the need for additional coping without changing the actual person–environment relationship. There are coping strategies that satisfy the
person in more than one situation, so they become automatic and develop into patterns for that person. Some situations require a combination of strategies and activities. Ideally, a person can cope with a stressful situation by matching the resources that are needed with the events that are unfolding. The two coping functions specified by Lazarus, solving problems and managing emotions, are generally recognised to be fundamental but also to be incomplete (Compas, Banez, Malcarne & Worsham, 1991), without a consensus of opinion on how the basic coping taxonomy should be changed. It is important to include this model in the current study to identify the types of coping strategies used by the participants when faced with breast cancer.

3.2.2 Antonovsky’s Salutogenic Model

People facing major crises such as breast cancer need to do more than deal with the immediate problem and its emotional sequelae (Lee, Cohen, Edgar, Laizner & Gagnon, 2006). We live within a web of meanings that can be profoundly shaken by traumatic events and unresolved chronic problems. Antonovsky (1987) conceptualizes coping by way of a person struggling with the stresses of everyday.

Antonovsky’s salutogenic model (1987) was designed to advance understanding of the relationship between stressors, coping and health, with the aim of explaining how some individuals remain healthy despite stressors in their everyday life. Antonovsky’s model highlights the inadequacy of pathogenic explanatory factors and concentrates on the adaptive coping mechanisms underscoring the movement to the healthy end of the stressful event. Antonovsky proposed that generalised resistance resources (wealth, ego strength, cultural stability, social support) can promote a sense of coherence, which is central to people’s ability to cope with stress. Antonovsky defines the sense of coherence as:

a global orientation that expresses the extent to which one has a pervasive, enduring through dynamic feeling of confidence that (1) the stimuli deriving from one’s internal and external environments in the course of living are structured, predictable, and explicable; (2) the resources are available to one to meet the demands posed by these stimuli; and (3) these demands are challenges, worthy of investment and engagement. (Antonovsky, 1987, p. 19)
Antonovsky describes the substantive structure of the sense of coherence as comprising three components: comprehensibility, manageability and meaningfulness. These develop as people’s experiences are influenced by consistency, balancing underload–overload and shaping outcomes, respectively. Unlike concepts such as locus of control, self-efficacy and problem-oriented coping, the sense of the coherence model is intended to be a construct that is universally meaningful and cuts across divisions of gender, social class, religion and culture. The salutogenic model recognises that optimal functioning requires social stability, rewarding occupations and freedom from anxiety, stress and persecution. The salutogenic model stresses health as a balance: ‘an ecological process, within and without the individual’ (Tolsma & Kaplan, 1993, p. 703).

Antonovsky (1996) conducted a study that provided a critical examination of the challenges facing the field of health promotion. The research reported that the salutogenic model is useful for all fields of health care; however, it is particularly appropriate to health promotion. As a sociologist, Antonovsky focused on the impact of social conditions on people’s health in a society. Antonovsky explicitly pointed out the responsibility of society to create conditions that induce the strength of coping. Antonovsky eventually considered that it was not a question about the free choice of the person to cope well, but that the key to coping was embedded in society and in people who care about each other. Antonovsky’s model is crucial to include in the current study as the impact of society is very powerful in the Arab world and hence it would affect the way women with breast cancer choose their coping strategies.

3.2.3 Trans-Theoretical Model of Change

The Trans-theoretical Model of Change (TTM) (Prochaska & DiClemente, 1983; Prochaska, DiClemente & Norcross, 1992; Prochaska & Velicer, 1997) is an integrative model of behaviour change. The model describes how people modify problem behaviours or acquire positive behaviours. The central organising construct of the model are the stages of change. The model also includes a series of independent variables—the processes of change—and a series of outcome measures.
The processes of change are the covert and overt activities that people use to progress through the stages of change. These processes provide important guidelines for the intervention process, since the processes are the independent variables that people need to apply or be engaged in to be able to move from one stage to another (Prochaska & Velicer, 1997). The processes of change encompass ten cognitive and behavioural activities that facilitate change: consciousness raising, dramatic relief, environmental re-evaluation, social liberation, self-re-evaluation, stimulus control, helping relationships, counter conditioning, reinforcement management and self-liberation.

The TTM construes change as a process involving progress through a series of five stages. First, pre-contemplation is the stage in which people are not intending to take action in the foreseeable future, usually measured as the next six months. People may be in this stage because they are uninformed or under-informed about the consequences of their behaviour, or they may have tried to change a number of times and become demoralised about their inability to change. Both groups tend to avoid reading, talking or thinking about their risk behaviour. They are often characterised in other theories as resistant or unmotivated or as not ready for health-promotion programs.

Contemplation is the second stage of change in which people are intending to change in the next six months. They are more aware of the pros of changing, but are also acutely aware of the cons. This balance between the costs and the benefits of changing can produce profound ambivalence that can keep people stuck in this stage for long periods of time. We often characterise this phenomenon as chronic contemplation or behavioural procrastination.

Preparation is the third stage of change in which people are intending to take action in the immediate future, usually measured within a month. They have typically taken some significant action in the past year. These individuals have a plan of action, such as joining a health-education session, consulting a counsellor, talking to their physician, buying a self-help book or relying on a self-change approach.
The next stage of change is the action stage in which people have made specific overt modification to their lifestyles. The individual has enacted a consistent behaviour change for less than six months. Since action is observable, behaviour change has often been equated with action. Not all modifications of behaviour count as action in this model. People attain a criterion that scientists and professionals agree is sufficient to reduce risks for disease.

The action stage is also the stage where vigilance against relapse is critical. Maintenance is the fifth stage of change in which people are working to prevent relapse but they do not apply change processes as frequently as do people in action. They are less tempted to relapse and increasingly more confident that they can continue their change.

Adams and White (2004) conducted a study on European smoking prevention using the TTM. They argued that the validity of the TTM has not been established for complex health behaviours and that the application of the TTM stages of change in physical-activity promotion came with all sorts of problems. They concluded that there is no consensus on the best way to allocate people to stages of change. Furthermore, the evidence for the stage-transition determinates proposed by TTM were not very strong. Nevertheless, Adams and White mentioned that stage-targeted activity promotion interventions were more likely to induce changes in motivation as well as short-term behaviour changes.

**3.2.4 Adaptation Model**

The Roy adaptation nursing model focuses on a system approach with the person as the focus of adaptation (Roy & Andrews, 1999). Roy uses adaptation as the key concept that connects four paradigm concepts: 1) the person, 2) their health, 3) their environment, and 4) nursing. Roy views the person as an input–output adapting system in that various stimuli and adaptation levels are input with the person as a focus of adaptation and then output or the person’s ability to cope with stimuli and then respond is viewed as
behavioural and physiological in nature. These responses then circle back as feedback and as coping control processes, which, in return, influence the system. System input is divided into three categories: 1) focal stimuli, which occur immediately; 2) contextual stimuli, which are contributing factors; and 3) residual factors, which are innate or unknown.

Roy and Andrews (1999) suggest output responses are the responses to the input of the stimuli. These responses, which can be observed both internally and externally, can also be measured and subjectively reported to help the health-care provider or caregiver determine the person’s level of adaptation. The response of the person is either effective and adaptive or ineffective and non-adaptive. According to Roy and Andrew (1999), adaptive responses advance the wholeness of the person in terms of growth and survival, whereas ineffective or non-adaptive responses do not.

The coping process, as defined earlier, is the ability to adapt to incoming stimuli. They are innate as well as the potential to be inherited. These coping responses are automatic in that the person does not have to think about the response. Acquired coping mechanisms are developed through strategies such as learning. The experiences encountered throughout life contribute to customary responses to particular stimuli (Roy & Andrews, 1999) being deliberate and are part of a cognator subsystem. According to Roy and Andrews (1999), a cognator subsystem is defined as a major coping process involving four cognitive–emotive channels: perceptual and information processing, learning, judgment and emotion. These innate or acquired mechanisms are used to deal with a constantly changing environment. Additionally, Roy and Andrews defined the regulator subsystem as:

a major coping process involving the neutral, chemical, and endocrine systems (Roy & Andrews, 1999, p. 32). The cognator subsystem responds through cognitive-emotional paths, such as learning, memory, emotions, judgment, and coding. Coding includes the registration, consolidation, and synthesis of information. Is the person underway noticing the events and is the response within the realm of expectations under the circumstances? Is the person able to perform direct commands and is there evidence of spatial orientation? (Roy & Andrews, 1999, p. 324)
Adaptation levels of an individual are influenced by their development as well as by their ability to utilise coping mechanisms. The higher the level of adaptation an individual exhibits, the more positive their response will be to a greater variety of stimuli. An individual’s response can be observed; however, the ability to adapt with the coping mechanisms cannot. When dealing with life-threatening illness the person is faced with lots of challenges that need lots of psychological, sociological and medical efforts to face the illness. Adaptation is not enough with a life-threatening disease; on the contrary, the individual needs to learn more about the disease and to work a lot on changing their way of thinking and maybe change their lifestyle (Lee et al., 2006).

### 3.3 Uncertainty in Illness Theory

Uncertainty is the inability to determine the meaning of illness-related events, occurring when the decision maker is unable to assign definite value to objects or events, or is unable to predict outcomes accurately (Mishel, 1999). Mishel’s original uncertainty in illness theory drew from existing information-processing models and personality research from the psychology. In this typology they characterised uncertainty as a cognitive state resulting from insufficient cues with which to form a cognitive schema or internal representation of a situation or event (Marriner, Tommy & Alligood, 2006). Michel attributes the underlying stress-appraisal–coping-adaptation framework to be based on the original theory of Lazarus and Folkman (1984). The unique aspect was her application of this framework to uncertainty as a stressor in the context of illness, which made the framework particularly meaningful for nursing.

Mishel’s original uncertainty in illness theory included several major assumptions. The first two reflect how uncertainty was conceptualised originally within the psychology discipline’s information-processing models. First, uncertainty is a cognitive state, representing the inadequacy of an existing cognitive schema to support the interpretation of illness-related events. Moreover, uncertainty is an inherently neutral experience that is neither desirable nor aversive until it is appraised as such. The next two assumptions reflect the uncertainty theory’s roots in traditional stress and coping models, which posit
a linear stress–coping–adaptation relationship. Then, adaptation represents the continuity of an individual’s usual bio-psychosocial behaviour. It can be characterized as the desired outcome of coping efforts to either reduce uncertainty appraised as danger or maintain uncertainty appraised as opportunity. Finally, the relationships among illness events, uncertainty, appraisal, coping and adaptations contended to be linear and unidirectional, moving from situations promoting uncertainty towards adaptation.

Dissatisfied with the traditional linear models that informed the original theory, Mishel turned to the more dynamic chaos theory to explain how prolonged uncertainty could function as a catalyst to change a person’s perspective on life and illness. Chaos theory contributed two of the following theoretical assumptions, which replace the linear stress–coping–adaptation outcome portion of the model. First, people, as bio-psychosocial systems, typically function in a disequilibrium state. Secondly, major fluctuations in a far-from-equilibrium system enhance the system’s receptivity to change. Finally, fluctuations result in re-patterning, which is repeated at each level of the system.

In Michel’s reconceptualised model, neither the antecedents to uncertainty nor the processes of cognitive appraisal of uncertainty act as danger or opportunity changes. However, uncertainty over time, associated with serious illness, functions as a catalyst for fluctuation in the system by threatening one’s pre-existing cognitive model of life as predictable and controllable. Because uncertainty due to cancer pervades nearly every aspect of a person’s life, its effect becomes concentrated and ultimately challenges the stability of the system. This is in response to the confusion and disorganisation created by continued uncertainty, the system ultimately must change in order to survive.

Ideally, under conditions of chronic uncertainty, such as cancer, a person gradually moves away from an evaluation of uncertainty as aversive to adopt a new view of life that accepts uncertainty as a part of reality. Thus uncertainty, especially in chronic or life-threatening illness such as breast cancer, can result in a new level of organisation
and a new perspective on life, incorporating the growth and change that can result from uncertain experiences.

Most empirical studies have focused predominantly on two of the antecedents of uncertainty—stimuli frame and structure providers—and the relationship between uncertainty and psychological outcomes. These studies have shown that objective or subjective indicators of the severity of life-threat or illness symptoms were associated positively with uncertainty (Grootenhuis & Last, 1997; Loerzel, McNees, Powel, Su & Meneses, 2008). Across a sustained illness trajectory, unpredictability in symptom onset, duration and intensity have been related to perceived uncertainty (Brown & Powell-Cope, 1991; Murray, 1993). Similarly, the ambiguous nature of illness symptoms and the consequent difficulty in determining the significance of physical sensations have frequently been identified by women with breast cancer as sources of uncertainty (Nelson, 1996). Ben-Zur, Gilbar and Lev (2001) found that social support had a direct impact on uncertainty by reducing perceived complexity and an indirect impact through its effect on the predictability of symptom patterns.

Numerous studies have reported the negative impact of uncertainty on psychological outcome, characterised variously as anxiety, depression, hopelessness and psychological distress (Badger, Braden, Mishel & Longman, 2004; Badger, Braden & Mishel, 2001; Bradger, Braden, Longman & Mishel, 1999). Uncertainty has also been shown to negatively impact QOL (Braden, 1990; Padilla, Mishel & Grant, 1992), satisfaction with family relationships (Ben-Zur et al., 2001) and satisfaction with health-care services (Nambayan, 1997; Green & Murton, 1996).

Mishel (2001) contends that the feeling of uncertainty may not be resolved with time but become part of the individual with chronic-disease reality. In this context, uncertainty is reappraised as an opportunity and prompts the formation of a new probabilistic view of life. To adopt this new view of life, the patient must be able to rely on social resources and health-care providers who themselves accept the idea of probabilistic thinking. The process of formulating a new view of life has been described by women with breast
cancer as a revised life perspective, new life goals (Carter, 1993), new ways of being in this world (Nelson, 1996) and new levels of self-organisation (Pelusi, 1997).

Mishel and her colleagues have used the original theory as the framework increasing cancer knowledge, reducing symptom burden and improving QOL in Mexican-American, white and African-American women with breast cancer (Gil et al., 2004). In this theory the relationship between the health-care provider and the patient must focus on recognising continual uncertainty and teaching patient how to use the uncertainty to generate different explanations for events.

3.4 The Theory of Illness Trajectory

Being ill creates a disruption in aspects of life; including physiological functioning, social interactions and the conceptions of self. Coping is the response to such disruption. Although coping with illness has been of interest to social scientists and nursing scholars for decades, Wiener and Dodd (1993) clearly explicate that formerly implicit theoretical assumptions have limited the utility in illness explanations. This is because as the processes surrounding the disruption of illness are played out in the context of living, a additional contention is that coping responses are inherently situated in sociological interactions with others, and biographical interactions with others and biographical processes of self. The complex interplay of physiological disruption, interactions with others and the contraction of biographical conceptions of the self-warrant a more sophisticated perspective of coping than identifying a compendium of strategies used to manage the disruption. Furthermore, Wiener and Dodd (1993) argue that attempting to isolate specific responses to one event that is lived within the complexity of life context or assigning value labels (e.g. good or bad) to the responsive behaviours that are described collectively as coping.

The theory of illness trajectory addresses these theoretical pitfalls by framing this phenomenon within a sociological perspective of a trajectory that emphasises the experience of disruption related to illness within the changing contexts of interactional
and sociological processes that ultimately influence the person’s response to such disruption. This theoretical approach defines this theory’s significant contribution to nursing: coping is not a simple stimulus–response phenomenon that can be isolated from the complex context of life. As life is centred in the living body, the physiological disruptions of illness permeate other life contexts to create a new way of being, a new sense of self. Responses to the disruptions caused by illness are interwoven into the various contexts encountered in one’s life and the interactions with other players in those life situations.

From this perspective, coping is best viewed as change over time that is highly variable in relation to biographical and sociological influences. The trajectory is this course of change, of variability, that cannot be confined to or modelled in linear phases or stages. Rather, the trajectory of illness organises insight to better understand the dynamic interplay of the disruption of illness within the changing contexts of life. Within such a sociological framework, Wiener and Dodd address serious concerns regarding the conceptual over-attribution of the role of uncertainty in the frame of understanding responses to living with disruptions of illness (Wiener & Dodd, 1993). The trajectory of illness is driven by the illness experience lived within contexts that are inherently uncertain and involve both the self and others. The dynamic flow of life contexts creates a dynamic flow of uncertainties that take on different forms, meanings and combinations when living with chronic illness. Thus, tolerating uncertainty is a critical theoretical stand in the illness-trajectory theory.

The theory has been referenced in a limited number of concept analyses or state-of-the-science papers addressing uncertainty (McCormick, 2002; Mishel, 1997; Parry, 2003). Mishel (1997) has praised the broad theoretical focus maintained through the qualitative approach to theory derivation. Much of the work in coping with illness is constrained by the application of Lazarus and Folkman’s framework of problem-based or emotion-based coping; however, the theory of illness trajectory using inductive reasoning produced a data-based theory that identifies a broad range of strategies related to tolerating and abating uncertainty (Lazarus & Folkman, 1984; Mishel, 1997). Oberst
(1993) argued that the delimitation of the concept of uncertainty to loss of control. This criticism has been echoed by McCormick (2002), who theoretically positions loss of control as a component in the uncertainty cycle, rather than as a manifestation of a state of uncertainty. Other researchers have criticised the implicit assertion that uncertainty (or loss of control) is always a negative event that requires some form of abatement (Oberst, 1993; Parry, 2003). Oberst (1993) suggests that further investigation is needed to differentiate work that is related to tolerating uncertainty from abatement work in order to reveal how effective strategies in each type of work affect the sense of uncertainty throughout the trajectory. Parry (2003) studied survivors of childhood cancer and revealed that although uncertain states may be problematic stressors for some, a more universal theme of embracing uncertainty towards transformational growth was evident in these survivors.

3.5 Health-Belief Model

The HBM is by far the most commonly used theory in health education and health promotion (Weitkunat et al., 2003; Wallace, 2002). It was developed in the 1950s as a way to explain why screening programs offered by the public-health service, particularly for tuberculosis, were not very successful. Reviews of research with the HBM across a wide range of health behaviours indicate that the four dimensions are able to provide consistent, though weak predictions of health behaviour (Harrison, Mullen & Green, 1992; Janz & Becker, 1984; Sheeran & Abraham, 1996).

The HBM was a psychological model developed by Rosenstock in 1966 for studying and promoting the uptake of health services offered by social psychologists. This model was further developed by Becker and colleagues in the 1970s and 1980s. Subsequent amendments to the model were made as late as 1988, to accommodate evolving evidence generated within the health community about the role that knowledge and perceptions play in personal responsibility. Originally, the model was designed to predict behavioural response to the treatment received by acutely or chronically ill
patients, but in more recent years the model has been used to predict more general health behaviours.

The original HBM, constructed by Rosenstock (1966), was based on four constructs of the core beliefs of individuals based on their perceptions: (1) perceived susceptibility—an individual’s assessment of their risk of getting the condition; (2) perceived severity—an individual’s assessment of the seriousness of the condition and its potential consequences; (3) perceived barriers—an individual’s assessment of the influences that facilitate or discourage adoption of the promoted behaviour; and (4) perceived benefits—an individual’s assessment of the positive consequences of adopting the behaviour.

Constructs of mediating factors were later added to connect the various types of perceptions with the predicted health behaviour:

- Demographic variables such as age, gender, ethnicity and occupation; socio-psychological variables such as social economic status, personality and coping strategies.
- Perceived efficacy, which is an individual’s self-assessment of their ability to successfully adopt the desired behavior.
- Health motivation—whether an individual is driven to stick to a given health goal.
- Perceived control—a measure of level of self-efficacy.
- Perceived threat—whether the danger imposed by not undertaking a certain health action that has been recommended is great.

The HBM has been used extensively to organise theoretical predictors of preventive health actions including individual perceptions of disease, individual perceptions of preventive actions and modifying factors such as social, demographic and structural characteristics. More recently, other constructs have been added to the HBM; thus, the model has been expanded to include cues to action, motivating factor, and self-efficacy.
HBM consists of four perceptions that serve as the main constructs of the model: perceived seriousness, perceived susceptibility, perceived benefits and perceived barriers. Each of these perceptions, individually or in combination, can be used to explain health behaviour. More recently, other constructs have been added to the HBM; thus, the model has been expanded to include cues to action, motivating factors and self-efficacy.

Breast cancer is considered a fatal disease and commonly associated with death and dying (Denic & Al-Gazali, 2003). Perceived susceptibility motivates people to do mammograms (Steel, Cohen & Porter, 1992). According to HBM, when individuals are faced with a potential threat to their health they consider their susceptibility to, and the severity of the health threat. For example, those women who perceive themselves to be susceptible to breast cancer and believe it to be a serious disease will be motivated to take action against the health threat. For example, women who believe that performing breast self-exam has many benefits and few barriers are most likely to engage in regular breast self-examination.

It is only logical that when people believe they are at risk of a disease, they will be more likely to do something to prevent it from happening. Unfortunately, the opposite also occurs in that when people believe they are not at risk or have a low risk of susceptibility, risky screening behaviours tend to result. This is exactly what has been found with early detection of breast cancer. For example, women with a family history of breast cancer are more competent in performing regular mammograms than women with a negative family history (Remennick, 2006).

While the HBM contend that perception of increased susceptibility or risk is linked to healthier behaviours and decreased susceptibility to unhealthy behaviour. In breast cancer, perception of susceptibility is rarely linked to the adoption of healthier behaviour, even when the perception of risk is high. For example, Arab women with a positive history of breast cancer do not perform monthly self-breast exams and they still
present late to the doctors for examination of existing lumps (El-Helal, Bener & Galadari, 1997).

In order for new coping behaviours to be adopted, a person needs to believe that the benefits of the new coping behaviour outweigh the consequences of continuing the old coping behaviour (Center for Disease Control and Prevention, 2004). This enables barriers to be overcome and the new coping behaviour to be adopted.

The constructs of this model suggest that the threat of breast cancer would motivate the adoption of this early detection practices yet the barriers to performing breast self-examination exert a greater influence over the behaviour than does the threat of the cancer itself (Umeh & Rogan-Gibson, 2001). Some of these barriers include difficulty with starting a new behaviour or developing a new habit, fear of not being able to perform breast self-examination correctly, having to give up things in order to do breast self-examination and embarrassment (Umeh & Rogan-Gibson, 2001).

As outlined previously, HBM is the most commonly used explanatory theory in health education and health promotion. As little is known about the nature of the coping patterns adopted by the Arab women suffering from breast cancer, the researcher needed a model that encompassed the multiple complexities as social, familial, and cultural levels that were available to accommodate the type of coping patterns used by Arab women after being diagnosed with breast cancer and how this information could be used for health education programs.

### 3.6 Theoretical Framework

After reviewing all the coping-pattern-related models, it became clear that the beginning of the twentieth century featured an understanding of health that was dominated by a biomedical perspective, characterised by a reductionist point of view in which health was defined as the absence of illness. This view has long been replaced by a biopsychosocial model that emphasised the role played by socio-cultural forces in the
shaping of health (and illness) and related psychological experiences (Engel, 1977). In 1948, the WHO defined health as a complete state of physical, mental and social wellbeing and not merely the absence of disease or infirmity, calling attention to the complexity and multidimensionality of the concept. Adding social wellbeing to the definition opened the way to conceptualising the individual as a social being, with health being about more than merely physiological aspects.

This shift in the definition of health and the factors responsible for disease prevention and health promotion is mirrored by a shift in the study of health and illness to be inclusive of disciplines such as psychology. In more recent psychological approaches to health and illness, individuals are increasingly viewed as a part of a larger network of forces, significantly influenced by their socio-cultural environments (Helman, 2007; Gurung, 2010).

In the years since the early 1980s, coping has been characterised as a complex, multidimensional process that is sensitive both to the environment, and its demands and resources, and to personality dispositions that influence the appraisal of stress and resources for coping. It is found that certain kinds of escapist coping strategies are consistently associated with poor mental health outcomes, while other kinds of coping—such as the seeking of social support or instrumental, problem-focused forms of coping—are sometimes associated with negative outcomes, sometimes with positive outcomes, and sometimes with neither, usually depending on characteristics of the appraised stressful encounter (Hagedoorn et al., 2008)

Despite the substantial gains that have been made in understanding coping per se, it seems only to have minimally addressed the complex ways in which coping actually affects psychological, physiological, and behavioural outcomes both in the short-and the longer term. Coping is embedded in a complex, dynamic stress process that involves the person, the environment, and the relationship between them.
An important motivation for studying coping is the belief that within a given culture certain ways of coping are more or less effective in promoting emotional well-being and addressing problems causing distress. A further contention is that information can be used to design interventions to help people cope more effectively with the stress in their lives. Despite the reasonableness of this expectation, the issue of determining coping effectiveness remains one of the most perplexing in coping research (Somerfield & McCrae, 2000).

The contextual approach to coping that guides much coping research states explicitly that coping processes cannot be classified as inherently positive or negative (Lazarus & Folkman, 1984). Instead, the adaptive qualities of coping processes need to be evaluated in the specific stressful context in which they occur. A given coping process may be effective in one situation but not in another, depending, for example, on the extent to which the situation is controllable. Furthermore, the context of coping is dynamic, so that what might be considered effective coping at the outset of a stressful situation may be deemed ineffective later in an illness trajectory.

This study aims to describe the coping patterns of Arab women living in the UAE after suffering from breast cancer. After a review of a number of models on coping and adaptation from the psychological, and health nursing literatures Lazarus’ coping model appeared the most systematic framework to capture the dynamics of coping within an Arabic culture. Lazarus conceived a stressful encounter as a person–environment transactional process, with two ways of gathering information—trying to answer the questions ‘What is at stake?’ (primary appraisal) and ‘What can be done about it?’ (secondary appraisal)—and two ways of trying to manage the problem, eliminating or reducing the source of stress (problem-focus coping) and calming upset feelings (emotion-focus coping) (Lazarus, 1993). The two coping functions specified by Lazarus, solving problems and managing emotions, are fundamental but also incomplete without taking into consideration the effect of two main resources—the psychological resources as well as the social resources. Both resources are affected by the social status informed by the cultural process.
The dominant theoretical framework used in coping research has typically approached coping processes from an individualistic perspective. Within this framework, a breast cancer survivor’s coping responses are conditioned by the woman’s evaluation of the threat posed by the stressor as well as her perception of the availability of psychological and social resources necessary to meet the threat (Lazarus, 1993). The presumption in this model is that individuals are activist who operate independently of one another and are capable of exerting influence on their environment (Dunahoo et al., 1998; Riger, 1993; Thoits, 1995).

Women live within a social networks, and in the Arab world, this network consists of numerous kinship and familial linkages among a defined set of people with whom there are interpersonal connection. Arab women then develop and maintain their social identity within this social network (Majer, et al., 2002; Moran, 2001). Thus Arab women, as do women elsewhere, require emotional support, spousal support, services, information, and new social contacts within this framework. A social network can increase a person’s resources, enhance the ability to cope with change, and influence the course of illness (Jones & Jonston, 2000). Social network is the structure within which the social support occurs. Social support serves three functions; first emotional support contributes to a person’s feelings of being cared for or loved; second, tangible support provides a person with additional resources; and third, informational support helps a person view situations in a new light (Schaefer, Coyne & Lazarus, 1982).

Ample research evidence indicates that social support enhances health outcomes and reduces mortality. It also helps people make needed behaviour changes (Taleghani, Yekta, & Narsrabadi, 2006; Henderson et al., 2003; Coyne, & Borbasi, 2009; Morgan et al., 2005). There is a link between psychological and physical health because when there is social support, a research reports women to feel valued, and in personal control, which is in turn may help reduce the “fight-or-flight” response and strengthen the immune system (Al Dwin, 2007). Social support also either directly or indirectly buffers stressful life events in two ways. First during stressful events, network members collect and analyse information, offer guidance, and help the person under stress interpret the world.
Second, by treating the person under stress as a unique, special human being, members of the social network provide comfort and a sanctuary or place of refuge.

Moreover, religious coping has received little attention in all models reviewed above. Religious coping literature is spurred in part by evidence that religion plays an important role in the entire stress process, ranging from its influence on the ways in which people appraise events to its influence on the ways in which they respond psychologically and physically to these events over the long term (Seybold & Hill, 2001). Religion is utilized specifically to help cope with the immediate demands of stressful events, especially to help find the strength to endure and to find purpose and meaning in circumstances that can challenge the most fundamental beliefs.

The recent interest in religious coping has been fuelled by increasing evidence that religious involvement affects mental and physical health (Seybold & Hill, 2001). Religious involvement is not synonymous with religious coping. Religious involvement can be a part of an individual’s life independent of stress in that person’s life. However, some people do become involved with religion as a way of coping with stress.

Little consideration has been given to the direct effect of social or religious influences on an individual’s appraisal of a stressor or her subsequent selection of coping pattern. Therefore, after reviewing the literature related to breast cancer and the coping patterns adopted by women suffering from this disease, additional themes were evident missing from the reviewed models. These were the centrality of body image, issues of uncertainty, and the influence of culture and religion. These themes affirmed the need for a conceptual framework that drew primarily on Lazarus’s coping model with the role of the environment that allowed social and cultural constructs to be present including the influence of social and psychological influence of perceptions of body image. This model and adaptations enabled personal modification as a means of coping and cultural variations as well as kinship influences in the unique Arab cultural context. A more detailed application of this framework will be presented in chapter seven where the results of the study will be critiqued against the theoretical framework.
In summary, the theoretical framework will draw on coping and key theoretical assumptions form: social, cultural, and religious influences are viewed as factors that affect Arab breast cancer survivors’ coping decisions-making processes and thereby impact on psychology and social coping resource (See Figure 3.1).

3.7 The Proposed Conceptual Framework

![Diagram of the conceptual framework for the study adopted from Lazarus (2001)]

3.8 Summary

This chapter has attempted to provide a critical review of relevant theories of coping with stress related to illness. Specifically, theories were chosen that were derived from the literature review presented in Chapter two. Because no single existing theoretical model could explain the complexity of the dynamic relationships between culture, religion, ethnicity and illness and the feelings of uncertainty, therefore, the conceptual
framework as above guides the design and will be further critiqued in the research results in chapter seven.
Chapter 4: Methodology

The aim of this chapter is to outline the methodology, data collection and discussion of the research techniques. This chapter also serves to explore the sample size, coding techniques, style of interview and methods adopted to analyse and transcribe data. The chapter aims to discuss in the following order the subjects listed below:

- 4.1 Introduction
- 4.2 Research Hypotheses
- 4.3 Research Methodology
- 4.4 Sample Size
- 4.5 Inclusive Criteria
- 4.6. Exclusive Criteria
- 4.7 Data-Collection Tools
  - 4.7.1 Phase One
  - 4.7.2 Phase Two
  - 4.7.3 Pilot Study
- 4.8 Data Analysis
  - 4.8.1 Phase One
  - 4.8.2 Phase Two
- 4.9 Summary

4.1 Introduction

The aim of this study is to examine the coping patterns of Arab women living in the UAE post-diagnosis of breast cancer.

The objectives of this study are:
1. To identify the current self-care practices of the Arab women living in the UAE post-diagnosis of breast cancer.
2. To examine their coping patterns after being diagnosed with breast cancer.
3. To compare the coping patterns of Arab women of different nationalities living in the UAE.
4. To recommend a culturally specific breast-cancer health-education program tailored to suit specific subgroups of Arab women living in the UAE.

4.2 Research Hypotheses

Following through the literature review related to women with breast cancer, the researcher developed the following hypotheses:

1. Younger Arab women (aged less than 50 years) with breast cancer will have different coping patterns than older Arab women (aged more than 50 years).
2. There is a difference in coping patterns between Arab women who are university graduates and Arab women who are high-school graduates.
3. There is a different coping pattern between women from the UAE and women from other Arab countries.
4. Married Arab women have different coping patterns than non-married (single, divorced or widowed) Arab women.
5. Unemployed Arab women have different coping patterns than Arab women who were employed before or after diagnosis.
6. Arab women with a positive family history of breast cancer have different coping patterns than Arab women with a negative family history of breast cancer.
7. Arab women with children younger than ten years old have different coping patterns than Arab women with children older than ten years old.
4.3 Research Methodology

This study utilised a two-phase descriptive survey design followed by a qualitative phenomenological approach comprising of a mixed-method approach. A mixed-method approach was employed by the researcher to enable a detailed and specific understanding of the variables of interest and to capture the complexity of the relationships that exist among them (Polit & Tatano, 2006). The dichotomy between quantitative and qualitative data represents a key methodological distinction in the social, behavioural and health sciences. Some argue that the paradigms that underpin qualitative and quantitative research are fundamentally incompatible. However, others believe that many areas of inquiry can be enriched and the evidence base enhanced through the judicious blending of qualitative and quantitative data (Polit & Tatano, 2006). One advantage of an integrated design is that qualitative and quantitative data represent words and numbers—the two fundamental languages of human communication. The strengths and weaknesses and associated methods of these two types of data are complementary. By using multiple methods, researchers can allow each method to do what it does best, possibly avoiding the limitations of a single approach. Moreover, when a model is supported by multiple and complementary types of data, researchers can be more confident about the validity of their results. Quantitative methods can demonstrate that variables are systematically related but may fail to provide insights about why they are related. When a study integrates qualitative and quantitative data, the researcher may be in a stronger position to derive meaning immediately from the statistical findings.

The scope, nature and impact of coping strategies among a community-based sample of women with breast cancer were investigated through a descriptive, exploratory design utilising a questionnaire and focused individual interviews. A pilot study was initially undertaken in order to assess issues arising from the constructions and components of the questionnaire and the interviews.
This descriptive, retrospective, explorative two-stage research project will investigate
the coping patterns of a cohort of 250 Arab women living in the UAE diagnosed with
breast cancer. The purpose of descriptive research is to observe, describe and document
the contemporary situation (Polit & Beck, 2006). Descriptive and exploratory designs
search for information useful to improve health-care characteristics of Arab women
suffering with breast cancer, particularly when little is known about the phenomena
under study (LoBiond-Wood & Smith, 1998).

Retrospective design was used to observe a phenomenon in the present that is linked to
phenomena occurring in the past. It is important to collect data about the resources that
Arab women with breast cancer use; hence, in phase one of this research, the
questionnaire elicited information on coping strategies and mechanisms of Arab women
after the completion of their curative treatment. Phase two used a qualitative research
method to enable a richer analysis of the exploration of the participants’ feelings and
emotions that might not otherwise be possible using only the highly structured
questionnaire.

4.4 Sample Size

A convenience sample of 250 adult (eighteen years and over) Arab women diagnosed
with breast cancer were recruited from the UAE National Breast Cancer Registry from
2005–2009. Systematic sampling design was applied in such a way that essentially the
sample was subsequently drawn.

One-thousand five-hundred Arab women were selected from the registered women in
the Breast Cancer Registry who met the eligibility criteria of the study. They were adult
women with Arabic nationality living in the UAE, not receiving cancer treatment at the
time of data collection and able to write and speak English in order to be able to answer
the questionnaire.
The size of the population was divided by 250, which is the desired sample, to obtain the sampling interval width. The sampling interval was six (every other sixth woman) in order to achieve the 250 participants. Systematic sampling conducted in this manner is essentially identical to simple sampling and often is preferable because the same results are obtained in a more convenient manner (Polit & Beck, 2006).

4.5 Inclusive Criteria

In order to meet the objectives of the study, the following eligibility criteria were formulated. All participants of the research were:

- Adult Arab women (eighteen years and over) to provide a sample of adults able to give informed consent on their own behalf.
- Diagnosed with breast cancer in the past five years, in order to exclude people without a formal diagnosis of the disease.
- Of Arab nationality living in the UAE, to define a geographical area able to be covered by the researcher within the scope of study.
- Not receiving cancer treatment at the time of data collection, to ensure respondents had adequate cognitive and emotional functioning.
- Able to write and speak English at Grade 10 level or above, in order to be able to read and complete the questionnaire and participate in the interview.

4.6 Exclusive Criteria

The researcher excluded:

- Terminally ill women who had been admitted to hospital.
- Women with serious co-morbidities such as cognitive impairment or severe psychological dysfunction that could affect their ability to complete the study.
4.7 Data-Collection Tools

The study used two instruments to obtain the data. The first was the questionnaire that consisted of two parts: demographic data and the Jalowiec coping scale (JCS) (Jalowiec, 1989). The researcher had the permission to translate the JCS to the Arabic language, but the researcher preferred to distribute the scale in English language to secure validity and reliability of the scale. So the questionnaire was in English, and all the participants could speak and write English. The second phase of this survey involved a structured interview based on the results of phase one of the study.

The instruments are explained in full detail below.

4.7.1 Phase One

4.7.1.1 Demographic Data

In order to establish the representativeness of the sample, a range of background information was obtained. Participants provided details on age, current marital status, nationality, ethnicity and completed educational level. Age was recorded in a set of five years. Four categories of marital status were recorded: single, married, divorced or widowed. Three categories of children were used: no children, children below ten years or children above ten years. The educational status for participants referred to the highest level of completed qualification attained: postgraduates, degree, diploma for those who have completed post-secondary education and training and secondary for all others.

Occupational status for all participants was categorised before illness into three sectors: home duties, self-employed or employed. The occupational status after illness was divided into three options: full-time, part-time or not working. Religion was divided into three options: Muslim, Christian or other. Four categories of monthly family income were used: less than 10,000 Dirhams (< AUS $2800), 10,000–30,000 Dirhams (AUS
$2,800–$8,200), 30,000–50,000 Dirhams (AUS $8,200–$13,600) or more than 50,000 Dirhams (> AUS $13,600).

Information about initial diagnosis and treatments were identified. Five categories were used to identify informal and formal support systems the participant had after diagnosis. Five categories were used to identify family history of cancer: ‘confirmation of disease’, ‘don’t know’, ‘type of cancer’, ‘age at diagnosis’ and ‘living/deceased’.

4.7.1.2 Jalowiec Coping Scale

To measure coping, the researchers need to consider two major aspects, namely whether coping should be conceptualised as a trait-like personality characteristic or as a state-like response to a specific stressor, and the use of special scales as opposed to situation-specific scales. Several coping scales were found such as active-coping and passive-coping scales, the wishful-thinking scale and social-support scale. The coping patterns of Arab women living in the UAE were investigated utilising the English version of the Jalowiec Coping Scale (JCS) (Jalowiec, 1987) as it turned out to be the most appropriate scale (appendix 6). Permission to use the JCS was sought and granted (appendix 7). The JCS is based on Lazarus and Folkman’s theory of stress and coping (Lazarus & Folkman, 1984; Lazarus & Folkman, 1991; Jalowiec, Murphy & Powers, 1984). The JCS measures the effectiveness of 60 coping strategies that could be employed psychologically in stressful situations. The items describe cognitive and behavioural efforts in response to stress. The strategies are grouped into eight coping styles, and were defined by Anne Jalowiec as:

- Confrontive coping style (10 items): confront the situation; face up to the problem and constructive problem-solving.
- Evasive coping style (13 items): evasive and avoidant activities are used in coping with a situation.
- Optimistic coping style (9 items): positive thinking, positive outlook and positive comparisons.
• Fatalistic coping style (4 items): pessimism, hopelessness and feeling of little control over the situation.
• Emotive coping style (5 items): expressing and releasing emotions and venting feelings.
• Palliative coping style (7 items): trying to reduce or control distress by making the person feel better.
• Supportant coping style (5 items): using support systems such as personal, professional and/or spiritual.
• Self-reliant coping style (7 items): depending on yourself rather than others in dealing with the situation.

Item responses are rated on a four-point scale from 0 (‘never used’) to 3 (‘often used’), and a scale of helpfulness from 0 (‘not helpful’) to 3 (‘very helpful’). The higher the score, the more coping effort is involved. The higher the total coping score the more the difference between coping strategies.

In designing the study, a constructive approach was employed to determine all the possible factors that could undermine the validity of inferences. Shadish, Cook and Campbell (2002) define validity in the context of research design as ‘the approximate truth of an inference’ (p. 34). Threats to validity are reasons that an inference could be wrong. When researchers can anticipate potential threats to validity and then introduce design features to eliminate or minimise these threats, the validity of the inference is strengthened, and thus evidence from the study is much more persuasive (Polit & Beck, 2008). Shadish and colleagues (2002) proposed a typology of validity that identifies four different aspects of a good research design and they also catalogued dozens of threats to validity. First, statistical-conclusion validity concerns the validity of inferences that there truly is an empirical relation, or correlation between the presumed cause and the effect.

The internal validity concerns the validity of inferences that—given the existence of an empirical relationship—it is the independent variable, rather than other factors, that
cause the outcome. Here the researcher’s job is to develop strategies to rule out the possibility that something other than the presumed cause can account for the observed relationship.

Construct validity involves the validity of inferences ‘from the observed people, setting, and cause and effect operations included in the study of the constructs that these instances might represent’ (Shadish et al., 2002, p. 38). The fourth type is external validity, which indicates that inferences about the observed relationship will hold despite variations in persons, settings, time or measures of the outcomes. External validity, then, concerns the generalisability of casual inferences and this is a critical concern for research that aims to yield evidence for evidence-based nursing research.

Reliability is the degree of consistency or dependency with which the instrument measures the attribute it is designed to measure (Polit & Beck, 2006). The coping scale’s reliability has been established through many studies (Jalowiec & Murphy, 1984; Jalowiec, 1991; Jalowiec, 2003).

To test the validity of the questionnaire and the semi-structured interview on a different culture, a pilot study was first conducted to ascertain that the items contained in the questionnaire (phase one) and the semi-structured interview (phase two) were interpreted correctly by a non-English-speaking background population. More details about the study will be discussed later in the chapter. By using the semi-structured interview, it was possible to increase the accuracy of the data generated by allowing the subjects and the interviewer the opportunity to clarify points of confusion.

The JCS has previously been tested in several studies (Jalowiec et al., 1984; Jalowiec, 1991; Jalowiec, 2003). An adequate psychometric support has been established for this instrument and has been demonstrated in multiple populations. This research instrument has been tested for its reliability and validity (Homogeneity reliability: total use alpha = 0.88; total effectiveness alpha = 0.91. Stability reliability: total use score ranged from \( r \) of 0.56–0.69; stability of total effectiveness score ranged from \( r \) of 0.43–0.63) (Jalowiec,
The JCS was used to examine the women’s methods of coping with their diagnosis and stressful situations like breast and ovarian cancer, cardiac problems, as well as their perceived effectiveness of each coping method. The psychometric properties of the JCS are supported by 27 published studies from Jaloweic and other independent researchers. In the present study, the scale exhibited adequate internal consistency, falling within the reported ranges in the published literature (Table 4.1).

### Table 4.1: Internal Consistency Measures for Jalowiec Coping Use and Effectiveness Subscales and Total Scales for Arab Women Diagnosed with Breast Cancer and Living in the UAE, 2010

<table>
<thead>
<tr>
<th>Subscale/Total Scale (# of Items)</th>
<th>Prior Studies</th>
<th>Current Study</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Confrontive (10)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Use</td>
<td>0.56–0.81</td>
<td>0.77</td>
</tr>
<tr>
<td>Effectiveness</td>
<td>0.58–0.81</td>
<td>0.82</td>
</tr>
<tr>
<td><strong>Supportant (5)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Use</td>
<td>0.40–0.71</td>
<td>0.38</td>
</tr>
<tr>
<td>Effectiveness</td>
<td>0.40–0.71</td>
<td>0.38</td>
</tr>
<tr>
<td><strong>Evasive (13)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Use</td>
<td>0.49–0.80</td>
<td>0.60</td>
</tr>
<tr>
<td>Effectiveness</td>
<td>0.36–0.78</td>
<td>0.73</td>
</tr>
<tr>
<td><strong>Optimistic (9)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Use</td>
<td>0.75–0.86</td>
<td>0.82</td>
</tr>
<tr>
<td>Effectiveness</td>
<td>0.72–0.93</td>
<td>0.88</td>
</tr>
<tr>
<td><strong>Fatalistic (4)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Use</td>
<td>0.20–0.68</td>
<td>0.56</td>
</tr>
<tr>
<td>Effectiveness</td>
<td>0.45–0.69</td>
<td>0.64</td>
</tr>
<tr>
<td><strong>Emotive (5)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Use</td>
<td>0.39–0.79</td>
<td>0.56</td>
</tr>
<tr>
<td>Effectiveness</td>
<td>0.39–0.79</td>
<td>0.42</td>
</tr>
<tr>
<td><strong>Palliative (7)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Use</td>
<td>0.21–0.64</td>
<td>0.43</td>
</tr>
<tr>
<td>Effectiveness</td>
<td>0.27–0.59</td>
<td>0.56</td>
</tr>
<tr>
<td><strong>Self-Reliant</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Use</td>
<td>0.35–0.79</td>
<td>0.58</td>
</tr>
<tr>
<td>Effectiveness</td>
<td>0.39–0.89</td>
<td>0.66</td>
</tr>
<tr>
<td><strong>Total Use Score (60)</strong></td>
<td><strong>0.88–0.94</strong></td>
<td><strong>0.89</strong></td>
</tr>
<tr>
<td><strong>Total Effectiveness Scale (60)</strong></td>
<td><strong>0.81–0.96</strong></td>
<td><strong>0.93</strong></td>
</tr>
</tbody>
</table>

*Refer to (Jalowiec, 1989) for the results of other studies

The focus of this questionnaire was on the specific responses outlining how women cope with breast cancer in order to derive specific themes for further exploration in the
interviews conducted in phase two. For example, many women mentioned the importance of having a network of women who understood what it meant to live with breast cancer in the form of a support group. Due to the lack of literature related to the coping patterns adopted by Arab women who are suffering from breast cancer, the researcher decided to start the survey with the quantitative phase and then in phase two use the general information gathered from the questionnaires and test them during the interviews.

4.7.1.3 Administration Procedures

After completion of the pilot study, the questionnaires were distributed to 250 Arab women selected from the Breast Cancer Registry in the identified hospital. Initially, the researcher sent by mail the plain-language statement (appendix 5), consent form (appendix 4) and the English version of the questionnaire to the participants. The initial response rate was low, with only twenty per cent responding.

The researcher had to send the women selected a follow-up letter to encourage them to respond to the questionnaire. Due to the global economic crisis, many families left the country, so the researcher had to refer back to the Registry to further recruit potential participants until a sample of 250 was reached, which is equivalent to 100 per cent. The systematic sampling helped the researcher to achieve the 100 percent result. The researcher contacted the women who refused to participate by phone to collect and record brief information concerning the reasons behind the women’s refusal to participate in this study.

All the participants were requested to complete the questionnaire and return it in the reply-paid envelopes along with the completed invitation card for the interview. To familiarise the potential participants with the study, the researcher distributed information flyers to Arab women as they presented for their follow-up appointments in the oncology day units in the identified hospital. After receiving the ethical approval from the RMIT ethics committee (appendix 1) and the UAE ethics committee (appendix
packages were sent to the sample selected by mail that included the plain-language statement, consent form, the questionnaire, the invitation card for the face-to-face interview and the reply-paid envelopes (appendix 8).

4.7.2 Phase Two

The researcher conducted semi-structured interviews with a sample of 20 women who completed the questionnaire and agreed to attend the interview. Single interviews were conducted at a time and place that was convenient to the participants. Most of the interviews were conducted in the participants’ homes, with only five interviews conducted in coffee shops. Taking into consideration what was mentioned earlier—the higher the total coping score the greater the difference between the coping strategies—the researcher selected the first ten consenting participants who got the highest score in the coping questionnaire and the first ten consenting participants who got the lowest score.

The semi-structured interviews were conducted through face-to-face interviews to broaden the scope of information obtained from the questionnaire. Semi-structured questions that covered the eight coping styles in the JCS, as well as allowing for flexibility and modification, served to secure full coverage of the information obtained in phase one of the study (appendix 9). In addition, the researcher encouraged the participants to discuss other coping strategies that were used by the participants.

The women were invited to provide a phone number on the invitation for face-to-face interviews at the end of the questionnaire so that the researcher could contact them to arrange a time and place convenient for interview. The women were asked to be involved in a personal face-to-face interview with the researcher to explore in more depth issues arising from the questionnaire.

The researcher conducted face-to-face structured interviews to broaden the information from the questionnaire. The length of the interview ranged between 45 minutes and 1

72
hour per participant. Each interview was audio-taped and was arranged at a time and location convenient to the participant. On a few occasions, follow-up interviews were conducted to clarify issues that arose from initial face-to-face interviews after analysing the transcribed data.

4.7.3 Pilot Study

4.7.3.1 Phase One

A pilot study was conducted with ten Arab women who met the inclusive criteria, who answered the English version of the questionnaire and who were independent of the main study to ascertain content validity and the cultural appropriateness of the questionnaire. The pilot study provided an opportunity to determine the appropriateness of the semi-structured interview in terms of its scope, length and clarity. Participants in the pilot project were not included in the main study. The participants were able to understand the English version of the questionnaire. The researcher did not need to change any items in the questionnaire.

4.7.3.2 Phase Two

The two women (one woman who obtained high score and one woman who obtained low score on the jalowiec coping scale) who accepted the semi-structured interview (refer to phase two below) attended the interview. The transcripts were translated correctly within a Middle Eastern cultural context.

4.8 Data Analysis

4.8.1 Phase One

The data from the questionnaires were analysed, coded and entered into the Statistical Package for the Social Sciences (SPSS) version 17.0 (2008) personal-computer version. Once entered, the data were reviewed for completeness and consistency within a single data form and among data forms. The accuracy of data coding and computer entry were
assured by comparing the computerised data with the original data for a random sample (10 per cent) of the database. All through the data analysis, the researcher was analysing and collecting data simultaneously. Cronbach alpha, Pearson’s coefficient, and t-tests were used to analyse the data and answer all the hypotheses. Descriptive statistics (e.g. frequencies, relative frequencies, means and standard deviations) were generated to describe the sample, as well as to examine the patterns of reported coping methods and their perceived effectiveness. Pearson’s chi-square was used to assess the association between two categorical variables, independent t-tests were used for continuous outcomes/binary explanatory variables, and a one-way analysis of variance (ANOVA) was used for continuous outcomes and categorical explanatory variables \((k > 2)\). The researcher ran one-way ANOVAs, and then tabulated the results to get an estimate of the means and the standard deviation, so when the variances were equal the researcher reported the \(p\)-value from the one-way ANOVA, and in the case when the variances were not equal, the researcher reported the Kruskal-Wallis \(p\)-value. Cronbach’s alpha was applied to examine the internal consistency of each subscale (i.e. coping style).

Several demographic items were included in the questionnaire to describe the women’s personal characteristics (e.g. ‘age’, ‘parity’, ‘marital status’) as well as to characterise their breast-cancer diagnosis (e.g. ‘first response’). For the purpose of analyses, several variables were recoded. ‘Age’ was recoded from five-year intervals as such (‘25–40’, ‘41–50’, ‘51–60’ and ’61 and over’). The various nationalities were also recombined to represent different geographical areas/ethnicities: the UAE, Middle Eastern (i.e. Lebanon, Syria, Palestine, Jordan and Iraq), Arab African (i.e. Egypt, Sudan, Somalia) and other Gulf (i.e. Saudi Arabia, Bahrain, Yemen and Oman). To address small numbers, separated/widowed women were combined as ‘previously married’. Occupation (before and after diagnosis) was recoded as ‘employed’ or ‘not employed’; a variable was also computed to categorise women as ‘never employed’, ‘employed before and after diagnosis’ and ‘changed employment’ upon diagnosis. Another variable characterising the ‘presence/absence of a positive family history of breast cancer’ was also created.
The JCS items are measured on a Likert scale (0–3) ranging from ‘never used’ to ‘often used’ (for use) and ‘not helpful’ to ‘very helpful’ (for effectiveness). Ratings are summarised separately for use and effectiveness items. Total raw and individualised adjusted scores were created for both the use and effectiveness measures. The raw-use score was created by adding each respondent’s use rating for all items within a coping style. The raw-effectiveness score was created by adding each respondent’s effectiveness ratings for all items within a given coping style and summarised among those who reported that particular method. The individualised adjusted use score for each coping style was then created by dividing the respondent’s raw-use score for a given coping style by the number of coping methods used by that respondent for that coping style. The adjusted effectiveness score was created by dividing the respondent’s raw-effectiveness score for a given coping style by the number of coping methods used by that respondent for that coping style and summarised among those who reported that particular method. The 60 coping methods mapped onto eight coping styles including:

- Confrontive (ten items)
- Evasive (thirteen items)
- Optimistic (nine items)
- Fatalistic (four items)
- Emotive (five items)
- Palliative (seven items)
- Supportant (five items)
- Self-reliant (seven items)

Given that the coping styles do not have the same number of items, raw scores were only used to compare across subjects but within the same coping style. Individualised adjusted scores were used to compare different coping styles for respondents within one group (same nationality, age, marital status,..) and to compare different coping styles between different groups (nationalities, marital status, age,..) of respondents (adjusted scores in fact are appropriate any time raw scores are).
4.8.2 Phase Two

Content analysis was used for interpreting the qualitative data, interviews were transcribed and identification and thematic categorising of key themes were performed (Munro, 2005). Bogdam and Biklen define qualitative data analysis as ‘working with data, organising it, breaking it into manageable units, synthesising it, searching for patterns, discovering what is important and what is to be learned, and deciding what you will tell others’ (cited in Hoepft, 1997, p. 8). Hoepft claimed further that qualitative researchers use inductive analysis, in that themes and categories emerge out of the data. The role of the qualitative researcher is to develop an understanding and an interpretation of the whole through categorising themes into meaningful categories and then translating them into a meaningful model.

Before conducting the interviews, the researcher developed an interview guide (Appendix 9) or protocol for the transcription of data: number of interviews and identification of participants. The transcript of each interview was read to gain an understanding of the whole situation and then re-read again slowly to determine its significant features. All interviews were audio-taped and transcribed verbatim by the researcher. Translation of the participants’ interviews were done by an English teacher and checked again with the original text by the researcher to maintain the sense of the original text. Each tape was listened to at least twice, once during the transcription before typing and then later on to check the typed text with the data transcribed. All the interviews were analysed using the N-Vivo qualitative research program. At the beginning, all ideas were identified and coded under free nodes. Free nodes were then further coded only where applicable under the eight coping styles identified by the JCS (Jalowiec, 1987).

During the coding process, each significant feature of every interview was analysed and formulated by the researcher into a statement that expressed the implicit and explicit meanings of the statement. The new statements were validated by an independent expert in the nursing field who worked with the Arab women to confirm their interpretation.
(Asraf, 1996). All new statements were clustered together to formulate common content that reflected the totality of the picture—a process called ‘open coding’. After the themes emerged they were organised into categories. The next stage of analysis involved re-examination of the categories and determining the similarities between them. The big picture, or the whole, started emerging at this stage. Finally, a general summary of the phenomenon was reached and validated by my supervisors.

4.8.2.1 The Complexity of Human Feelings

To overcome the bias threat, triangulation of data, investigators and methodologies is usually employed (Tellis, 1997). In quantitative research, special attention is paid by the researcher to the instrument utilised in collecting data to ensure its reliability and validity (Polit & Hungler, 1999). In qualitative research, attention is paid to the uniqueness of human experience and situations and truth is considered as relative. The researcher here paid special attention to credibility, dependability, confirmability and transferability. These strategies are intended to control bias and increase the truth value of the research.

All feelings and attitudes related to cancer in addition to assumptions and expectations were written down before the research started, during data collection, and finally when analysing data (Holroyd, 2001). The biases and influences of the researcher’s experience with the disease were acknowledged and have been addressed in the limitations of the study in this chapter.

The researcher paid special attention to credibility, which corresponds in qualitative research to internal validity and transferability, corresponding to external validity, dependability or reliability, and confirmability or objectivity. Credibility refers to the ‘extent to which the feelings accurately describe reality’ (Hoepfl, 1997, p.12). Triangulation, peer debriefing, members’ checks, bracketing and using the words of the participants themselves were used to enhance credibility.
Reliability of the self-administered questionnaire was achieved by the researcher through utilising Cronbach’s alpha to determine the internal consistency between sub-items of each coping pattern (how often they used the coping pattern and how helpful was it). Content validity was ensured so that the questionnaire was really measuring what it was meant to measure. The following is the Cronbach alpha results for all categories (see Table 4.1).

4.9 Summary

The main investigation demonstrated a mixed-method approach to strengthen the study design, as both quantitative and qualitative data were collected and analysed. Participants from different backgrounds provided diverse views regarding coping patterns practiced by these women who are suffering from breast cancer. The scale measurements utilised in this study have been described, and reliability and validity trustworthiness methods outlined. Ethical guidelines were adhered to throughout this study, ensuring that both confidentiality and anonymity were upheld. The pilot study provided valuable insight regarding the practicalities of conducting interviews with the participants.
Chapter 5: Results

5.1 Introduction

The aim of this chapter is to present the findings of the quantitative data in relation to the research objectives and hypotheses. The chapter will be structured systematically under the subheading of the research objectives and hypotheses identified in Chapter 4. The chapter will begin with the demographic data of the sample. The descriptive analysis of the quantitative data outlined the socio-demographic characteristics of the sample; specifically religion, age, educational level, age of children, marital status and occupation. The relationship of these attributes with the diagnosis of breast cancer and the type of treatment they underwent and the use and effectiveness of the eight coping styles are also examined. Moreover, the descriptive analysis reports on the prevalence of the formal and informal support networks of the participants and on the positive family history of breast cancer among the participants. The statistical analysis will identify the relationships among the variables and the data were screened for potential covariates. The frequency and perceived helpfulness of the 60 coping patterns are examined. This chapter also presents the descriptive statistics for the calculated raw and adjusted scores for the eight coping styles. The chapter aims to present the subjects listed below:

- 5.2 Coping with Breast Cancer
- 5.2.1 The Study Sample
- 5.2.2 Demographic Status
- 5.2.3 Detection of Breast Lump
- 5.2.4 Formal and Informal Support Received
- 5.2.5 Family History
- 5.3 JCS: Reported Frequency and Perceived Helplessness
- 5.3.1 Confrontive Coping Style
- 5.3.2 Evasive Coping Style
5.3.3 Optimistic Coping Style
5.3.4 Fatalistic Coping Style
5.3.5 Emotive Coping Style
5.3.6 Palliative Coping Style
5.3.7 Supportant Coping Style
5.3.8 Self-reliant Coping Style
5.4 Raw and Adjusted Scores for the Eight Coping Styles of the Jalowiec Coping Style
5.5 Demographics and Raw and Adjusted Scores of the Use and Perceived Effectiveness of the Eight Jalowiec Coping Styles
5.5.1 Demographics and ‘Raw Score’ of the ‘Use’ of the Eight Jalowiec Coping Styles
5.5.2 Demographics and ‘Raw Score’ of the ‘Effectiveness’ of the Eight Jalowiec Coping Styles
5.5.3 Demographics and ‘Adjusted Score’ of the ‘Use’ of the Eight Jalowiec Coping Styles
5.5.4 Demographics and ‘Adjusted Score’ of the ‘Effectiveness’ of the Eight Jalowiec Coping Styles
5.6 Summary

5.2 Coping with Breast Cancer
5.2.1 The Study Sample

A random sample of 250 women was recruited from the 1,500 Arab women who matched the inclusive criteria of the research and were identified by the UAE National Breast Cancer Registry during 2005–2009. The researcher had employed a systematic sampling design over three interval times to secure the sample size. When the researcher contacted the participants 98 women refused to participate, 150 women could not be contacted due to change of address and 13 women were identified as dead by a family member when the researcher tried to contact them.
5.2.2 Demographic Status

More than half of the women (56 per cent) diagnosed with breast cancer were younger than 50 years of age. Only 41 per cent of these women were UAE nationals and the remaining women were from Saudi Arabia, Bahrain, Yemen, Lebanon, Syria, Palestine, Jordan, Iraq and from Arab African countries such as Egypt, Sudan and Somalia (Table 5.1).

A total of 76 per cent of the women who were diagnosed with breast cancer had children who were ten years of age or older. Eighty-five per cent of the women were married and almost eight per cent were single. Most of the women (95 per cent) were Muslims and 76 per cent of the sample had no university education.

A total of 15 per cent of the participants left their jobs after diagnosis with breast cancer. The monthly household salary of 75 per cent of these women was under 30,000 Dirham (US $8,220), which represents the middle income bracket (Table 5.1).
### Table 5.1: Demographic and Socio-Economic Status Indicators

<table>
<thead>
<tr>
<th>Personal Characteristics</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>25–40</td>
<td>44</td>
<td>18</td>
</tr>
<tr>
<td>40–50</td>
<td>94</td>
<td>38</td>
</tr>
<tr>
<td>50–60</td>
<td>70</td>
<td>28</td>
</tr>
<tr>
<td>60–over</td>
<td>42</td>
<td>16</td>
</tr>
<tr>
<td>Nationality*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UAE</td>
<td>103</td>
<td>41</td>
</tr>
<tr>
<td>Other Gulf countries</td>
<td>14</td>
<td>6</td>
</tr>
<tr>
<td>Middle East countries</td>
<td>73</td>
<td>29</td>
</tr>
<tr>
<td>Arab African countries</td>
<td>60</td>
<td>24</td>
</tr>
<tr>
<td>Religion</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Muslim</td>
<td>238</td>
<td>95</td>
</tr>
<tr>
<td>Christian</td>
<td>10</td>
<td>4</td>
</tr>
<tr>
<td>Other</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Parity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No children</td>
<td>28</td>
<td>11</td>
</tr>
<tr>
<td>Children below ten years</td>
<td>33</td>
<td>13</td>
</tr>
<tr>
<td>Children above ten years</td>
<td>189</td>
<td>76</td>
</tr>
<tr>
<td>Marital Status</td>
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<td></td>
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<tr>
<td>Single</td>
<td>19</td>
<td>8</td>
</tr>
<tr>
<td>Married</td>
<td>213</td>
<td>85</td>
</tr>
<tr>
<td>Divorced</td>
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</tr>
<tr>
<td>Widowed</td>
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<td>5</td>
</tr>
<tr>
<td>Educational Level</td>
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<td>Post-graduate</td>
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</tr>
<tr>
<td>Degree</td>
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<tr>
<td>Diploma</td>
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<td>24</td>
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<tr>
<td>Secondary</td>
<td>130</td>
<td>52</td>
</tr>
<tr>
<td>Employment Prior to Diagnosis</td>
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<td></td>
</tr>
<tr>
<td>No employment/home duties</td>
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<td>73</td>
</tr>
<tr>
<td>Self-employment</td>
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</tr>
<tr>
<td>Employed</td>
<td>64</td>
<td>26</td>
</tr>
<tr>
<td>Employment After Diagnosis</td>
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<tr>
<td>No employment</td>
<td>221</td>
<td>88</td>
</tr>
<tr>
<td>Part-time job</td>
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<td>1</td>
</tr>
<tr>
<td>Full-time job</td>
<td>28</td>
<td>11</td>
</tr>
<tr>
<td>Monthly Income €</td>
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<td></td>
</tr>
<tr>
<td>Less than 10,000 Dirhams</td>
<td>93</td>
<td>37</td>
</tr>
<tr>
<td>10,000–30,000 Dirhams</td>
<td>94</td>
<td>38</td>
</tr>
<tr>
<td>30,000–50,000 Dirhams</td>
<td>62</td>
<td>25</td>
</tr>
<tr>
<td>More than 50,000 Dirhams</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>

US $1 = 3.68 Dirhams

N=250

#### 5.2.3 Detection of Breast Lump

Two-hundred and eighteen women (87 per cent) found the lump by chance and the majority (69 per cent) of the women’s first response to the breast lump was to visit a
hospital. More than 90 per cent of the women had undertaken the three main treatment mechanisms for breast cancer, which included surgery, chemotherapy and radiotherapy. With respect to the other treatments, 45 per cent of the women surveyed had taken five years of hormonal therapy (see Table 5.2)

Table 5.2: Detection of Breast Lump

<table>
<thead>
<tr>
<th>First diagnosis with Breast Lump</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>During monthly self-breast exam</td>
<td>11</td>
<td>4</td>
</tr>
<tr>
<td>Routine physician</td>
<td>7</td>
<td>3</td>
</tr>
<tr>
<td>Annual breast self-exam</td>
<td>14</td>
<td>6</td>
</tr>
<tr>
<td>By chance</td>
<td>218</td>
<td>87</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>First Response</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Sought private doctor</td>
<td>16</td>
<td>6</td>
</tr>
<tr>
<td>Visited breast-cancer screening clinic</td>
<td>15</td>
<td>6</td>
</tr>
<tr>
<td>Visited primary health-care centre</td>
<td>45</td>
<td>18</td>
</tr>
<tr>
<td>Visited a hospital</td>
<td>173</td>
<td>69</td>
</tr>
<tr>
<td>Other</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Treatment(s) Undertaken*</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Surgery</td>
<td>242</td>
<td>97</td>
</tr>
<tr>
<td>Chemotherapy</td>
<td>232</td>
<td>93</td>
</tr>
<tr>
<td>Radiotherapy</td>
<td>212</td>
<td>85</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Other Treatments (if yes)</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Hysterectomy</td>
<td>11</td>
<td>4</td>
</tr>
<tr>
<td>Breast reconstruction</td>
<td>15</td>
<td>6</td>
</tr>
<tr>
<td>Hormonal therapy</td>
<td>138</td>
<td>45</td>
</tr>
<tr>
<td>Ovarian removal</td>
<td>14</td>
<td>6</td>
</tr>
</tbody>
</table>

* Each respondent may have reported one or more treatment mechanisms
5.2.4 Formal and Informal Support Received

The first informal person who the respondents informed about their illness was identified by 79 per cent of the participants as their husband.

A total of 97 per cent of the women surveyed identified the hospital as the first formal support mechanism after identifying the illness (see Table 5.3).

<table>
<thead>
<tr>
<th>Table 5.3: Formal and Informal Support Received</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First Person Who Knew About the Illness</strong></td>
</tr>
<tr>
<td>Husband</td>
</tr>
<tr>
<td>Family member</td>
</tr>
<tr>
<td>Friend</td>
</tr>
<tr>
<td>Other</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>First Formal Support</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Hospital</td>
</tr>
<tr>
<td>Breast-cancer clinic</td>
</tr>
<tr>
<td>Other</td>
</tr>
<tr>
<td>None</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>First Informal Support After Identifying the Illness</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Parents</td>
</tr>
<tr>
<td>Husband</td>
</tr>
<tr>
<td>Children</td>
</tr>
<tr>
<td>Relatives</td>
</tr>
<tr>
<td>Friends</td>
</tr>
<tr>
<td>Husband and children</td>
</tr>
<tr>
<td>Brothers or sisters</td>
</tr>
<tr>
<td>Other</td>
</tr>
</tbody>
</table>

5.2.5 Family History

More than three-quarters (n = 192; 77 per cent) of the women surveyed did not have a family history of cancer. Over one-fifth (n = 58; 23 per cent) of the women reported a positive family history of cancer and 60 per cent of these women reported having a positive family history of breast cancer. Only 40 per cent of the participants’ relatives who had cancer were reported by the participants as being still alive (Table 5.4)
Table 5.4: Family History of Cancer

<table>
<thead>
<tr>
<th>Family Member</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mother</td>
<td>15</td>
<td>6</td>
</tr>
<tr>
<td>Father</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Sister and brother</td>
<td>13</td>
<td>5</td>
</tr>
<tr>
<td>Mother’s sister or brother</td>
<td>12</td>
<td>5</td>
</tr>
<tr>
<td>Father’s sister or brother</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>Nieces or nephews</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Cousin</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Mother and sister</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>None</td>
<td>192</td>
<td>77</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>250</td>
<td>100%</td>
</tr>
</tbody>
</table>

Type of Cancer*

<table>
<thead>
<tr>
<th>Type of Cancer</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breast cancer</td>
<td>35</td>
<td>60</td>
</tr>
<tr>
<td>Lungs</td>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td>Prostate</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Thyroid</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Uterus</td>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td>Leukaemia</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Liver</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Colon</td>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td>Pancreas</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Brain</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>58</td>
<td>100%</td>
</tr>
</tbody>
</table>

Living Status of the Family Member Who Had Cancer

<table>
<thead>
<tr>
<th>Status</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deceased</td>
<td>35</td>
<td>60</td>
</tr>
<tr>
<td>Living</td>
<td>23</td>
<td>40</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>58</td>
<td>100%</td>
</tr>
</tbody>
</table>

* Among those who reported having any positive family history (n = 58)

5.3 Jalowiec Coping Scale: Reported Frequency and Perceived Helplessness

As mentioned earlier, the JCS is divided into eight coping styles: confrontive, evasive, optimistic, fatalistic, emotive, palliative, supportant and self-reliant. This section reports on participants’ use of each coping style. When calculating the effectiveness of each coping style, the researcher measured the effectiveness of coping style as perceived by the surveyed women who used that specific coping style. For example, if 45 per cent of the participants used a specific item in one coping style then the researcher will only calculate how the participants who used that item (these 45 per cent) perceived the same coping item as helpful or not.
All tables in section 5.2 are divided into two parts; the first part will measure the frequency of the eight coping styles while the second part will measure the perceived helpfulness of the eight coping styles. Please note that the researcher only counted the participants who ‘seldom used’, ‘sometimes used’ or ‘often used’ the coping styles when calculating the perceived effectiveness; that is, the researcher did not count the participants who ‘never used’ a specific coping style when calculating the effectiveness of the same coping style.

5.3.1 Confrontive Coping Style (Ten Items)

Eighty-six per cent of the surveyed women reported that they ‘seldom used’ or ‘did not use’ the first confrontive coping style of ‘Thought out different ways to handle the situation’, which means only fourteen per cent of the surveyed women used this coping item. Sixty-one per cent of the fourteen per cent of surveyed women who used the same item perceived the first confrontive coping style as ‘fairly helpful’ or ‘very helpful’. Fifty-eight per cent of the surveyed women used the second confrontive coping style of ‘Tried to examine the problem objectively and see all sides’ and 72 per cent of the surveyed women had perceived this item as ‘helpful’. Sixty-three per cent of the surveyed women used ‘Tried to keep the situation under control’ and 66 per cent perceived the same item as ‘fairly helpful’ and ‘very helpful’. Only sixteen per cent of the participants used the fourth item of ‘Tried to change the situation’ with 41 per cent of surveyed women who used this item perceiving it as ‘very helpful’. Even though only 38 per cent of the surveyed women used the fifth confrontive coping style, 95 per cent of the surveyed women who used this item perceived it as ‘helpful’. Only 26 per cent of the surveyed women used the sixth confrontive coping style; however, still 83 per cent \((n = 127)\) of surveyed women who used the sixth confrontive coping style \((n = 151)\) perceived it as ‘very helpful’. In the seventh confrontive coping style ‘Tried to work out a compromise’, only fifteen per cent of the surveyed women used this item and 38 per cent of the surveyed women who used this item perceived it as ‘helpful’. Only 25 per cent of the surveyed women reported that they used the eighth confrontive coping style
of ‘Set up a plan of action’, but still 86 per cent of the surveyed women who used the same item perceived it as ‘helpful’. Moreover, 25 per cent of the surveyed women reported that they used the ninth confrontive coping style ‘Practiced in your mind what had to be done’, but 79 per cent of the surveyed women who used this confrontive coping style perceived it as ‘helpful’. Eleven per cent of the surveyed women reported that they used the tenth confrontive coping style ‘Learned something new in order to deal with the problem better’, still 71 per cent of the surveyed women who used the same item perceived it as ‘fairly helpful’ or ‘very helpful’.

Even though the ten items were testing facing problems and trying to cope with the problems, only three types of the confrontive coping patterns were mainly used by the participants and these were ‘Tried to examine the problem objectively and see all sides’ expressed by 58 per cent of the participants, with 63 per cent stating that they ‘Tried to keep the situation under control’ and 38 per cent stating that they ‘Tried to find more about the problem’ (Table 5.5).
<table>
<thead>
<tr>
<th>Coping Methods</th>
<th>USE</th>
<th>PERCEIVED EFFECTIVENESS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Never</td>
<td>Seldom</td>
</tr>
<tr>
<td>Confrontive Coping Style: Ten Items</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Thought out different ways to handle the situation</td>
<td>136</td>
<td>54</td>
</tr>
<tr>
<td>2 Tried to examine the problem objectively and see all sides</td>
<td>13</td>
<td>5</td>
</tr>
<tr>
<td>3 Tried to keep the situation under control</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>4 Tried to change the situation</td>
<td>116</td>
<td>47</td>
</tr>
<tr>
<td>5 Tried to find more about the problem</td>
<td>27</td>
<td>11</td>
</tr>
<tr>
<td>6 Tried to handle things one step at a time</td>
<td>97</td>
<td>39</td>
</tr>
<tr>
<td>7 Tried to work out a compromise</td>
<td>183</td>
<td>73</td>
</tr>
<tr>
<td>8 Set up a plan of action</td>
<td>132</td>
<td>53</td>
</tr>
<tr>
<td>9 Practiced in your mind what had to be done</td>
<td>98</td>
<td>39</td>
</tr>
<tr>
<td>10 Learnt something new in order to deal with the problem better</td>
<td>147</td>
<td>70</td>
</tr>
</tbody>
</table>
5.3.2 Evasive Coping Style (Thirteen Items)

There are three items in the evasive coping style that were mainly used by the participants and at the same time were perceived by the participants as ‘fairly helpful’ and ‘very helpful’. The first item, ‘Tried to put the problem out of your mind and think of something else’, was reported by 60 per cent of the surveyed women as ‘often used’ and 67 per cent of the surveyed women who used this coping style perceived it as ‘fairly helpful’ and ‘very helpful’. The second item ‘Daydreamed about a better life’ was used by 89 per cent of the participants and 71 per cent of these participants perceived this item as ‘fairly helpful’ and ‘very helpful’. Eighty-eight per cent of the surveyed women used the item ‘Wished that the problem would go away’ and 75 per cent of those that used it saw it as ‘fairly helpful’ and ‘very helpful’ (Table 5.6).
Table 5.6: Reported Frequency and Perceived Helpfulness of the Evasive Coping Style (Thirteen Items)

<table>
<thead>
<tr>
<th>Coping Methods</th>
<th>USE</th>
<th>PERCEIVED EFFECTIVENESS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Never</td>
<td>Seldom</td>
</tr>
<tr>
<td>Evasive Coping Style: Thirteen Items</td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>1 Tried to get away from the problem</td>
<td>95</td>
<td>38</td>
</tr>
<tr>
<td>2 Tried to put the problem out of your mind and think of something else</td>
<td>13</td>
<td>5</td>
</tr>
<tr>
<td>3 Daydreamed about a better life</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>4 Tried to get out of the situation</td>
<td>111</td>
<td>44</td>
</tr>
<tr>
<td>5 Told yourself that the problem was someone else’s fault</td>
<td>230</td>
<td>92</td>
</tr>
<tr>
<td>6 Waited to see what would happen</td>
<td>69</td>
<td>28</td>
</tr>
<tr>
<td>7 Slept more than usual</td>
<td>210</td>
<td>84</td>
</tr>
<tr>
<td>8 Let time take care of the problem</td>
<td>59</td>
<td>24</td>
</tr>
<tr>
<td>9 Put off facing up to the problem</td>
<td>176</td>
<td>70</td>
</tr>
<tr>
<td>10 Tried to ignore or avoid the problem</td>
<td>40</td>
<td>16</td>
</tr>
<tr>
<td>11 Told yourself that this problem was really not that important</td>
<td>35</td>
<td>14</td>
</tr>
<tr>
<td>12 Avoided being with people</td>
<td>176</td>
<td>70</td>
</tr>
<tr>
<td>13 Wished that the problem would go away</td>
<td>6</td>
<td>2</td>
</tr>
</tbody>
</table>
5.3.3 Optimistic Coping Style (Nine Items)

This coping style was used by most of the participants. Although only 26 per cent of the surveyed women reported that the optimistic coping style ‘Tried to keep a sense of humour’ as ‘mostly used’, 60 per cent of the participants who used this item perceived it as ‘fairly helpful’ and ‘very helpful’. Only nine per cent of the surveyed women used the optimistic coping style ‘Compared yourself with other people who were in the same situation’, but 66 per cent of the participants who used this coping style perceived it as ‘fairly helpful’ and ‘very helpful’. The item that was least used by twenty per cent of the participants and perceived by only fifteen per cent of the same surveyed women as effective was ‘Told yourself that things could be much worse’.

The most frequently reported item in the optimistic coping style ‘Hoping that things would get better’ was reported by 77 per cent of the participants and it was perceived by 73 per cent of the participants as ‘mostly effective’ (Table 5.7)
Table 5.7: Reported Frequency and Perceived Helpfulness of Optimistic Coping Style (Nine Items)

<table>
<thead>
<tr>
<th>Coping Methods</th>
<th>USE</th>
<th>PERCEIVED EFFECTIVENESS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Never</td>
<td>Seldom</td>
</tr>
<tr>
<td>Optimistic Coping Style: Nine Items</td>
<td>$N$</td>
<td>$%$</td>
</tr>
<tr>
<td>1 Hoping that things would get better</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>2 Told yourself that things could be much worse</td>
<td>73</td>
<td>29</td>
</tr>
<tr>
<td>3 Tried to keep your life as normal as possible and not let the problem interfere</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>4 Told yourself not to worry because everything would work out fine</td>
<td>13</td>
<td>5</td>
</tr>
<tr>
<td>5 Tried to keep a sense of humour</td>
<td>90</td>
<td>36</td>
</tr>
<tr>
<td>6 Thought about the good things in your life</td>
<td>9</td>
<td>4</td>
</tr>
<tr>
<td>7 Compared yourself with other people who were in the same situation</td>
<td>201</td>
<td>80</td>
</tr>
<tr>
<td>8 Tried to think positively</td>
<td>15</td>
<td>6</td>
</tr>
<tr>
<td>9 Tried to see the good side of the situation</td>
<td>17</td>
<td>7</td>
</tr>
</tbody>
</table>

92
5.3.4 Fatalistic Coping Style (Four Items)

Most of the participants did not use the four items in this category. For example, 98 per cent of the participants reported that they ‘never used’ or ‘seldom used’ the item ‘Told yourself that you were just having some bad luck’, and the majority, almost 97 per cent of the women perceived this item as ‘not helpful’ (Table 5.8).
### Table 5.8: Reported Frequency and Perceived Helpfulness of Fatalistic Coping Style

<table>
<thead>
<tr>
<th>Coping Method</th>
<th>USE</th>
<th>PERCEIVED EFFECTIVENESS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Never</td>
<td>Seldom</td>
</tr>
<tr>
<td>Fatalistic Coping Style: Four Items</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Expected the worst that could happen</td>
<td>124</td>
</tr>
<tr>
<td>2</td>
<td>Accepted the situation because very little could be done</td>
<td>197</td>
</tr>
<tr>
<td>3</td>
<td>Resigned yourself to the situation because things looked hopeless</td>
<td>203</td>
</tr>
<tr>
<td>4</td>
<td>Told yourself that you were just having some bad luck</td>
<td>242</td>
</tr>
</tbody>
</table>
5.3.5 Emotive Coping Style (Five Items)

In general, 60 per cent of the participants reported that they did not use or even perceive any of the items in this coping style as helpful. Even though 98 per cent of the participants reported that they either ‘never used’ or ‘seldom used’ the item ‘Did something impulsive or risky that you would not usually do’, still 37.5 per cent of the participants who used this item considered using this coping style as ‘fairly helpful’ or ‘very helpful’ (Table 5.9).
Table 5.9: Reported Frequency and Perceived Helpfulness of Emotive Coping Style

<table>
<thead>
<tr>
<th>Coping Method</th>
<th>USE</th>
<th>PERCEIVED EFFECTIVENESS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Never</td>
<td>Seldom</td>
</tr>
<tr>
<td>Emotive Coping Style: Five Items</td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>1</td>
<td>Worried about a problem</td>
<td>54</td>
</tr>
<tr>
<td>2</td>
<td>Got mad and let off steam</td>
<td>45</td>
</tr>
<tr>
<td>3</td>
<td>Took out your tensions on someone else</td>
<td>45</td>
</tr>
<tr>
<td>4</td>
<td>Did something impulsive or risky that you would not usually do</td>
<td>242</td>
</tr>
<tr>
<td>5</td>
<td>Blamed yourself for getting into such a situation</td>
<td>232</td>
</tr>
</tbody>
</table>
5.3.6 Palliative Coping Style (Seven Items)

Five out of the seven items of the palliative coping style were reported by the participants as ‘never used’ or ‘seldom used’. For example, ‘Ate or smoked more than usual’ was reported by almost 97 per cent of the participants as ‘never used’ and perceived by 83 per cent of the surveyed women who used this item as ‘not helpful’. Moreover, 96 per cent of the participants considered the item ‘Took a drink to make yourself feel better’ as ‘never used’ and 50 per cent of the four per cent of the participants who used this item perceived it as ‘not helpful’. Even though 78 per cent of the participants considered the item ‘Used relaxation techniques’ as ‘never used’ or ‘seldom used’, still 84 per cent of these participants who used this palliative coping style perceived it as ‘fairly helpful’ and ‘very helpful’.

Conversely, 69 per cent of the surveyed women reported that they often used the item ‘Tried to distract yourself by doing something that you enjoy’ and 75 per cent of the participants who used this item perceived it as ‘fairly helpful’ and ‘very helpful’. Moreover, 77 per cent of the surveyed women reported that they mostly used ‘Tried to keep busy’ and 86 per cent of the same participants perceived this palliative coping style as ‘fairly helpful’ or ‘very helpful’ (Table 5.10).
Table 5.10: Reported Frequency and Perceived Helpfulness of Palliative Coping Style

<table>
<thead>
<tr>
<th>Coping Method</th>
<th>USE</th>
<th>Effectiveness</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Never</td>
<td>Seldom</td>
</tr>
<tr>
<td>Palliative Coping Style: Seven Items</td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>1 Ate or smoked more than usual</td>
<td>232</td>
<td>93</td>
</tr>
<tr>
<td>2 Exercised or did some physical activity</td>
<td>118</td>
<td>47</td>
</tr>
<tr>
<td>3 Used relaxation techniques</td>
<td>160</td>
<td>64</td>
</tr>
<tr>
<td>4 Took a drink to make yourself feel better</td>
<td>238</td>
<td>95</td>
</tr>
<tr>
<td>5 Tried to distract yourself by doing something that you enjoy</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>6 Tried to keep busy</td>
<td>10</td>
<td>4</td>
</tr>
<tr>
<td>7 Took medication to reduce tension</td>
<td>234</td>
<td>94</td>
</tr>
</tbody>
</table>
5.3.7 Supportant Coping Style (Five Items)

The only item to be reported as ‘often used’ by 96 per cent of the participants was ‘Prayed or put your trust in God’ and was perceived by almost 99 per cent of the participants who used this supportant coping style as ‘very helpful’. Even though 21 per cent of the participants used the supportant coping style ‘Talked the problem over with a professional person’, still 92 per cent of the participants who used this coping style perceived it as ‘fairly helpful’ or ‘very helpful’. Ninety-one per cent of the participants did not use ‘Depended on others to help you out’ as a palliative coping style, but 64 per cent of the nine per cent surveyed women who used this coping style considered it as ‘fairly helpful’ or ‘very helpful’ (Table 5.11).
### Table 5.11: Reported Frequency and Perceived Helpfulness of Supportant Coping Style

<table>
<thead>
<tr>
<th>Coping Method</th>
<th>Use</th>
<th>Perceived Effectiveness</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Never</td>
<td>Seldom</td>
</tr>
<tr>
<td>Supportant Coping Style: Five Items</td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>1</td>
<td>Talked the problem over with family or friends</td>
<td>45</td>
</tr>
<tr>
<td>2</td>
<td>Talked the problem over with a professional person (such as a doctor, nurse, teacher, counsellor)</td>
<td>53</td>
</tr>
<tr>
<td>3</td>
<td>Prayed or put your trust in God</td>
<td>4</td>
</tr>
<tr>
<td>4</td>
<td>Talked the problem over with someone who had been in a similar situation</td>
<td>110</td>
</tr>
<tr>
<td>5</td>
<td>Depended on others to help you out</td>
<td>194</td>
</tr>
</tbody>
</table>
5.3.8 Self-Reliant Coping Style (Seven Items)

There were different opinions relating to this coping style. The first item ‘Keep your feelings to yourself’ was the only coping pattern that 65 per cent of the participants ‘seldom used’ or ‘never used’, and 51 per cent of the participants who used this self-reliant coping style perceived it as ‘not helpful’ or ‘slightly helpful’. The second item within the self-reliant coping style showed that even though they ‘never used’ or ‘seldom used’ these items, still the participants who used these items perceived them as ‘helpful’.

Sixty-nine per cent of the participants reported they used the self-reliant coping style ‘Told yourself that you could handle anything no matter how hard’ and 76 per cent of the surveyed women who used this coping style perceived it as ‘fairly helpful’ or ‘very helpful’. Moreover, 57 per cent of the participants reported that they mostly used the self-reliant coping style ‘Thought about how you had handled other problems in the past’ and 80 per cent of the surveyed women who used this self-reliant coping style perceived it as ‘fairly helpful’ or ‘very helpful’ (Table 5.12).
Table 5.12: Reported Frequency and Perceived Helpfulness of Self-Reliant Coping Style

<table>
<thead>
<tr>
<th>Coping Method</th>
<th>USE</th>
<th>PERCEIVED EFFECTIVENESS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Never</td>
<td>Seldom</td>
</tr>
<tr>
<td><strong>Self-Reliant Coping Style: Seven Items</strong></td>
<td>$N$</td>
<td>$%$</td>
</tr>
<tr>
<td>1 Kept your feelings to yourself</td>
<td>73</td>
<td>29</td>
</tr>
<tr>
<td>2 Wanted to be alone to think things out</td>
<td>96</td>
<td>38</td>
</tr>
<tr>
<td>3 Thought about how you had handled other problems in the past</td>
<td>11</td>
<td>4</td>
</tr>
<tr>
<td>4 Told yourself that you could handle anything no matter how hard</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>5 Tried to keep your feelings under control</td>
<td>16</td>
<td>6</td>
</tr>
<tr>
<td>6 Preferred to work things out yourself</td>
<td>116</td>
<td>47</td>
</tr>
<tr>
<td>7 Tried to improve yourself in some way so you could handle the situation better</td>
<td>71</td>
<td>28</td>
</tr>
</tbody>
</table>
5.4 Raw and Adjusted Scores for the Eight Coping Styles of the JCS

To score the JCS, the ratings for the individual items were summarised separately for each coping style. Two main types of scores were derived from the JCS: use and effectiveness. These scores were obtained for each of the eight coping styles and also for the overall scale. Scores for each of the eight coping styles were expressed either as raw scores or as adjusted scores. The researcher would like to clarify again that, as discussed in Chapter 4, the eight coping styles do not have the same number of items and the raw scores were only used to compare across subjects but within the same coping style. Individualised adjusted scores were used to compare different coping styles for respondents within one group, and to compare different coping styles between different groups of respondents.

In the current study, when comparing the same coping styles between the different groups (raw score for use and effectiveness), the researcher found that the optimistic coping style had the highest raw scores in both use (median = 12, mean (SD) 12.80 (4.46)) and effectiveness (median = 15, mean (SD) 13.34 (6.86)), followed by the evasive coping style (median = 13, mean (SD) 13.90 (3.90)) for use and (median = 14, mean (SD) 13.20 (5.96)) for effectiveness. The lowest raw score in both use and effectiveness reported by the participants was that of the fatalistic coping style with (median = 1, mean (SD) 1.40 (1.80)) for the use and (median = 0, mean (SD) 0.60 (1.44)) for effectiveness.

When comparing different coping styles within one group (individualised adjusted scores), the supportant coping style had the highest adjusted score for use (median = 2, mean (SD) 1.93 (0.35)) and effectiveness (median = 2.33, mean = 2.34 and SD = 0.43). The second coping style was optimistic, as the adjusted score for use was (median = 1.71, mean = 1.75 and SD = 0.54) and the individualised adjusted score for effectiveness was (median = 2.10, mean = 1.81 & SD = 0.90). The coping style that was reported by the participant as having the lowest individualised adjusted score was the fatalistic
coping style with (median = 1, mean = 1.50 and SD = 0.70) for use and (median = 0, mean = 0.48 and SD = 0.80) for effectiveness (Table 5.13).
Table 5.13: Descriptive Statistics for the Calculated Raw and Adjusted Scores for the Eight Coping Styles

<table>
<thead>
<tr>
<th>Coping Styles</th>
<th>Raw Scores</th>
<th>Individualised Adjusted Scores</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Possible range</td>
<td>Use Median</td>
</tr>
<tr>
<td>Confrontive (10)</td>
<td>0—30</td>
<td>9</td>
</tr>
<tr>
<td>Evasive (13)</td>
<td>0—39</td>
<td>13</td>
</tr>
<tr>
<td>Optimistic (9)</td>
<td>0—27</td>
<td>12</td>
</tr>
<tr>
<td>Fatalistic (4)</td>
<td>0—12</td>
<td>1</td>
</tr>
<tr>
<td>Emotive (5)</td>
<td>0—15</td>
<td>4</td>
</tr>
<tr>
<td>Palliative (7)</td>
<td>0—21</td>
<td>5</td>
</tr>
<tr>
<td>Supportant (5)</td>
<td>0—15</td>
<td>6</td>
</tr>
<tr>
<td>Self-Reliant (7)</td>
<td>0—21</td>
<td>8</td>
</tr>
</tbody>
</table>

*Individualised adjusted score refers to the average score across all coping items completed by each respondent
5.5 Demographics and Raw and Adjusted Scores of the Use and Perceived Effectiveness of the Eight Jalowiec Coping Styles

5.5.1 Demographics and ‘Raw Scores’ of the ‘Use’ of the Eight Jalowiec Coping Styles

Table 5.14 presents the demographic data and the raw scores of the eight coping styles. The researcher gave the p value of each group whenever p < 0.05 or p < 0.01. Participants who most frequently used most of the coping styles were in the age group 50–60 with the confrontive coping style (M = 10.70, SD = 4.60, p < 0.05), the evasive coping style (M = 14.33, SD = 4.32), the optimistic coping style (M = 13.74, SD = 3.90, p < 0.01), the palliative coping style (M = 5.50, SD = 1.96), the supportant coping style (M = 7.01, SD = 2.16, p < 0.05) and the self-reliant coping style (M = 9.59, SD = 2.81).

The age group 25–40 ‘used mostly’ the emotive coping style (M = 4.66, SD = 1.82, p < 0.05) and the age group 40–50 most commonly used the fatalistic coping style (M = 1.77, SD = 2.02, p < 0.05).

The ‘ever’ married group, which represents the separated and widowed participants ‘mostly used’ the confrontive (M = 10.11, SD = 5.78), evasive (M = 15.39, SD = 4.05), optimistic (M = 13.17, SD = 5.01), fatalistic (M = 1.89, SD = 2.59), emotive (M = 4.72, SD = 1.67) and self-reliant style (M = 9.61, SD = 3.45). The ‘single’ participants most commonly used the palliative coping style (M = 6.16, SD = 2.06) and the ‘married’ participants ‘mostly used’ the supportant coping style (M = 6.52, SD = 2.05).

The participants who did not have children mostly used the evasive coping style (M = 14.68, SD = 5.38) and the palliative coping style (M = 5.79, SD = 1.93, p < 0.01). The participants who had children less than ten years old mostly used the fatalistic coping style (M = 1.88, SD = 1.43) and the emotive coping style (M = 4.76, SD = 1.52, p < 0.05). The participants who ‘mostly used’ the confrontive coping style (M = 9.95, SD = 4.74, p < 0.05), optimistic coping style (M = 13.37, SD = 4.43, p < 0.01), supportant coping style (M = 6.57, SD = 2.04) and self-reliant coping style (M = 9.26, SD = 3.05) had children above 10 years of age.
The participants with UAE nationality most commonly used the fatalistic coping style \((M = 1.72, \ SD = 1.87)\), while the participants with the other Gulf nationalities ‘used mostly’ the confrontive coping style \((M = 10.16, \ SD = 5.16, \ p < 0.05)\), optimistic coping style \((M = 13.55, \ SD = 4.66)\), palliative coping style \((M = 5.68, \ SD = 2.42)\), supportant coping style \((M = 6.58, \ SD = 1.96)\) and the self-reliant coping style \((M = 9.66, \ SD = 3.11)\). The evasive coping style \((M = 14.37, \ SD = 3.58)\) and the emotive coping style \((M = 4.65, \ SD = 2.01, \ p < 0.01)\) were ‘mostly used’ among participants from Middle East countries.

The participants who had a post-graduate degree ‘mostly used’ the confrontive coping style \((M = 17.75, \ SD = 8.99, \ p < 0.01)\), evasive coping style \((M = 18.00, \ SD = 6.38, \ p < 0.01)\), optimistic coping style \((M = 14.25, \ SD = 6.18)\), fatalistic coping style \((M = 3.50, \ SD = 3.32, \ p < 0.05)\), emotive coping style \((M = 6.25, \ SD = 3.30, \ p < 0.05)\), palliative coping style \((M = 9.75, \ SD = 4.57, \ p < 0.01)\) and supportant coping style \((M = 8.25, \ SD = 3.40)\). The self-reliant coping style was ‘mostly used’ by the participants with university degrees \((M = 9.84, \ SD = 3.07)\).

The emotive coping style was ‘mostly used’ among the participants who never worked. The participants who worked either before or after their illness mostly used the confrontive coping style \((M = 12.02, \ SD = 4.97, \ p < 0.01)\), evasive coping style \((M = 15.17, \ SD = 4.92, \ p < 0.05)\), fatalistic coping style \((M = 1.54, \ SD = 2.10)\), palliative coping style \((M = 6.34, \ SD = 2.74, \ p < 0.01)\) and supportant coping style \((M = 7.34, \ SD = 2.14, \ p < 0.01)\). The optimistic coping style \((M = 14.48, \ SD = 5.11, \ p < 0.01)\) and the self-reliant coping style \((M = 9.81, \ SD = 3.03)\) were ‘mostly used’ by the participants who worked before and after their illness.

The participants who had no family history of cancer ‘mostly used’ the fatalistic coping style \((M = 1.43, \ SD = 1.69)\) and emotive coping style \((M = 4.09, \ SD = 1.91)\). The participants who had a positive family history of cancer were among the most who used the confrontive coping style \((M = 12.00, \ SD = 0.72)\), the evasive coping style \((M = 15.21, \ SD = 4.41)\), optimistic coping style \((M = 15.02, \ SD = 4.95)\), palliative
coping style (M = 6.29, SD = 5.62), supportant coping style (M = 7.21, SD = 1.89) and self-reliant coping style (M = 10.43, SD = 3.03).

In summary, the confrontive coping style was ‘mostly used’ by the participants who were in the age group 50–60 years, who were either divorced or widowed, had children above ten years old, from all Gulf countries other than the UAE with post-graduate degrees, who either worked before or after they were diagnosed with breast cancer and had a positive family history of cancer. The second coping style (evasive) was ‘mostly used’ by the participants who were in the age group 50–60, who were either divorced or widowed, had no children, were from Middle Eastern countries with post-graduate degrees, either worked before or after their diagnosis with breast cancer and had a positive family history for cancer. The third coping style (optimistic) was ‘mostly used’ by the participants who were in the age group 50–60, who were either divorced or widowed, had children above ten years of age, were from other Gulf countries, with post-graduate degrees, worked before and after their diagnosis with breast cancer and had a positive family history of cancer. The fourth coping style (fatalistic) was ‘mostly used’ by the participants who were in the age group 40–50, who were either divorced or widowed, had children below ten years old, were from the UAE with post-graduate degrees, who either worked before or after their diagnosis with breast cancer and had no family history of cancer. The fifth coping style (emotive) was ‘mostly used’ by the participants who were in the age group 25–40, were either divorced or widowed, with children below ten years of age, who were from Middle Eastern countries with post-graduate degrees, had never worked and had no family history of breast cancer. The sixth coping style (palliative) was ‘mostly used’ by the participants who were in the age group 50–60, who were single with no children, were from other Gulf countries, had post-graduate degrees, and who either worked before or after their diagnosis with breast cancer and had a positive family history for cancer. The seventh coping style (supportant) was ‘mostly used’ by the participants who were in the age group 50–60 and were married with children above ten years of age, were from other Gulf countries with post-graduate degrees, and who either worked before or after their diagnosis with breast cancer and had a positive family history for cancer. The eighth coping style (self-reliant)
was ‘mostly used’ by the participants who were in the age group 50–60, were either divorced or widows with children above ten years old, from all Gulf countries other than the UAE, who had university degrees, who worked before and after their diagnosis with breast cancer and had a positive family history of cancer (Table 5.14)
Table 5.14: Demographics and ‘Raw Scores’ of the ‘Use’ of the Eight Coping Styles of 250 Arab Women Diagnosed with Breast Cancer and Living in the UAE (2010) Using ANOVA

<table>
<thead>
<tr>
<th>Use</th>
<th>Confrontive Mean (SD)</th>
<th>Confrontive Mean (SD)</th>
<th>Evasive Mean (SD)</th>
<th>Evasive Mean (SD)</th>
<th>Optimistic Mean (SD)</th>
<th>Optimistic Mean (SD)</th>
<th>Fatalistic Mean (SD)</th>
<th>Fatalistic Mean (SD)</th>
<th>Emotive Mean (SD)</th>
<th>Emotive Mean (SD)</th>
<th>Palliative Mean (SD)</th>
<th>Palliative Mean (SD)</th>
<th>Supportant Mean (SD)</th>
<th>Supportant Mean (SD)</th>
<th>Self-Reliant Mean (SD)</th>
<th>Self-Reliant Mean (SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>*</td>
<td>**</td>
<td>*</td>
<td>*</td>
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<tr>
<td>25–40</td>
<td>8.23(3.90)</td>
<td>14.09(3.48)</td>
<td>11.02(4.62)</td>
<td>1.50(1.37)</td>
<td>4.66(1.82)</td>
<td>4.95(1.85)</td>
<td>6.20(1.82)</td>
<td>8.52(2.17)</td>
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<tr>
<td>40–50</td>
<td>9.50(4.97)</td>
<td>13.94(4.19)</td>
<td>12.53(4.64)</td>
<td>1.77(2.02)</td>
<td>4.30(2.17)</td>
<td>5.31(2.56)</td>
<td>6.41(2.08)</td>
<td>9.00(3.04)</td>
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<tr>
<td>50–60</td>
<td>10.70(4.60)</td>
<td>14.33(4.32)</td>
<td>13.74(3.90)</td>
<td>1.00(1.70)</td>
<td>3.56(2.06)</td>
<td>5.50(1.96)</td>
<td>7.01(2.16)</td>
<td>9.59(3.15)</td>
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<td>60 and over</td>
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<td>12.69(2.59)</td>
<td>13.62(4.20)</td>
<td>1.07(1.45)</td>
<td>3.45(1.85)</td>
<td>5.19(1.88)</td>
<td>6.05(1.78)</td>
<td>9.22(2.81)</td>
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<tr>
<td>Single</td>
<td>9.21(4.31)</td>
<td>13.32(3.58)</td>
<td>12.05(3.95)</td>
<td>1.42(1.26)</td>
<td>4.16(2.03)</td>
<td>6.16(2.06)</td>
<td>6.42(2.09)</td>
<td>9.32(2.47)</td>
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<tr>
<td>Married</td>
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<td>12.83(4.47)</td>
<td>1.34(1.72)</td>
<td>3.94(2.10)</td>
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<td>6.52(2.05)</td>
<td>9.06(2.90)</td>
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<td>Ever married</td>
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<td>15.39(4.05)</td>
<td>13.17(5.01)</td>
<td>1.89(2.59)</td>
<td>4.72(1.67)</td>
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<td>6.17(1.76)</td>
<td>9.61(3.45)</td>
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<tr>
<td>Parity</td>
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<td>11.89(4.17)</td>
<td>1.57(2.01)</td>
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<tr>
<td>Children below ten years</td>
<td>7.73(3.64)</td>
<td>14.58(3.53)</td>
<td>10.30(3.95)</td>
<td>1.88(1.43)</td>
<td>4.76(1.52)</td>
<td>4.33(1.61)</td>
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<tr>
<td>Children above ten years</td>
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<td>Middle East Countries</td>
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<td>12.30(4.39)</td>
<td>1.17(1.52)</td>
<td>4.65(2.01)</td>
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<td>6.42(1.88)</td>
<td>9.07(2.98)</td>
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<td>Arab African Countries</td>
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<td>13.00(2.22)</td>
<td>12.21(4.48)</td>
<td>1.14(1.23)</td>
<td>3.50(2.21)</td>
<td>4.64(1.34)</td>
<td>6.21(2.01)</td>
<td>8.07(2.06)</td>
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</tr>
</tbody>
</table>
Use | Confrontive Mean (SD) | Evasive Mean (SD) | Optimistic Mean (SD) | Fatalistic Mean (SD) | Emotive Mean (SD) | Palliative Mean (SD) | Supportant Mean (SD) | Self-Reliant Mean (SD) |  
----|---------------------|------------------|---------------------|--------------------|------------------|-------------------|---------------------|---------------------| 
Educational Level | ** | ** | * | * | ** | ** |  
Post graduate | 17.75(8.99) | 18.00(6.38) | 14.25(6.18) | 3.50(3.32) | 6.25(3.30) | 9.75(4.57) | 8.25(3.40) | 7.50(3.32) |  
Degree | 10.31(4.69) | 14.29(3.65) | 13.33(5.00) | 1.58(1.88) | 4.13(2.10) | 5.27(1.99) | 6.80(1.81) | 9.84(3.07) |  
Diploma | 9.31(4.16) | 12.54(2.85) | 12.79(4.18) | 1.16(1.43) | 3.51(1.99) | 5.36(2.21) | 6.59(1.99) | 8.77(2.27) |  
Secondary | 9.05(4.36) | 14.18(4.19) | 12.53(4.32) | 1.35(1.78) | 4.13(2.01) | 5.11(2.01) | 6.25(2.07) | 9.02(3.05) |  
Employment Before and After Diagnosis | ** | * | ** | ** | ** | ** |  
Never worked | 8.66(4.11) | 13.56(3.76) | 12.23(4.10) | 1.40(1.76) | 4.12(1.99) | 4.91(1.89) | 6.21(1.95) | 8.86(2.83) |  
Either worked before or after | 12.02(4.97) | 15.17(4.92) | 14.22(5.04) | 1.54(2.10) | 3.80(2.18) | 6.34(2.74) | 7.34(2.14) | 9.78(3.05) |  
Worked before and after | 11.63(5.20) | 13.93(2.60) | 14.48(5.11) | 1.11(1.22) | 3.60(2.37) | 5.28(2.17) | 7.00(2.02) | 9.81(3.03) |  
Family History |  
No family history | 8.79(0.29) | 13.46(3.65) | 12.13(4.08) | 1.43(1.69) | 4.09(1.91) | 4.97(1.95) | 6.27(2.03) | 8.72(2.75) |  
Positive family history | 12(0.72) | 15.21(4.41) | 15.02(4.95) | 1.24(2.01) | 3.74(2.54) | 6.29(5.62) | 7.21(1.89) | 10.43(3.03) |  

*p < 0.05; **p < 0.01

When variances were equal then the p-values from the one-way ANOVA were reported; in cases where they were not, the Kruskal-Wallis p-value was reported.
5.5.2 Demographics and ‘Raw Scores’ of the ‘Effectiveness’ of the Coping Styles

Table 5.15 presents the demographic data and the raw effectiveness of the eight coping styles. Participants in the age group 50–60 years used the confrontive coping style ($M = 13.80$, $SD = 5.63$, $p < 0.01$), the evasive coping style ($M = 16.34$, $SD = 5.31$, $p < 0.01$), the fatalistic coping style ($M = 0.66$, $SD = 1.56$) and the supportant coping style ($M = 11.19$, $SD = 3.45$, $p < 0.05$) as ‘mostly effective’. The age group of 60 years and above reported that they perceived the optimistic coping style ($M = 16.19$, $SD = 5.67$, $p < 0.01$) and the self-reliant coping style ($M = 11.19$, $SD = 3.45$) as ‘mostly effective’. The age group 40–50 considered the emotive coping style ($M = 0.54$, $SD = 1.15$) as ‘mostly effective’.

The ‘ever’ married group, which represents the separated and the widowed participants, perceived the following coping styles to be ‘mostly effective’: confrontive coping style ($M = 12.22$, $SD = 6.52$), the evasive coping style ($M = 16.00$, $SD = 5.08$, $p < 0.01$), optimistic coping style ($M = 14.06$, $SD = 6.73$, $p < 0.01$), fatalistic coping style ($M = 1.06$, $SD = 2.21$) and the self-reliant coping style ($M = 10.19$, $SD = 3.18$). The single women perceived the emotive coping style ($M = 0.89$, $SD = 1.56$) and the palliative coping style ($M = 6.58$, $SD = 3.11$) as being ‘mostly effective’. The married women perceived the supportant coping style ($M = 7.96$, $SD = 2.53$) as mostly effective.

The women who had children above ten years old perceived most of the coping styles as ‘mostly effective’: the confrontive coping style ($M = 12.53$, $SD = 5.60$, $p < 0.01$), the evasive coping style ($M = 14.21$, $SD = 5.27$, $p < 0.01$), the optimistic coping style ($M = 14.88$, $SD = 6.12$, $p < 0.01$), fatalistic coping style ($M = 0.66$, $SD = 1.60$), the palliative coping style ($M = 6.47$, $SD = 2.17$, $p < 0.01$), the supportant coping style ($M = 8.05$, $SD = 2.55$, $p < 0.05$) and the self-reliant coping style ($M = 10.45$, $SD = 3.60$, $p < 0.01$). The participants who did not have children perceived the emotive coping style ($M = 0.79$, $SD = 1.42$) as ‘mostly effective’.

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The participants from the Gulf countries other than the UAE had perceived the confrontive coping style ($M = 13.12$, $SD = 6.65$, $p < 0.05$), the evasive coping style ($M = 13.92$, $SD = 5.69$), the optimistic coping style ($M = 14.90$, $SD = 6.62$), the palliative coping style ($M = 6.90$, $SD = 3.22$), the supportant coping style ($M = 8.10$, $SD = 2.48$), and the self-reliant coping style ($M = 10.92$, $SD = 3.57$, $p > 0.05$) as ‘effective’. The participants from the UAE perceived the fatalistic coping style ($M = 0.65$, $SD = 1.55$) and the emotive style ($M = 0.16$, $SD = 1.34$) as ‘mostly effective’.

The participants with post-graduate degrees perceived almost all the coping styles as ‘effective’: the confrontive coping style ($M = 17.00$, $SD = 9.93$, $p < 0.01$), the evasive coping style ($M = 16.00$, $SD = 9.02$), the optimistic coping style ($M = 15.00$, $SD = 7.87$), the fatalistic coping style ($M = 2.50$, $SD = 3.32$, $p < 0.05$), the emotive coping style ($M = 2.75$, $SD = 2.22$, $p < 0.01$), the palliative coping style ($M = 10.25$, $SD = 7.04$, $p < 0.05$), and the supportant coping style ($M = 10.00$, $SD = 2.94$, $p < 0.05$). The coping style that was perceived by the participants with university degrees as ‘effective’ was the self-reliant coping style ($M = 10.60$, $SD = 3.98$).

The participants who worked before and after their diagnosis with breast cancer perceived most of the coping styles as ‘effective’: the confrontive coping style ($M = 14.41$, $SD = 6.62$, $p < 0.01$), the evasive coping style ($M = 14.70$, $SD = 5.19$, $p < 0.05$), the optimistic coping style ($M = 15.89$, $SD = 6.76$, $p < 0.05$), the evasive coping style ($M = 1.15$, $SD = 1.77$, $p < 0.01$), the palliative coping style ($M = 7.52$, $SD = 3.00$, $p < 0.01$), and the self-reliant coping style ($M = 11.15$, $SD = 4.28$). The participants who either worked before or after the diagnosis, perceived two coping styles as ‘effective’. These coping styles are the fatalistic coping style ($M = 0.83$, $SD = 1.800$) and the supportant coping style ($M = 9.12$, $SD = 2.67$, $p < 0.01$).

The participants with a positive family history of breast cancer perceived all the coping styles as ‘effective’. These coping styles were the confrontive coping style ($M = 14.58$, $SD = 0.81$), the evasive coping style ($M = 15.43$, $SD = 6.41$), the optimistic coping style
(M = 15.59, SD = 6.58), the fatalistic coping style (M = 0.79, SD = 1.71), the evasive coping style (M = 0.58, SD = 1.12), the palliative coping style (M = 7.71, SD = 3.12), the supportant coping style (M = 9.00, SD = 2.68) and the self-reliant coping style (M = 11.71, SD = 4.16) (Table 5.15).
Table 5.15: Demographics and ‘Raw Scores’ of the ‘Effectiveness’ of the Eight Coping Styles of 250 Arab Women Diagnosed with Breast Cancer and Living in the UAE (2010) Using ANOVA

<table>
<thead>
<tr>
<th>Effectiveness</th>
<th>Confrontive</th>
<th>Evasive</th>
<th>Optimistic</th>
<th>Fatalistic</th>
<th>Emotive</th>
<th>Palliative</th>
<th>Supportant</th>
<th>Self-Reliant</th>
</tr>
</thead>
<tbody>
<tr>
<td>mean (SD)</td>
<td>mean (SD)</td>
<td>mean (SD)</td>
<td>mean (SD)</td>
<td>mean (SD)</td>
<td>mean (SD)</td>
<td>mean (SD)</td>
<td>mean (SD)</td>
<td>mean (SD)</td>
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<td><strong>25–40</strong></td>
<td><strong>40–50</strong></td>
<td><strong>50–60</strong></td>
<td><strong>60 and over</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td>8.39(7.08)</td>
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<td>0.45(1.17)</td>
<td>4.95(2.60)</td>
<td>7.32(2.16)</td>
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<td>15.84(4.93)</td>
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<td>0.49(1.26)</td>
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<td>0.39(1.01)</td>
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<td><strong>Children below ten years</strong></td>
<td><strong>Children above ten years</strong></td>
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<td></td>
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<tr>
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<tr>
<td></td>
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<tr>
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<td>*</td>
<td>*</td>
<td>**</td>
<td>**</td>
<td>**</td>
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<td>14.78(6.96)</td>
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<td>9.43(3.39)</td>
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<td>Positive family history</td>
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<td>15.59(6.58)</td>
<td>0.79(1.71)</td>
<td>0.58(1.12)</td>
<td>7.71(3.12)</td>
<td>9.00(2.68)</td>
<td>11.71(4.16)</td>
</tr>
</tbody>
</table>

* p < 0.05; **p < 0.01

When variances were equal then the p-values from the one-way ANOVA were reported; in cases where they were not, the Kruskal-Wallis p-value was reported.
5.5.3 Demographics and ‘Adjusted Scores’ of the ‘Use’ of the Eight Coping Styles of the JCS

The participants who were in the age group 50–60 years ‘mostly used’ six out of the eight coping styles: the confrontive coping style (M = 1.52, SD = 0.41), evasive coping style (M = 1.84, SD = 0.35, \( p < 0.01 \)), optimistic coping style (M = 1.88, SD = 0.49, \( p < 0.05 \)), palliative coping style (M = 1.83, SD = 0.41), supportant coping style (M = 1.93, SD = 0.31) and self-reliant coping style (M = 1.81, SD = 0.42, \( p < 0.01 \)). The fatalistic coping style was ‘mostly used’ by the participants in the age group over 60 years and the emotive coping style was ‘mostly used’ by the participants in the age group 25–40 years (M = 1.77, SD = 0.39, \( p < 0.01 \)). The supportant coping style was the most common coping style used by all the participants in all age groups.

The participants who were divorced or widowed ‘mostly used’ seven out of eight coping styles: evasive coping style (M = 1.74, SD = 0.35), optimistic coping style (M = 1.76, SD = 0.51), fatalistic coping style (M = 1.99, SD = 0.72), emotive coping style (M = 1.69, SD = 0.47), palliative coping style (M = 1.87, SD = 0.31), supportant coping style (M = 2.07, SD = 0.41) and the self-reliant coping style (M = 1.75, SD = 0.44). The eighth coping style (confrontive) was ‘mostly used’ by the participants who were married (M = 1.52, SD = 0.40). Once again, the supportant coping style was the main coping style used by all the participants with different marital status.

The participants who had no children ‘mostly used’ the palliative coping style (M = 1.76, SD = 0.42). The participants with children below ten years of age ‘mostly used’ the fatalistic coping style (M = 1.69, SD = 0.79), emotive coping style (M = 1.74, SD = 0.33, \( p < 0.05 \)) and supportant coping style (M = 1.98, SD = 0.24). The participants who had children above ten years of age ‘mostly used’ the confrontive coping style (M = 1.55, SD = 0.40, \( p < 0.01 \)), evasive coping style (M = 1.75, SD = 0.35), optimistic coping style (M = 1.82, SD = 0.52, \( p < 0.01 \)), palliative coping style (M = 1.76, SD = 0.43) and self-reliant coping style (M = 1.73, SD = 0.39, \( p <
Again, the supportant coping style was the main coping style used by all participants within this group. The UAE participants ‘mostly used’ the fatalistic coping style (M = 1.51, SD = 0.68) and the palliative coping style (M = 1.80, SD = 0.43, p < 0.01). The participants from other Gulf countries ‘mostly used’ the confrontive coping style (M = 1.55, SD = 0.44, p < 0.05), evasive coping style (M = 1.77, SD = 0.39), optimistic coping style (M = 1.88, SD = 0.58) and self-reliant coping style (M = 1.76, SD = 0.35, p < 0.05). The participants from the Middle East countries ‘mostly used’ the emotive coping style (M = 1.67, SD = 0.47). The supportant coping style was ‘mostly used’ by the participants from Arab African countries (M = 2.00, SD = 0.37). The ‘mostly used’ coping style among all participants from different nationalities was the supportant coping style.

The participants with post-graduate degrees ‘mostly used’ the confrontive coping style (M = 2.23, SD = 0.46, p < 0.01), optimistic coping style (M = 2.03, SD = 0.78), emotive coping style (M = 1.69, SD = 0.47), palliative coping style (M = 2.23, SD = 0.64) and supportant coping style (M = 2.01, SD = 0.61). The participants with university degrees ‘mostly used’ the evasive coping style (M = 1.79, SD = 0.39), fatalistic coping style (M = 1.64, SD = 0.77) and self-reliant coping style (M = 1.71, SD = 0.39). The supportant coping style was ‘mostly used’ by all participants from different educational levels, except the participants who had a post-graduate degrees.

The participants who had worked before and after the diagnosis of breast cancer ‘mostly used’ the confrontive coping style (M = 1.70, SD = 0.43), the optimistic coping style (M = 1.97, SD = 0.59) and the emotive coping style (M = 1.61, SD = 0.50). The participants who either worked before or after the diagnosis of breast cancer ‘mostly used’ the evasive coping style (M = 1.89, SD = 0.36), fatalistic coping style (M = 1.56, SD = 0.74) and self-reliant coping style (M = 1.82, SD = 0.37). The participants who never worked ‘mostly used’ the palliative coping style (M = 2.24, SD = 0.39) and supportant coping style (M = 1.95, SD = 0.40). The participants who never worked ‘mostly used’ the palliative coping style, those who either worked before or after
‘mostly used’ the supportant coping style and the participants who worked before and after their diagnosis ‘mostly used’ the optimistic coping style.

The participants with a positive family history of breast cancer ‘mostly used’ all the coping styles: confrontive ($M = 1.68$, $SD = 0.06$), evasive ($M = 1.94$, $SD = 0.37$), optimistic ($M = 2.05$, $SD = 0.61$), fatalistic ($M = 1.55$, $0.72$), emotive ($M = 1.73$, $SD = 0.56$), palliative ($M = 1.80$, $SD = 0.43$), supportant ($M = 1.97$, $SD = 0.32$) and self-reliant ($M = 1.80$, $SD = 0.37$). Participants with a positive and negative family history of cancer ‘mostly used’ the supportant coping style.

In summary, participants of different age groups, marital status, parities, nationalities and lower educational levels, who had either worked before or after diagnoses of breast cancer and were with or without a family history of cancer mostly used the supportant coping style (Table 5.16).
Table 5.16: Demographics and ‘Adjusted Scores’ of the ‘Use’ of the Eight Coping Styles of 250 Arab Women Diagnosed with Breast Cancer and Living in the UAE (2010) Using ANOVA

<table>
<thead>
<tr>
<th>Use</th>
<th>Confrontive</th>
<th>Evasive</th>
<th>Optimistic</th>
<th>Fatalistic</th>
<th>Emotive</th>
<th>Palliative</th>
<th>Supportant</th>
<th>Self-Reliant</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean (SD)</td>
<td>Mean (SD)</td>
<td>Mean (SD)</td>
<td>Mean (SD)</td>
<td>Mean (SD)</td>
<td>Mean (SD)</td>
<td>Mean (SD)</td>
<td>Mean (SD)</td>
</tr>
<tr>
<td>Age</td>
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<td>*</td>
<td>**</td>
<td>**</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>25–40</td>
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<td>1.63(0.35)</td>
<td>1.52(0.63)</td>
<td>1.40(0.63)</td>
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<td>1.63(0.33)</td>
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<td>1.52(0.37)</td>
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<td>1.73(0.53)</td>
<td>1.49(0.69)</td>
<td>1.61(0.46)</td>
<td>1.73(0.44)</td>
<td>1.91(0.37)</td>
<td>1.65(0.39)</td>
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<td>1.88(0.49)</td>
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<td>1.83(0.41)</td>
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<td>1.81(0.49)</td>
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<td>Married</td>
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<td>1.76(0.54)</td>
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<td>1.55(0.46)</td>
<td>1.74(0.42)</td>
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<td>1.76(0.51)</td>
<td>1.99(0.72)</td>
<td>1.69(0.47)</td>
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<td>1.75(0.44)</td>
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<td>Parity</td>
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<td>**</td>
<td>*</td>
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<td>No children</td>
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<td>1.74(0.33)</td>
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<td>Children above ten years</td>
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<td>1.76(0.43)</td>
<td>1.94(0.36)</td>
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<td>Use</td>
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<td>Evasive Mean (SD)</td>
<td>Optimistic Mean (SD)</td>
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<td>Emotive Mean (SD)</td>
<td>Palliative Mean (SD)</td>
<td>Supportant Mean (SD)</td>
<td>Self-Reliant Mean (SD)</td>
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<td>1.68(0.41)</td>
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<td>**</td>
<td>**</td>
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<td>1.68(0.51)</td>
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<td>2.24(0.39)</td>
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<td>1.65(0.40)</td>
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<td>Either worked before or after</td>
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<td>1.90(0.61)</td>
<td>1.56(0.74)</td>
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<td>1.94(0.48)</td>
<td>1.94(0.35)</td>
<td>1.82(0.37)</td>
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<td>Worked before and after</td>
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<tr>
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<td>1.66(0.49)</td>
<td>1.45(0.65)</td>
<td>1.52(0.43)</td>
<td>1.73(0.41)</td>
<td>1.93(0.36)</td>
<td>1.65(0.39)</td>
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<tr>
<td>Positive family history</td>
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<td>1.94(0.37)</td>
<td>2.05(0.61)</td>
<td>1.55(0.72)</td>
<td>1.73(0.56)</td>
<td>1.80(0.43)</td>
<td>1.97(0.32)</td>
<td>1.80(0.37)</td>
</tr>
</tbody>
</table>

*p < 0.05; **p < 0.01

When variances were equal then the p-values from the one-way ANOVA were reported; in cases where they were not, the Kruskal-Wallis p-value was reported.
5.5.4 Demographics and ‘Adjusted Scores’ of the ‘Effectiveness’ of the Eight Jalowiec Coping Styles

The participants who were in the age group 50–60 years mostly perceived six out of the eight coping styles as ‘mostly effective’: the confrontive coping style ($M = 2.07$, SD = 0.56, $p < 0.01$), the evasive coping style ($M = 2.13$, SD = 0.61, $p < 0.01$), the optimistic coping style ($M = 2.17$, SD = 0.62, $p < 0.01$), the fatalistic coping style ($M = 0.83$, SD = 1.05), the palliative coping style ($M = 2.31$, SD = 0.64, $p < 0.01$) and the self-reliant coping style ($M = 2.11$, SD = 0.47, $p < 0.01$). The emotive coping style ($M = 0.25$, SD = 0.54) was mostly perceived as ‘mostly effective’ by the participants who were in the age group 40–50 years. The participants in the age group 60 years and over perceived the supportant coping style as ‘mostly effective’ ($M = 2.49$, SD = 0.34, $p < 0.01$). Participants in all age groups mainly perceived the supportant coping style as ‘mostly effective’.

The participants who were divorced or widowed mostly perceived six out of eight coping style as ‘mostly effective’: the confrontive coping style ($M = 1.84$, SD = 0.71), the evasive coping style ($M = 1.85$, SD = 0.66), the optimistic coping style ($M = 1.89$, SD = 0.81), the fatalistic coping style ($M = 0.78$, SD = 1.13), the palliative coping style ($M = 2.16$, SD = 0.78) and the self-reliant coping style ($M = 2.02$, SD = 0.52). The married participants mostly perceived the supportant coping style as ‘mostly effective’ ($M = 2.36$, SD = 0.40). The single participants mostly perceived the emotive coping style as ‘mostly effective’ ($M = 0.43$, SD = 0.67). The supportant coping style was the coping style perceived by all participants in this category as the most effective.

The participants who had children above ten years of age mostly perceived seven out of eight coping styles as ‘mostly effective’: the confrontive coping style ($M = 1.95$, SD = 0.62, $p < 0.01$), the evasive coping style ($M = 1.88$, SD = 0.71, $p < 0.01$), the optimistic coping style ($M = 2.01$, SD = 0.77, $p < 0.01$), the fatalistic coping style ($M = 0.60$, SD = 0.90), the palliative coping style ($M = 2.09$, SD = 0.78, $p < 0.05$), the supportant coping style ($M = 2.37$, SD = 0.41) and the self-reliant coping style.
(M = 1.98, SD = 0.52, p < 0.01). The participants who had no children mostly perceived the emotive coping style as ‘mostly effective’ (M = 0.37, SD = 0.41, p < 0.05). The supportant coping style was mainly perceived by all participants in this category as ‘mostly effective’.

The participants from Gulf countries other than the UAE perceived six coping styles out of eight coping styles as ‘mostly effective’: the confrontive coping style (M = 1.99, SD = 0.67, p < 0.05), the evasive coping style (M = 1.90, SD = 0.80), the fatalistic coping style (M = 0.73, SD = 0.98), the palliative coping style (M = 2.14, SD = 0.76), the supportant coping style (M = 2.43, SD = 0.38) and the self-reliant coping scale (M = 2.03, SD = 0.52, p < 0.05). The supportant coping style was mostly perceived by all participants in this category as ‘mostly effective’.

The participants with post-graduate degrees mostly perceived seven out of eight coping styles as ‘mostly effective’: the confrontive coping style (M = 2.19, SD = 0.86), the evasive coping style (M = 1.78, SD = 0.85), the optimistic coping style (M = 2.12, SD = 0.98), the fatalistic coping style (M = 0.77, SD = 1.10), the emotive coping style (M = 0.76, SD = 0.54), the palliative coping style (M = 2.21, SD = 1.27) and the supportant coping style (M = 2.47, SD = 0.24). The participants with secondary school certificates mostly perceived the self-reliant coping style as ‘mostly effective’ (M = 1.89, SD = 0.57). The supportant coping style was mostly perceived by all participants with different educational levels as ‘mostly effective’.

The participants who worked before and after their diagnosis with breast cancer mostly perceived seven out of eight coping styles as ‘mostly effective’: the confrontive coping style (M = 2.10, SD = 0.65, p < 0.01), the evasive coping style (M = 2.02, SD = 0.76, p < 0.01), the optimistic coping style (M = 2.16, SD = 0.82, p < 0.05), the emotive coping style (M = 0.62, SD = 0.84, p < 0.01), the palliative coping style (M = 2.21, SD = 0.66, p < 0.05), the supportant coping style (M = 2.34, SD = 0.34) and the self-reliant coping style (M = 1.97, SD = 0.63). The participants who either worked before or after their diagnosis with breast cancer mostly perceived the fatalistic coping style (M = 0.69,
SD = 1.01) as ‘mostly effective’. The supportant coping style was mostly perceived by all participants in this category as ‘mostly effective’.

The participants with a positive family history of cancer mostly perceived seven out of eight coping styles as ‘mostly effective’: the confrontive coping style (M = 2.10, SD = 0.09), the optimistic coping style (M = 2.13, SD = 0.86), the fatalistic coping style (M = 0.92, SD = 1.08), the emotive coping style (M = 0.28, SD = 0.49), the palliative coping style (M = 2.21, SD = 0.64), the supportant coping style (M = 2.44, SD = 0.41) and the self-reliant coping style (M = 2.03, SD = 0.58). The participants with a negative family history mostly perceived the evasive coping style as ‘mostly effective’ (M = 2.10, SD = 0.09). Participants with both a negative and positive family history of cancer mostly perceived the supportant coping style as ‘mostly effective’.

In summary, participants of different age groups, marital status, parities, nationalities, educational levels, employment before and/or after the diagnosis of breast cancer, and with or without a family history of cancer mostly perceived the supportant coping style as ‘mostly effective’ (Table 5.17).
### Table 5.17: Demographics and ‘Adjusted Scores’ of the ‘Effectiveness’ of the Eight Coping Styles of 250 Arab Women Diagnosed with Breast Cancer and Living in the UAE (2010) Using ANOVA

<table>
<thead>
<tr>
<th>Effectiveness</th>
<th>Confrontive</th>
<th>Evasive</th>
<th>Optimistic</th>
<th>Fatalistic</th>
<th>Emotive</th>
<th>Palliative</th>
<th>Supportant</th>
<th>Self-Reliant</th>
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<tbody>
<tr>
<td></td>
<td>Mean (SD)</td>
<td>Mean (SD)</td>
<td>Mean (SD)</td>
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<tr>
<td><strong>Age</strong></td>
<td>**</td>
<td>**</td>
<td>**</td>
<td>**</td>
<td>**</td>
<td>**</td>
<td>**</td>
<td>**</td>
</tr>
<tr>
<td>25–40</td>
<td>1.29(0.67)</td>
<td>1.13(0.77)</td>
<td>1.15(0.96)</td>
<td>0.19(0.40)</td>
<td>0.20(0.58)</td>
<td>1.60(0.59)</td>
<td>2.28(0.43)</td>
<td>1.48(0.58)</td>
</tr>
<tr>
<td>40–50</td>
<td>1.74(0.74)</td>
<td>1.55(0.76)</td>
<td>1.69(0.89)</td>
<td>0.40(0.72)</td>
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<tr>
<td>50–60</td>
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<td>2.00(0.72)</td>
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<td>Single</td>
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</tr>
<tr>
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<td>1.66(0.74)</td>
</tr>
<tr>
<td>Children below ten years</td>
<td>1.14(0.61)</td>
<td>0.94(0.66)</td>
<td>0.93(0.81)</td>
<td>0.11(0.32)</td>
<td>0.18(0.58)</td>
<td>1.60(0.56)</td>
<td>2.30(0.37)</td>
<td>1.34(0.43)</td>
</tr>
<tr>
<td>Children above ten years</td>
<td>1.95(0.62)</td>
<td>1.88(0.71)</td>
<td>2.01(0.77)</td>
<td>0.60(0.90)</td>
<td>0.19(0.48)</td>
<td>2.09(0.78)</td>
<td>2.37(0.41)</td>
<td>1.98(0.52)</td>
</tr>
<tr>
<td><strong>Nationality</strong></td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td></td>
</tr>
<tr>
<td>UAE</td>
<td>1.70(0.73)</td>
<td>1.61(0.80)</td>
<td>2.12(0.98)</td>
<td>0.46(0.81)</td>
<td>0.28(0.64)</td>
<td>1.98(0.81)</td>
<td>2.28(0.45)</td>
<td>1.80(0.63)</td>
</tr>
<tr>
<td>Other countries</td>
<td>1.99(0.67)</td>
<td>1.90(0.80)</td>
<td>1.68(0.98)</td>
<td>0.73(0.98)</td>
<td>0.14(0.32)</td>
<td>2.14(0.76)</td>
<td>2.43(0.38)</td>
<td>2.03(0.52)</td>
</tr>
<tr>
<td>Middle countries</td>
<td>1.73(0.68)</td>
<td>1.69(0.77)</td>
<td>1.85(0.89)</td>
<td>0.37(0.63)</td>
<td>0.16(0.46)</td>
<td>1.92(0.73)</td>
<td>2.33(0.45)</td>
<td>1.77(0.52)</td>
</tr>
<tr>
<td>Arab countries</td>
<td>1.76(0.66)</td>
<td>1.64(0.81)</td>
<td>1.84(0.85)</td>
<td>0.07(0.22)</td>
<td>0.14(0.26)</td>
<td>2.00(0.58)</td>
<td>2.36(0.44)</td>
<td>1.75(0.67)</td>
</tr>
<tr>
<td>Effectiveness</td>
<td>Confrontive Mean (SD)</td>
<td>Evasive Mean (SD)</td>
<td>Optimistic Mean (SD)</td>
<td>Fatalistic Mean (SD)</td>
<td>Emotive Mean (SD)</td>
<td>Palliative Mean (SD)</td>
<td>Supportant Mean (SD)</td>
<td>Self-reliant Mean (SD)</td>
</tr>
<tr>
<td>---------------</td>
<td>----------------------</td>
<td>-------------------</td>
<td>----------------------</td>
<td>----------------------</td>
<td>------------------</td>
<td>---------------------</td>
<td>--------------------</td>
<td>---------------------</td>
</tr>
<tr>
<td><strong>Educational Level</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Post-graduate</td>
<td>2.19(0.86)</td>
<td>1.78(0.85)</td>
<td>2.12(0.98)</td>
<td>0.77(1.10)</td>
<td>0.76(0.54)</td>
<td>2.21(1.27)</td>
<td>2.47(0.24)</td>
<td>1.55(0.76)</td>
</tr>
<tr>
<td>Degree</td>
<td>1.73(0.76)</td>
<td>1.70(0.89)</td>
<td>1.68(0.98)</td>
<td>0.55(0.85)</td>
<td>0.27(0.58)</td>
<td>2.06(0.71)</td>
<td>2.30(0.47)</td>
<td>1.85(0.56)</td>
</tr>
<tr>
<td>Diploma</td>
<td>1.84(0.66)</td>
<td>1.71(0.80)</td>
<td>1.85(0.89)</td>
<td>0.28(0.57)</td>
<td>0.22(0.58)</td>
<td>2.01(0.71)</td>
<td>2.36(0.41)</td>
<td>1.81(0.62)</td>
</tr>
<tr>
<td>Secondary</td>
<td>1.79(0.70)</td>
<td>1.72(0.76)</td>
<td>1.84(0.85)</td>
<td>0.52(0.85)</td>
<td>0.15(0.43)</td>
<td>1.99(0.80)</td>
<td>2.35(0.42)</td>
<td>1.89(0.57)</td>
</tr>
<tr>
<td><strong>Employment Before and After Diagnosis</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Never worked</td>
<td>1.71(0.70)</td>
<td>1.63(0.78)</td>
<td>1.72(0.89)</td>
<td>0.40(0.71)</td>
<td>0.15(0.44)</td>
<td>1.94(0.77)</td>
<td>2.33(0.42)</td>
<td>1.83(0.57)</td>
</tr>
<tr>
<td>Either worked before or after</td>
<td>1.95(0.71)</td>
<td>1.90(0.81)</td>
<td>1.97(0.87)</td>
<td>0.69(1.01)</td>
<td>0.20(0.46)</td>
<td>2.21(0.74)</td>
<td>2.41(0.50)</td>
<td>1.92(0.61)</td>
</tr>
<tr>
<td>Worked before and after</td>
<td>2.10(0.65)</td>
<td>2.02(0.76)</td>
<td>2.16(0.82)</td>
<td>0.65(1.04)</td>
<td>0.62(0.84)</td>
<td>2.21(0.66)</td>
<td>2.34(0.34)</td>
<td>1.97(0.63)</td>
</tr>
<tr>
<td><strong>Family History</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No family history</td>
<td>1.70(0.05)</td>
<td>1.63(0.79)</td>
<td>1.71(0.88)</td>
<td>0.37(0.69)</td>
<td>0.19(0.52)</td>
<td>1.95(0.79)</td>
<td>2.31(0.43)</td>
<td>1.81(0.57)</td>
</tr>
<tr>
<td>Positive family history</td>
<td>2.10(0.09)</td>
<td>1.01(0.76)</td>
<td>2.13(0.86)</td>
<td>0.92(1.08)</td>
<td>0.28(0.49)</td>
<td>2.21(0.64)</td>
<td>2.44(0.41)</td>
<td>2.03(0.58)</td>
</tr>
</tbody>
</table>

* p < 0.05; **p < 0.01

When variances were equal then the p-values from the one-way ANOVA were reported; in cases where they were not, the Kruskal- Wallis p-value was reported.
5.6 Summary

In the reported study, 56 per cent of the Arab women diagnosed with breast cancer were younger than 50 years of age. A total of 76 per cent of Arab women who were diagnosed with breast cancer had children who were above ten years old. Eighty-five per cent of the Arab women were married and 95 per cent were Muslims. Fifteen per cent of the participants left their jobs after diagnosis with breast cancer. The monthly household salary of 75 per cent of the surveyed women was under 30,000 Dirhams ($8,220). Two-hundred and eighty women (87 per cent) found the lump by chance and the majority of the surveyed women’s (69 per cent) first response was to visit a hospital. More than 90 per cent of the surveyed women had undertaken the three main treatment mechanisms for breast cancer, which included surgery, chemotherapy and radiotherapy.

The first person who knew about their illness was identified by 79 per cent of the participants as their husband. A total of 97 per cent of the surveyed women considered the hospital as the first informal support mechanism after identifying the illness. More than three-quarters of the women surveyed did not have a family history of cancer. Sixty per cent of the participants who had a positive family history of cancer reported a positive family history of breast cancer. When calculating the raw scores for use and effectiveness of the eight coping styles measured by the JCS the optimistic coping style had the highest raw scores for use with median = 12, mean = 12.8 and SD = 4.5, and effectiveness with median = 15, mean = 13.3 and SD = 6.9. However, when calculating the adjusted scores, the supportant coping style had the highest adjusted score for use (median = 2, mean = 1.9 and SD = 0.35) and effectiveness (median = 2.33, mean = 2.34 and SD = 0.43).

The reported frequency and perceived helpfulness of the eight coping styles showed that: first, three out of ten confrontive coping patterns were mainly used by the participants and these coping patterns were ‘Tried to examine the problem objectively and see all sides’ and expressed by 58 per cent of the participants with 63 per cent stating that they ‘Tried to keep the situation under control’, and 38 per cent stating that
they ‘Tried to find more about the problem’ (Table 5.5). Second, there were three items in the evasive coping style that were mainly used by the participants and at the same time were perceived by the participants as ‘fairly helpful’ and ‘very helpful’ (Table 5.6). Third, the mostly used coping item in the optimistic coping style reported by 77 per cent of the participants was ‘Hoping that things would get better’ and it was perceived by 72 per cent of the participants as ‘mostly effective’ (Table 5.7). Fourth, most of the participants did not use any of the fatalistic or emotive coping styles. Fifth, conversely, 69 per cent of the surveyed women reported that they often used the palliative coping pattern of ‘Tried to distract yourself by doing something that you enjoy’ and 75 per cent of the participants who used this item perceived it as ‘fairly helpful’ and ‘very helpful’. Moreover, 77 per cent of the surveyed women reported that they mostly used ‘Tried to keep busy’, and 86 per cent of the same participants perceived the same palliative coping style as ‘fairly helpful’ or ‘very helpful’ (Table 5.10). Sixth, the only supportant coping pattern that was reported by 96 per cent of the participants as often used and perceived by almost 99 per cent of the participants who used the same coping pattern as ‘very effective’ was ‘Prayed or put your trust in God’. Finally, 69 per cent of the participants reported they used the self-reliant coping style ‘Told yourself that you could handle anything no matter how hard’ and 76 per cent of the surveyed women who used this coping style perceived it as ‘fairly helpful’ or ‘very helpful’. Moreover, 57 per cent of the participants reported they mostly used the self-reliant coping style ‘Thought about how you had handled other problems in the past’ and 80 per cent of the surveyed women who used this self-reliant coping style perceived it as ‘fairly helpful’ or ‘very helpful’ (Table 5.11).

To test the hypotheses stated in Chapter 4, the researcher calculated the demographics and the raw scores as well as the adjusted scores of the eight coping styles of the 250 Arab women diagnosed with breast cancer living in the UAE. The researcher found that although each participant used different coping patterns and perceived them as helpful, the answer to the six hypotheses is that participants in different age groups, with different marital status, parities, nationalities, educational levels, employment before and/or after the diagnosis of breast cancer, and with or without a family history of cancer
‘mostly used’ the supportant coping style and perceived it as ‘mostly effective’ (Tables 5.16 and 5.17).

The next chapter will analyse the qualitative data collected from the focused interviews.
Chapter 6: Understanding the Coping Patterns Exhibited by Arab Women with Breast Cancer: Meaning Through Focused-Interview Methodology

6.1 Introduction

The aim of this chapter is to present the findings of the qualitative component of the current study that address the specific objectives of exploring the coping patterns exhibited by Arab women living in the UAE post-diagnosis of breast cancer. While there is a growing body of literature documenting the coping patterns of women with breast cancer internationally, little is known about the experience of coping with breast cancer as experienced by Arab women. The chapter will identify eight interrelated themes that will provide deep and meaningful insights into the participants’ experiences and shared understanding of living daily with their illness. The chapter aims to present the subjects listed below:

- 6.2 Methods
- 6.3 Sample Characteristics
- 6.4 Findings
- 6.4.1 Reducing Threats to Identity
- 6.4.2 Coping with Changes in One’s Self
- 6.4.3 Seeking a Healthy Identity
- 6.4.4 Coping by Engaging in Religious Practices
- 6.4.5 Stigma and Isolation
- 6.4.6 Facing the Feeling of Uncertainty
- 6.4.7 Accepting Support to Achieve Autonomy and Independence
- 6.4.8 Accepting Changes to Identity (Body Image)
- 6.5 Summary
6.2 Methods

A detailed description of the research methods were presented in Chapter 4. Twenty focused semi-structured interviews were conducted in order to examine the manner in which Arab women with breast cancer utilise coping patterns and the specific coping patterns that they found helpful in overcoming specific challenges from their illness. The 20 participants who agreed to conduct interviews were selected from the 250 participants who completed the questionnaires in phase one of the study. The researcher selected the ten consenting participants who had (a) the highest scores in the coping questionnaire and (b) the ten consenting participants who had the lowest scores as well as purposively selecting from these scores a representation of age groups, educational backgrounds and nationalities. To maintain confidentiality, all women were assigned pseudonyms.

6.3 Sample Characteristics

Twenty Arab women successfully completed all interviews. The first participant was Laudy, a 40-year-old, married, Lebanese, Christian university graduate and house wife. The second participant was Hajjie, a 65-year-old, Palestinian Muslim widow and secondary graduate who was a house wife. The third participant was Omm Khalid, a 60-year-old, divorced, UAE, Muslim secondary graduate and house wife. The fourth participant was Omm Mohamad, a 46-year-old, married, Palestinian, Muslim university graduate and a house wife. The fifth participant was Omm Ziad, a 32-year-old, married, Egyptian, Muslim University graduate and a house wife. The sixth participant was Nancy, a 58-year-old, single, Jordanian, Christian employed university graduate. The seventh participant was Naema, a 47-year-old, married, Palestinian, employed Muslim university graduate. The eighth participant was Omm Mahmood, a 54-year-old, married, Sudanese, employed Muslim with a secondary certificate. The ninth participant was Najwa, a 55-year-old, married, Syrian, Muslim University graduate and a house wife. The tenth participant was Nada, a 55-year-old, Yemeni, divorced Muslim with a secondary certificate who was employed. The eleventh participant was Salma, a 55-year-
old, UAE divorced Muslim with a university degree and who was a house wife. The twelfth participant was Fatima, a 30-year-old, Jordanian, single, employed Muslim university graduate. The thirteenth participant was Mona, a 42-year-old, UAE, married and employed Muslim university graduate. The fourteenth participant was Suha, a 46-year-old employed Lebanese, Christian, married university graduate. The fifteenth participant was Rula, a 48-year-old, Syrian, Muslim, divorced university graduate, and a house wife. The sixteenth participant was Omm Mazen, a 58-year-old, Palestinian, married woman with a secondary certificate who was a house wife. The seventeenth participant was Omm Salem, a 56-year-old, UAE, divorced, secondary certificate house wife. The eighteenth participant was Fatima, a 57-year-old, Saudi Arabian, married house wife with a secondary certificate. The nineteenth participant was Noura, a 38-year-old, Omani, who was married with a secondary certificate and was a house wife. The twentieth participant was Sana, a 42-year-old, divorced Syrian with a post-graduate degree who was employed (Table 6.1).

**Table 6.1: Demographics of Arab Women Who Took Part in the Semi-Structured Interviews**

<table>
<thead>
<tr>
<th>Name</th>
<th>Age</th>
<th>Marital Status</th>
<th>Nationality</th>
<th>Religion</th>
<th>Level of Education</th>
<th>Employment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Laudy</td>
<td>40</td>
<td>Married</td>
<td>Lebanese</td>
<td>Christian</td>
<td>University degree</td>
<td>House wife</td>
</tr>
<tr>
<td>Hajjie</td>
<td>65</td>
<td>Widow</td>
<td>Palestinian</td>
<td>Muslim</td>
<td>Secondary degree</td>
<td>House wife</td>
</tr>
<tr>
<td>Omm Khalid</td>
<td>60</td>
<td>Divorced</td>
<td>UAE</td>
<td>Muslim</td>
<td>Secondary degree</td>
<td>House wife</td>
</tr>
<tr>
<td>Omm Mohammad</td>
<td>60</td>
<td>Married</td>
<td>Palestinian</td>
<td>Muslim</td>
<td>University degree</td>
<td>House wife</td>
</tr>
<tr>
<td>Omm Ziad</td>
<td>32</td>
<td>Married</td>
<td>Egyptian</td>
<td>Muslim</td>
<td>University degree</td>
<td>House wife</td>
</tr>
<tr>
<td>Nancy</td>
<td>58</td>
<td>Single</td>
<td>Jordanian</td>
<td>Christian</td>
<td>University degree</td>
<td>Employed</td>
</tr>
<tr>
<td>Naema</td>
<td>47</td>
<td>Married</td>
<td>Palestinian</td>
<td>Muslim</td>
<td>University degree</td>
<td>Employed</td>
</tr>
<tr>
<td>Omm Mahmood</td>
<td>54</td>
<td>Married</td>
<td>Sudanese</td>
<td>Muslim</td>
<td>University degree</td>
<td>Employed</td>
</tr>
<tr>
<td>Najwa</td>
<td>55</td>
<td>Married</td>
<td>Syrian</td>
<td>Muslim</td>
<td>University degree</td>
<td>House wife</td>
</tr>
<tr>
<td>Nada</td>
<td>55</td>
<td>Divorced</td>
<td>Yemeni</td>
<td>Muslim</td>
<td>Secondary degree</td>
<td>Employed</td>
</tr>
<tr>
<td>Salma</td>
<td>55</td>
<td>Divorced</td>
<td>UAE</td>
<td>Muslim</td>
<td>University degree</td>
<td>House wife</td>
</tr>
<tr>
<td>Fatima</td>
<td>30</td>
<td>Single</td>
<td>Jordanian</td>
<td>Muslim</td>
<td>University degree</td>
<td>Employed</td>
</tr>
<tr>
<td>Mona</td>
<td>42</td>
<td>Married</td>
<td>UAE</td>
<td>Muslim</td>
<td>University degree</td>
<td>Employed</td>
</tr>
<tr>
<td>Suha</td>
<td>46</td>
<td>Married</td>
<td>Lebanese</td>
<td>Christian</td>
<td>University degree</td>
<td>Employed</td>
</tr>
<tr>
<td>Rula</td>
<td>48</td>
<td>Divorced</td>
<td>Syrian</td>
<td>Muslim</td>
<td>University degree</td>
<td>House wife</td>
</tr>
<tr>
<td>Omm Mazen</td>
<td>58</td>
<td>Married</td>
<td>Palestinian</td>
<td>Muslim</td>
<td>Secondary degree</td>
<td>House wife</td>
</tr>
<tr>
<td>Omm Salem</td>
<td>56</td>
<td>Divorced</td>
<td>UAE</td>
<td>Muslim</td>
<td>Secondary degree</td>
<td>House wife</td>
</tr>
<tr>
<td>Fatima</td>
<td>57</td>
<td>Married</td>
<td>Saudi</td>
<td>Muslim</td>
<td>Secondary degree</td>
<td>House wife</td>
</tr>
</tbody>
</table>
In summary, the researcher was able to conduct semi-structured interviews with 20 Arab women who had breast cancer and were from a range of different ages (50 per cent < 50 years old and 50 per cent >50 years old), different Arab countries (35 per cent Gulf countries, 55 per cent Middle East, ten per cent Arab African countries), with different levels of education (60 per cent university degree & 40 per cent high school degree), marital status (55 per cent married and 45 per cent single or had been married) and of different occupations (65 per cent were employees and 35 per cent were currently not working) (Table 6.2).

Table 6.2: Frequency of Demographic Data of Arab Women Who Took Part in Semi-Structured Interviews

<table>
<thead>
<tr>
<th></th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; 50 years old</td>
<td>10</td>
<td>50</td>
</tr>
<tr>
<td>&gt; 50 years old</td>
<td>10</td>
<td>50</td>
</tr>
<tr>
<td><strong>Nationality</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UAE</td>
<td>4</td>
<td>20</td>
</tr>
<tr>
<td>Other Gulf countries</td>
<td>3</td>
<td>15</td>
</tr>
<tr>
<td>Middle East</td>
<td>11</td>
<td>55</td>
</tr>
<tr>
<td>Arab African</td>
<td>2</td>
<td>10</td>
</tr>
<tr>
<td><strong>Marital Status</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Married</td>
<td>11</td>
<td>55</td>
</tr>
<tr>
<td>Single or been married</td>
<td>9</td>
<td>45</td>
</tr>
<tr>
<td><strong>Religion</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Muslim</td>
<td>17</td>
<td>85</td>
</tr>
<tr>
<td>Christian</td>
<td>3</td>
<td>15</td>
</tr>
<tr>
<td><strong>Level of Education</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>University degree</td>
<td>12</td>
<td>60</td>
</tr>
<tr>
<td>Secondary degree</td>
<td>8</td>
<td>40</td>
</tr>
<tr>
<td><strong>Occupation</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employed</td>
<td>8</td>
<td>40</td>
</tr>
<tr>
<td>Unemployed</td>
<td>12</td>
<td>60</td>
</tr>
</tbody>
</table>
### 6.4 Findings

Qualitative data analysis revealed eight broad conceptualisations of the experience of Arab women suffering from breast cancer, which are presented in Table 6.3. These interrelated themes provide meaningful insights into the participants’ experiences and shared understanding of living with breast cancer. A broad analysis of each of these themes, along with extracts from the data to illustrate each category is presented below.

**Table 6.3: Overview of the Coping Patterns Experienced by the Participants during the Interviews**

<table>
<thead>
<tr>
<th>Theme</th>
<th>Sub-themes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Reducing the threat to personal identity</td>
<td>• ‘nothing to worry about’</td>
</tr>
<tr>
<td></td>
<td>• ‘sense of humour’</td>
</tr>
<tr>
<td></td>
<td>• ‘getting angry quickly’</td>
</tr>
<tr>
<td></td>
<td>• ‘the problem is someone’s else’</td>
</tr>
<tr>
<td></td>
<td>• ‘do not trust ‘just’ any doctor’</td>
</tr>
<tr>
<td>2. Coping with changes in one’s self</td>
<td>• ‘becoming fragile’</td>
</tr>
<tr>
<td></td>
<td>• ‘exaggerate simple symptoms’</td>
</tr>
<tr>
<td>3. Seeking a healthy identity</td>
<td>• ‘change in occupation’</td>
</tr>
<tr>
<td></td>
<td>• ‘finding a healthy role model’</td>
</tr>
<tr>
<td>4. Coping by engaging in religious practices</td>
<td>• ‘visiting religious places’</td>
</tr>
<tr>
<td></td>
<td>• ‘using blessed/holy water’</td>
</tr>
<tr>
<td></td>
<td>• ‘praying or reading religious books’</td>
</tr>
<tr>
<td></td>
<td>• ‘God has given me the strength’</td>
</tr>
<tr>
<td>5. Overcoming the stigma and isolation</td>
<td>• ‘finding someone who shares the same feelings’</td>
</tr>
<tr>
<td></td>
<td>• ‘the prohibited disease (That disease)’</td>
</tr>
<tr>
<td></td>
<td>• ‘feeling depressed’</td>
</tr>
<tr>
<td></td>
<td>• ‘not to express feelings’</td>
</tr>
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<td>6. Facing uncertainty ‘I do not want to die’</td>
<td>• ‘engaged in work’</td>
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<td>• ‘remember ideal models who passed through this disease’</td>
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<td>7. Accepting support in achieving autonomy and independence</td>
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<td>8. Accepting changes to body image.  ‘The wound affected me a lot’</td>
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6.4.1 Reducing Threats to Identity

The theme ‘Reducing threats to identity’ encompassed the typical, common and the deleterious consequences of the diagnosis of cancer on the women’s lives.

The lump is nothing to worry about. For many women, denial was a coping method that helped them to overcome their stress. Some women chose to ignore the presence of the lump and consequently delayed seeking medical assistance.

Suha and Laudy were both Lebanese married Christians of 40 years of age who ignored their doctors’ advice to undergo further investigations and indicated that they had ‘nothing to worry about’:

When I did the first check-up they told me you need to do more investigation, but I continued believing that it is nothing and no need to do anything although I could feel it. (Laudy)

I felt it but I did not want to go and see a doctor because I kept on convincing myself that it is nothing. (Suha)

Hajjie and Omm Mohamed, who were both Palestinian, widowed Muslim women of 60 years of age, tried to convince themselves that the problem was a temporary issue so that they did not need to go for check-ups:

When bad things happen, I put in mind that is temporary and will be over soon, so when I felt this lump in my breast I thought that it is nothing and it will go with time. (Hajje)

One time when I was taking a shower I noticed a big lump in my left breast, it was big, I was so frightened that I thought what is this? No it is not true, it is nothing and it will go by itself, so I ignored it. (Omm Mohamed)
Nancy, a 58-year-old, Jordanian, Christian single woman believed that her disease was due to incorrect medical interventions. Moreover, Omm Mahmood, a 54-year-old, Sudanese Muslim woman believed that the hospital exchanged her results with another woman and she had received treatment although she did not have cancer:

I went and saw my doctor, he asked me to do a test, so I went and did an x-ray and they told me that they needed to take some of the fluids in that lump to examine it. I knew that the problem was from the needle they used to remove the fluids. I have nothing, but all my problems are because of a contaminated needle. (Nancy)

I still have doubts if I have cancer or not, till now I am not sure, even though I did the operation, and the treatment but I still think most of the times that they are mistaken and they took the results of another person. (Omm Mahmood)

Mona, a 42-year-old, married Muslim woman from the UAE and Omm Khalid, a 60-year-old, UAE, divorced Muslim woman were both not able to face their problems, so they simply stopped thinking about them:

When they tell me something that I cannot face, I run away from it. This happened to me when they first told me that I have cancer. I blocked it and I did not want to believe it. (Mona)

Sometimes I face problems and sometimes I run away from it. Now with this problem I ran away as I am afraid and I believe that I cannot do anything to overcome it. (Omm Khalid)

Laudy, a 40-year-old, Lebanese, Christian married woman and Omm Salem, a 56-year-old, UAE Muslim divorcée went further in their denial and tried to prove to themselves that nothing had changed:

After the operation for the removal of my breast, the first thing I did when I left the hospital was that I went and bought a swimming suit, I was so naïve. (Laudy)

All what they did was done as preventive measures because they found something in the biopsy, so the operation, treatment and the radiotherapy and the rest are mainly done if there were any cancer cells they will die and if there are none it will not cause any bad effect. (Omm Salem)

**Tried to keep my sense of humour.** Some women alleviated their anxiety through the use of humour.
Hajjie, a 65-year-old, Palestinian Muslim widow used to spend her time telling jokes to her family:

My sisters used to tell me jokes, and make funny things to keep me smiling. I do not know how I remembered all that jokes and I felt very relaxed and happy when I was responding to their jokes and even telling my sisters back lots of jokes too. I felt that time that I can control my life and I will not accept anything to defeat me. (Hajje)

While Suha, a 46-year-old, Lebanese, Christian married woman started laughing when the doctor told her about her diagnosis as she considered it a joke:

When the doctor told me that I need to do a mastectomy, I looked at her for a second and then I said: ‘You are kidding!’ and I started laughing. I did not want to believe that what she is telling me is true. (Suha)

While Najwa, a 55-year-old, Syrian, Muslim married woman and Sana, a 42-year-old, Syrian, Muslim divorced woman both acknowledged the use of humour that allowed them to discuss their feelings of uncertainty:

When my brothers knew about my condition, they called to ask me what I will do with my land. I was shocked and I told them, I do not know and I started laughing. When I stopped laughing I told them: ‘You cannot wait to see if I will die or not before thinking that way’. (Najwa)

After the chemotherapy, I told my friend: ‘You know I am lucky I do not have to do waxing anymore’. (Sana)

Mona, a 42-year-old, UAE, Muslim married woman and Laudy, a 40-year-old, Lebanese, Christian married woman both gave reasons and explanations for their disease:

I told myself that I passed through lots of physical problems in my life that caused lots of pain; much more than the pain I had in this problem. I had five years of back pain that I could not sleep, or could not leave the house. This cannot be worse. (Laudy)

When I knew that I have cancer, I told myself it is nowadays like flue, you take medication and you will be o.k. and the story is over, but I was really mistaken, it will never be over. (Mona)
**Getting angry quickly.** Most of the surveyed women from different nationalities or age groups had noticed that they got angry more quickly once they knew about their sickness:

I never used to shout, but since the operation I started to shout and get angry quickly. Most of the times I shout at my husband, and fewer times at my children. (Omm Mohamed)

I have changed a lot, nowadays I get angry easily and I start shouting at my husband and my children and after a minute I start crying. (Omm Ziad)

I like cleanliness and discipline so when I am under stress I overdo it and if things are not clear or not in good shape I start shouting until they fix it. I noticed that after the sickness I am shouting continuously and I knew that this is due to sickness. (Noura)

I was not like that before, but since I got sick, I shout a lot whenever anyone says one thing. I take it very badly and I keep on thinking about it in all directions, but at the end I take the worse explanation. (Salma)

Sometimes I feel angry and I start shouting at my grandchildren most of the times as I cannot hear any loud voices. I feel upset easily although I do not want to stay alone. I hate what happened to me; this disease destroyed my life. (Omm Khalid)

In contrast, some women stated that ‘the problem is someone else’s fault’.

Laudy and Nancy, a 58-year-old Jordanian and Salma, a 55-year-old UAE woman stated that despite checking frequently in clinics, no one noticed the lump until it became big enough to be felt accidentally:

The lump was so big even though it was only after seven months since I did the previous mammography, so whose fault was it? Of course it is the doctor’s fault. (Laudy)

I am sure that what happened and all the suffering I went through was due to a dirty needle when they did the biopsy. (Nancy)

I had a lump so I went abroad and they took it out and when I came back I showed the results to a family friend who is a doctor. She said I need to go to the hospital for more treatment. I went and they started me on radiotherapy, so that was the reason why I have cancer. I did not have cancer before, but the radiation caused the normal tissues in me to change into cancer, and I believe that I have cancer because it is the hospital’s fault. (Salma)
Did not trust ‘just’ any ‘doctor’. Some women felt frightened because they simply did not trust ‘just any’ doctor in their community.

Fatima, a 30-year-old Jordanian woman and Suha, a 46-year-old Lebanese woman did not trust any doctor and they both declared that they had to check with many doctors before they finished their treatment:

The minute I knew about my condition, I opened my phone and called my husband and asked him to call the insurance company to see how much they can cover and who are the good doctors in town. (Fatima)

I do not trust the doctors. I visited around 2000 doctors till now, I keep an eye open and focus on what they are saying, and I compare the conversations with each other and till now I have contradiction between different oncologists. (Suha)

Noura, a 30-year-old, Omani married woman believed treatment for breast cancer is still under study, so she did not trust that her doctor had used the best treatment available:

Now things are better and I am ok, but you feel that this sickness is still under study and every doctor is working according to a specific study and they do not know which way is the best. (Noura)

While Nancy, a 58-year-old, Jordanian single woman believed that doctors would not disclose a mistake done by a previous doctor:

The second doctor did the operation only because my breast was blue from the biopsy, so I do not know if they removed my breast because I had cancer or because they used a dirty needle when they took the biopsy? I really do not trust them because usually doctors cover for each other. (Nancy)

Once she knew about her condition, the first thing Suha did was search for the best hospital for treatment:

I wanted to find the best hospital and I did my search until I decided where I should go, so I had to wait for 20 anxious days until they gave me an appointment. Unfortunately they did not do a full check-up and they decided to do a surgery even though the cancer reached the bones. (Suha)

Najwa had a relative who had a bad experience with the radiotherapy and so she had developed a fear of radiotherapy reported as follows:
I am so frightened from the radiation because one of my relatives is dying now because she had allergy to radiation, so I did a search and found only one machine in Germany that is safe because it will kill only the cancer cells and will keep the normal cells. The problem is that I do not have enough money to go and do it there. (Najwa)

Hajje, a 60-year-old, Palestinian, Muslim married woman trusted her doctor simply because she felt relaxed with him, because he used to pray before proceeding with any treatment:

I trust my doctor because he is a believer, he prays before seeing any patient and he prays before he start any operation. The doctor who does this I trust anything he tells me. (Hajje)

Omm Mohamed, a 46-year-old, Palestinian, Muslim married woman believed that the doctor was only doing what he had learnt, but that ultimately the results would be in the hands of ‘God’ and only ‘God’ would be the one to decide who would get cured or who would die:

I trust my doctor and I listen to everything he mentions, and abide by whatever he says, but I know that she cannot change my destiny. I will get only what God had written me. (Omm Mohamed)
6.4.2 Coping with Changes in Body Image

6.4.2.1 Becoming Fragile

Omm Mohamed believed that when she got sick she would be a weak person and that people around her would always consider her as a weak woman who would get sick easily:

When you break a dear cup then you try to fix it but it will never be the same as before, you always feel that this cup is either ugly, or fragile, or you hide it because if you use it might break easily. I am now like this cup even if I passed through this, still people around me will always feel and deal with caution and this is what I hate most. (Omm Mohamed)

Omm Ziad, a 32-year-old, Egyptian, Muslim married woman felt that she became featureless when she lost her hair during the chemotherapy:

After the second dose, I went home to take a shower and I found all my hair on my shoulders. The scene was very hard (crying). I will not forget this picture all my life, while standing in front of the mirror all my hair dropped, afterwards my eye brows, then eye lashes, two days later not even one hair on my body. I felt like a person without features. (Omm Ziad)

Najwa, a 55-year-old Syrian woman, Salma, a 55-year-old UAE woman and Nada, a 55-year-old Yemeni woman shared the same feeling that they became easily disturbed: they got angry, frightened or upset. All these emotions started only after the diagnosis of breast cancer:

The minute I heard from the doctor that I have cancer I felt as if someone threw boiled water on me, then I started feeling anxious, frightened and angry at the same time. When I started the treatment all the anger feelings changed to sadness and I became lazy and helpless. (Nada)

I feel very lazy and I get tired quickly so all I do is to go to open places to eat or drink. All what I want to do is to keep up with the regular check-ups. I became obsessed about this because I feel safe when I am in the hospital. (Salma)

I am afraid that it will kill me because I do check up every six months and now it is spreading more in my bones. I am trying to help myself in the diet, reading and watching TV. I eat organic food, cereals and I use anything to fight the depressed feeling. (Najwa)
6.4.2.2 Exaggerating Simple Symptoms

Laudy and Rula, a 48-year-old Syrian woman, both acknowledged that they started exaggerating simple symptoms:

If I feel anything itching me, I think something went wrong and immediately I call for an appointment. I know it is only small thing, but I cannot control my emotions because if I do not call the doctor, then I will become anxious. (Laudy)

My daughter who is fourteen had pain so I took her to the doctor and he said she has a cyst on one ovary, so my immediate response was let us remove the cyst and the ovary, the doctor told me it is ok it will go next month, and it really did next month. Imagine how much I changed. (Rula)

On the contrary, Hajje tried to minimise the problem in order to deal with it:

When things happen to me like this disease, I put in mind that it is something passing by and it is temporary and it will be over soon, so I do not give it importance, and all the house will be thinking and busy with my problem but I do not give it any importance. (Hajje)

6.4.3 Seeking a Healthy Identity
6.4.3.1 Changing Occupation

None of the working women wanted to leave their jobs and stated that they considered work as a way of coping with their sickness. Further, some women from different nationalities such as Nancy (Jordanian), Naema (Palestinian), Salma (UAE) and Najwa (Syrian) were asked by their employers to leave their jobs:

Once they knew my medical condition at work, they terminated me within three months. That was a very big shock more that the cancer itself. (Nancy)

Once they knew about my sickness, they asked me to resign. After finishing my treatment, I searched for another job that will not ask for a medical check-up because I was afraid that they will not hire me. (Naema)

I lost my job because when they knew that I have cancer and I need to travel abroad for treatment, they found a silly reason to terminate my contract. (Salma)

When I started the treatment I felt very weak, so I thought of leaving my job, so I took sick leave and I told them that I might not continue, but the big shock was when they told me we do not want you. I was a good teacher (started
crying). I could not handle it because I love my job so immediately I booked a ticket and left the country for treatment. Imagine now once I finished the treatment they knew and they want me to join again. They left me behind when I needed them most. (Najwa)

6.4.3.2 Finding a Healthy Role Model

Mona and Omm Ziad, a 32-year-old, Egyptian, Muslim married woman and Mona, a 42-year-old UAE, Muslim married woman believed that talking to or thinking of a woman they each knew who recovered from the sickness and was healthy now, was a very important way of coping with the disease:

When you ask the doctor if any simple symptom happen to you, he will tell you it is normal, but you will not feel relaxed unless you hear it from someone who is healthy now but passed through this experience before. She will tell you exactly what you are feeling. (Mona)

Whenever I feel depressed I remember my mother who had breast cancer and she used to take care of her family even that time there were no medications, but she was a great fighter. (Omm Ziad).

6.4.4 Coping by Engaging in Religious Practices

6.4.4.1 It Is All in God’s Hands

Most of the women used religion as a coping pattern and they perceived it as effective. Moreover, some women from different nationalities believed that their life and recovery were in God’s hands:

I do not trust whatever a doctor tells me, all what I do is depending on God’s abilities. (Omm Mazen)

Religion plays a very important part in my life, before they took a biopsy I prayed that God will lighten our way, and believe me, whenever it gets complicated, I find a way to solve it. (Laudy)

When I feel weak and I start crying, I start praying to God and ask him for His mercy, and I believe that nobody will die until his/her time comes, take it as a rule, no disease, no diabetes, no hypertension, and no heart problem, and not anything only when your time comes you will die. (Omm Salem)
Omm Mohamad, a 46-year-old, Palestinian married woman and Omm Mahmood, a 54-year-old, Sudanese, Muslim married woman acknowledged the common centrality of religious beliefs that were held by themselves, their husbands and other social-support networks:

My husband keeps on telling me do not be sad, this is from God, and I believe it is so, and since long time even before my sickness we practice the basic concepts in our religion and now we moved to advanced practices in Islam. I even want to do more but I cannot. Anyway I have peace inside me and I am putting everything in God’s hands. What makes me stronger is that I believe that it is my destiny and if God had written for me to get cured or not I accept. (Omm Mohamed).

Thanks to God I believe that everyone has his destiny and I have to accept what God has written to me. I also believe that God helped me and He accepted my prayers and he supported me, thanks God for everything I read from the Qur’an frequently and pray all the five daily prayers, and I went to Hajj, there I asked God to help me and I am sure He did. I always pray to God to cure me from this disease and to strengthen my belief in Him. I know that no one will die if it is not his day, but I keep on asking Him not to get this disease again. (Omm Mahmood).

6.4.4.2 God Has Given Me the Strength

Omm Ziad and Omm Mahmood both believed that ‘God’ has given them the strength to support their family members:

I prayed to God and I said what to do I have to be strong and help my family, the girls were very weak so I had to help them. (Hajje)

When my sister-in-law told me about the results she was crying and my husband was crying and all I did was I started praying and afterwards I told them we need to see the doctor. I do not know why I was the only person who was not crying and God had given me the strength to support everyone although they needed to support me. (Omm Ziad)

I started helping others because God likes people who solve others’ problems. In Qur’an, God says that there are people who will be wearing white and will sit near God in paradise are those who solve others’ problems. Thanks God I have this talent and I try to solve others’ problems. (Omm Mahmood)

Some women believed that by praying and reading the holy books, they would become relaxed and able to overcome their uncontrollable emotions:
I used to be religious before the disease, but what changed is that I started reading more since the disease. When I start reading I forget my worries and I feel relieved. (Noura, 38 years old, Omani)

I depend on God in everything, and this is the most important thing in life, I pray a lot; for example, there is a part in the Qur’an that is important to pray, I repeated it 50 times before operation and that is why I woke up after the operation relaxed and calm. (Naema, 47 years old, Palestinian)

I started praying a lot and this helped me, God gave me the strength to continue. When I feel upset, or angry, I used to start praying and I found peace. (Omm Ziad, 32 years old, Egyptian)

I teach religion and I believe that God protects me and helps me. Thanks God ‘He, who is the only one we thank for unwanted issues’, everything is in his hands, nothing happens to me unless God wrote it for me. I read the Qur’an, and the cure is there and I believe that He will cure me. He is close to me more than my blood, no mother or sister and He created the medicine for every disease. (Fatima, 57 years old, Saudi Arabian)

God is the only one who will give me the patience and strength so I will be able to fight this disease. This can happen through lots of praying. (Sana, 42 years old, Syrian)

I’ve always been religious, I pray regularly, but since my sickness, I started to pray more because I feel more secured and more at peace when I pray, it became like a therapy to my emotions. (Nancy, 58 years old, Jordanian)

I cannot cry, because if I do this means that I do not accept God’s will and this is forbidden in Islam, so when I am upset or I want to shout, I start praying or I change the place so the devil will leave me. I sometimes listen to religious speeches. (Omm Mazen, 58 years old, Palestinian)

When I get upset, I start praying. When I pray I feel much better, it turned out to be the best way. The only way is by praying and it is the only thing I do that makes me stop thinking and makes me relaxed. (Nada, 55 years old Yemeni)

Omm Khalid, a 60-year-old, UAE, Muslim divorced woman, Rula, a 48-year-old, Syrian, Muslim married woman and Naema, a 47-year-old, Palestinian, Muslim married woman visited the holy places as a way of coping with their illness:

I used to pray very fast, now I take my time in praying and I visited Mecca several times after the operation. (Omm Khalid)

My relationship with God is good and got even better after the problem. I believe it is from God. I pray and I read the Qur’an continuously, imagine in

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1 Mecca is a religious and important city in Saudi Arabia where Muslims visit to pray
five years I went to Mecca 7 times and I pray all my prayers on time. I went to Hajj twice after the problem. (Rula)

I brought with me from Mecca Zamzam water (holy water). I use it when I take shower every day, I believe in this and I am convinced that the holy water is protecting me. When I started treatment I took it with me and I took shower before any procedure till now especially on Fridays. This makes me protected. (Naema)

Najwa saw an angel in her dreams, who came twice and told her what she should do:

I come from a family where they have cancer from both sides (mother and father), so I do regular check-ups. Since one year and I feel very weak, I did all types of check-ups and everything is normal, no one told me to do test for cancer, all the time I feel that all my bones are hurting me. One day at dawn I woke up and I saw a man with white cloths like an angel and he told me you have cancer so I went to the clinic and it turned out that I have breast cancer and it reached the bones. (Najwa)

Two days before the operation the same angle came to me and told me the cancer reached the bones, do not do the surgery. I followed my instincts even though I believe in reason and I am a teacher, writer and a musician. (Najwa)

6.4.5 Stigma and Isolation

Loneliness. Some women felt that they lost their social relationships due to their disease. For example, Omm Khalid and Omm Mazen mentioned that people stopped visiting them, while Omm Mohamad and Omm Ziad mentioned that they did not want to see anyone. However, all women with different nationalities agreed that having social support was an effective coping strategy:

My relationship with my neighbours used to be very good, but now things changed I do not see them frequently because they are busy and they do not have time to visit people like me, people like to go where they can laugh not where they feel sad. My children in the same house and I do not see them frequently so I cannot complain about my neighbours. (Omm Khalid).

Nowadays, I am very upset, I have a room in the big house so I do not see my kids, they come for a short time then they say they are tired and they need to go to their rooms to sleep so I stay most of the times watching TV or sleeping as no one comes to visit me. (Omm Mazen)

Our social relationship changed, I am not doing any social visits, even I do not want people to come for a visit, so I try to find lots of excuses to delay their visits. (Omm Mohamed)
I stopped communicating with my friend as before, and I know that some friends try to avoid being in the same place with a sick person. Some they like to check if I changed, lost weight, my hair had fallen out, things like that, so I stopped talking to anyone because I hate sympathy. (Omm Ziad)

I used to work seventeen hours every day, now I gave up everything and I am focusing on what to eat, what to do next, where is the best clinic. I feel so lonely and what is bothering me most is that I gave up all my dreams. (Najwa)

6.4.5.1 Sharing the Same Feelings

Some women coped with their disease by talking to people who had cancer and were experiencing the same feeling and emotions. This experience gave them the strength to challenge the disease and to feel that they are not alone:

After I got sick I found out that there are lots of people who are sick, they have cancer and specifically breast cancer, and younger than me, some in their thirties, or even younger. (Sana, 42 years old, Syrian)

When I used to go to the hospital for medication and see new patients, I used to start encouraging them and giving them hope the same way one woman gave me hope the first time I went to the hospital. (Omm Ziad, 32 years old, Egyptian)

My sick brother asked me to stay with him in Canada during my treatment and he was a very big support to me. He told me look at me if you are not strong you will not be able to overcome your problem. I have cancer too and I am living my life normally when death will come let it come but do not give up at all. (Nancy, 58 years old, Jordanian)

I saw two ladies who had breast cancer and they told me about the development of the treatment and that sometimes they start with treatment to control the tumour and then they do the surgery, another lady they did not remove the tumour. I feel relaxed when I talk to these women because I feel that I am not alone. (Suha, 42 years old, Lebanese)

The prohibited disease (‘that’ disease). The women explained how the community viewed cancer sufferers in that cancer was a deadly disease that people should not talk about or even mention the word, and if a person got the disease the relative should hide this condition and give other names to the disease.

Suha’s family did not allow any topic related to cancer to be discussed:
All people in my culture when they hear about any problem or disorder, they directly put it under certain classification that they already have in their mind. Take cancer for example, no one is allowed to discuss this disease because it is a deadly one. (Suha)

Laudy is another Lebanese woman who mentioned that people feel shy and uncomfortable when speaking to someone who has cancer:

I hate sympathy, till now we are facing this, if she has cancer, first they stop talking to you? They do not know what subject to open? They become shy if they ask you how you are. (Laudy)

Noura, an Omani woman, knew only by accident that her uncle died from cancer as saying the word ‘cancer’ was not allowed in her family:

My uncle died of leukaemia, but only recently I knew from his daughter-in-law, because whenever anyone would ask them what was wrong with my uncle, they used to say something in his blood that is why we need to take him to hospital to change his blood. (Noura)

Mona and Hajje were both afraid to pronounce the name of the disease as follows:

In my family, they cannot pronounce the word cancer; they say ‘that’ disease. (Mona)

The name is frightening, and my family avoids mentioning the name of this disease. We are not allowed to say it because they used to say if you say it will come and affect you. (Hajje)

Nancy believed, as did other members of her community, that cancer was contagious:

I do not care if people will know about my disease, but here cancer is a disease that people do not like to talk about it, and I might lose my job if they know that I have cancer. I lost my job once when I got sick, and I do not want to repeat it again. This is the reason why I do not want anyone to know that I have cancer. (Nancy)

Naema felt relieved as she was able to speak to someone (i.e. the researcher) about her disease as it is not permitted in her culture to talk about it:

Thanks for giving me the chance to talk with you because as you know we cannot talk in front of anyone about this disease, it is not a shameful thing, no but people believe that this disease is a deadly one and people only talk nowadays about nice things. (Naema)
Fatima’s (30 years old, Jordanian) fiancé left her once he knew she had cancer and was encouraged to do so by his family:

I was engaged and we were preparing for our wedding. After the operation, I felt that his parents changed and they stopped visiting me, but my fiancé stayed with me till I finished the treatment and then he told me that he wants to leave because all his family told him you are still young and it is not fair to stay with someone who has cancer. (Fatima)

Najwa believed that her chemotherapy might harm the people around her, so she stopped visiting them:

I think that the medication I am taking will affect the children in one way or another, but I prefer not to come close to anyone especially the kids. I try to see the parents without the children, maybe I transferred anything to the children, I do not want. Maybe my body is carrying a poison that it may transfer to them. (Najwa)

6.4.5.2 Feeling Depressed

Several surveyed women revealed depressed feelings and claimed these were due to a number of different reasons.

Laudy felt depressed because she was not able to find the right treatments:

I feel depressed when things are not solved, that happened when I could not find an oncologist. I felt so upset, I felt sick, because I have a deadline after the operation before I must start treatment, otherwise everything will not be effective, so I used to wake up every night and cry until I started the treatment, then I stopped crying. (Laudy)

Omm Khalid felt depressed because she was not able to fulfil her role as mother, wife or as a family member:

My children are very good and my relationship with them did not change, but I feel very bad because you know I used to cook and take care of everything in the house, but now I cannot do anything, I stay most of the time in my room. (Omm Khalid)
Omm Mohamad could not cope with her physical weakness due to the disease so she felt defeated:

I feel defeated, I am tired, I have changed a lot, always anxious, and afraid and I do not know why. (Omm Mohamed)

Omm Ziad was depressed because she could not cope with her changes in her body image:

I felt depressed most when they put me alone in the hospital because I had to start radiotherapy and my kids got chicken pox. Imagine someone alone in the room with incomplete body, no hair, dark skin, so I started talking to myself. (Omm Ziad)

In contrast, Naema, and Fatima, a 57-year-old Saudi Arabian woman, appreciated life more after their initial diagnosis:

I have changed a lot after the problem, I love life more now, I travel every summer. After the problem, my husband and me started going on vacation, that was not the case before, now we want to see other places, visit new countries, enjoy life more. Before you face a major problem you never think that life is short and you need to do things as soon as possible. This does not mean that I think I will die soon, now I appreciate life more. (Naema)

I have changed after the sickness, I started praying for God to help me overcome this problem, and I started appreciating life more, and since then I thank God on every day and whenever I do anything. When I went to remove the dressing of the wound, I was very active and I told the doctor please hurry up because I need to go because I have lots of things to do. The doctor said: please keep this positive spirit as it helps a lot. (Fatima)

Najwa declared that she used to sing to help her feel better whenever she felt depressed:

I fight the sadness by singing as I have a nice voice and I play piano so I start singing until I change my mood because I am alone at home, my husband and my son are at work. (Najwa)
6.4.6 Facing the Feeling of Uncertainty (I Do Not Want to Die)

The surveyed women used different coping patterns to face their feelings of uncertainty.

Women from different nationalities commonly agreed that the best way to face the disease was by frequent check-ups and looking for the best treatment:

I expected that my destiny was to die from cancer, but I never expected that cancer will come so early. I found out that the best way to face this disease is by frequent check-ups. (Laudy, 40 years old, Lebanese)

I have changed in a way that I check regularly and I do not underestimate anything, I follow up with the doctor, and whenever he asks me to do anything I go directly and do it. I put my health in his hands and I stop thinking. (Naema, 47 years old, Palestinian)

I face my problem by following the instructions from my doctor. I eat healthy food, take my medication, daily exercises and keep on convincing myself that this will protect me from any other problems. When after all this I cannot control my negative thinking, I pray. (Omm Salem, 56 years old, UAE)

When I knew that I have cancer, I did not know what to do. I felt like someone is telling you that you are dying; then I started thinking what is the thing that will kill me first, is it the cancer or the treatment? Yes, the first threat for me was having an allergy to the treatment and I was under the impression that this will kill me first. (Nada, 55 years old, Yemeni)

Mona, and Najwa, a 55-year-old Syrian woman, faced the disease by focusing on the people that they loved and trying to do their best for them:

When the doctor told me, you have cancer, directly I asked him, what are my chances, he said you have 80 per cent chance. The first thing came to my mind what if I am among the 20 per cent, what will happen to my children. For them I should never give up. (Mona)

I do not sleep at night, I think that if it spread and I could not control it, what will happen? So what should I do before I die, sometimes I plan to sell my properties and give them to my son and see him happy when I am still alive. Sometimes I stay awake till dawn then I leave the house and buy breakfast and give to all the people who are cleaning the streets and I come back home tired so I sleep. (Najwa)

Noura, a 38-year-old Omani woman, kept in mind what the previous personal role models did when they faced the disease:
I faced my cancer by remembering what my daddy passed through when he faced cancer and I told myself what I am passing through is nothing compared to my father, so definitely I will make it. (Noura)

Some women from different nationalities tried to engage more in work to overcome their disease:

- When my thought reaches a point that life can be very short, I start working in anything near me and I focus on my work until the idea goes away. (Laudy, 40 years old, Lebanese)
- I did not want to sit so I will not start thinking so all day when my children are outside I start cooking, cleaning, fixing the house, doing anything that keeps me busy. (Hajje, 65 years old, Palestinian)
- I do not think of the future, I cannot think, I keep myself busy so I do not think of the future and when I cannot stop thinking I start praying; only when you are praying you cannot think of anything else. (Fatima, 30 years old, Jordanian)
- I do not dare to think of the future, my weight dropped, my husband’s weight dropped, we do not go out anymore, even small things in the house are not clean as before. I feel I defeated my family. I used to clean the house, change the decoration every now and then; prepare all sorts of food. Now I cannot do anything. (Omm Salem, 56 years old, UAE).

Omm Mahmood faced her feeling of uncertainty by socialisation and trying to go and visit friends:

- There is continuous fear from death that was not before, now I put everything in God’s hand that is why the fear decreased, but the human being is weak and the devil is smart, and for my bad luck where ever I go to cheer up I find a group of women talking about the disease and saying: ‘You know that lady she has breast cancer, she is dying now, poor woman, no one can survive from cancer no matter they struggle, it always come back and kill them’. (Omm Mahmood)

Noura tried to stop thinking about the future or even about the disease:

- I do not want to think what will happen later, you know I do not ask them what they want to do next because I do not want to think about the future. When I start thinking of tomorrow, I start to be frightened, anxious, worried and denying as I cannot think what will happen to me. (Noura)
6.4.6.1 Choose Not to Express Their Feelings of Uncertainty to Those Closest to Them to Avoid Causing Them Anxiety

Rula did not dare to tell her family members because she was afraid they might panic:

I did not tell my family because they usually make a big issue for small things, imagine cancer, they will panic. (Rula)

Laudy regretted telling her relatives about her disease because she felt that they got tired from waiting for an outcome:

I really regretted that I told my family about my disease, you know why, because every day there is something new; we have to do different blood tests or different check-ups and we have to wait for the results that might continue forever. I could see that they were tired and to be honest with you sometimes I felt they were fed up from waiting. (Laudy)

Suha, Omm Mohamad and Fatima felt exhausted from giving false information about their absence from family activities because they had not told their relatives that they had the disease:

I could not tell my mother about my disease, but I felt really exhausted from preparing excuses where I am going every day and why I look so tired. (Suha)

It was hard for me to tell my brothers and sister as they were so worried and every one came with a different doctor’s address and different centre and I wished I did not tell them. I was tired from giving false information to my mother because I could not tell her so I lied and now she is very worried because I told her that I have a problem with my leg, so what will happen if she knew about my condition. (Omm Mahmed).

When they told me the results all what I thought of was ‘How will I tell my family?’ . My parents are old people and they cannot handle this, so I decided not to tell them. My father passed away the year after without knowing what happened to me and my mother till now all what she knows is that I had a small problem in my breast so I had to do an operation. (Fatima)

Some women felt exhausted from needing to support others who had become distressed when they had told them about their disease:

My real fear was when I am telling anyone, I feel tired because if I want to tell someone about something this means I need their support. What happened with me was that whenever I tell a friend about my case I end up supporting them
and convincing them that I am ok and I will not die instead of them supporting me. (Noura, 38 years old, Omani)

The only issue that was bothering me was with my youngest daughter as she was thirteen years old she was always near me and she saw everything and she was worried and I used to assure her that everything will be ok, and that nothing is wrong with me. (Naema, 47 years old, Palestinian)

When the doctor told me that I have cancer, I felt dizzy and my friend started crying, then I told my friend do not worry everything will be ok and things will become good. I did not know what to tell her I was so sad but I did not want her to cry. (Nada, 55 years old, Yemeni)

When I was taking the medication Tuesday, Wednesday and Thursday and I used to be in a very bad condition, but on Friday I used to prepare breakfast for the whole family and we sit and tell them all kinds of jokes. My brother used to say, you are giving us emotional support even though it should be the other way. (Fatima, 57 years old, Saudi Arabian)

I asked the doctor to call me once he has the results, and I used to call him daily so it was normal to tell me. Once I told my husband, he was very emotional and I had to support him instead of supporting me. (Mona, 42 years old, UAE)

Noura was the ‘strong person’ in the family and she did not want this image to change to a weak person:

I did not tell anyone because I hate sympathy, I do not want anyone to feel pity and says poor lady, even from my brothers and sisters, I’ve always been the strongest and I do not want them to see me weak. If I am 100 per cent sure that I am dying then I will tell them. (Noura)

6.4.7 Accepting Support in Order to Achieve Autonomy and Independence

Surveyed women from different nationalities accepted the support and decision making from their children:

When I did the check-up they told me it is nothing, and I did not want to do anything, but my children insisted that even if it is nothing, still you have to remove it. (Laudy, 40 years old, Lebanese)

My children and I were the only people who knew about my illness and they were my support and the reason for my struggle. They even helped me when I needed to take certain decisions related to my treatments. (Fatima, 57 years old, Saudi Arabian)
Since my husband died, all the family members have to meet, I mean all my children, I have two boys and four girls, old and young, to share in taking a decision, all will help, and all have their opinion. This makes me satisfied and I go by the decision taken after the meeting. (Hajje, 65 years old, Palestinian)

I felt very tired from taking decisions about the treatment and I felt relaxed when my husband came and took over everything. He helped me a lot in taking decisions. (Omm Ziad, 32 years old, Egyptian)

When my daughter saw my lump she told me you need to see a doctor. When I refused, she went to her father and told him and both of them went and booked for me an appointment with the doctor. They had to force me to go and see the doctor. (Omm Khalid, 60 years old, UAE)

My daughter was always trying to make me strong, and always assuring me, (started crying). She took me to the best doctor and stayed with me during my treatment. (Omm Mahmood, 54 years old, Sudanese)

Omm Mazen acknowledged the importance of having a daughter working in the medical field, because her daughter supported her not only emotionally, but also in providing her with medical information:

My daughter used to bring me pamphlets, as she works in a dental clinic, she is the one who told me about the exercises, and even she brought me a small ball and asked me to press on it continuously. I am lucky because my daughter is working in a medical clinic. (Omm Mazen, 58 years old, Palestinian)

Naem appreciated the support of her family. She admitted that she could not have completed her treatment without their support:

My husband and my children insisted that I should go and see a doctor and they did not leave me at all through my sickness. (Naema)

Moreover, Rula stated that her siblings played a very supportive role:

My brother and sister were really very helpful to me, even though they were abroad, they kept on calling me and my sister came and stayed with me and she promised to stay with me until I am better. (Rula)

Conversely, Najwa felt defeated when her family members did not support her decision making:

My husband always accused me of exaggerating things and spending my money on doctors and this was the reason behind the delay in treatment. When he knew that I have cancer, instead of supporting me, he told me I will leave
you on your own and do not tell me anything about your plans. I feel so lonely.
(Najwa)

Omm Mohamed did not want to contribute at all in the decision making and she wanted to leave it in her family’ hands:

I usually like to solve my problems, but with this problem I depend totally on others, I do not want to think about it, I wish I can close my eyes and when everything is over I open my eyes and continue my life as before, even though I know that nothing will be the same anymore. (Omm Mohamed).

Naema went further and stated that even if her husband wanted to take a decision that she does not agree with then she will go his way:

I want to tell you one thing, in my opinion if my husband is happy I do not mind keeping it like this even if I am not happy, but if my husband would like me to do the plastic surgery and put a fake breast, then even if I do not want still I have to do it because if I do not do it he might think of getting married to another one and it will be his right. This is the (sharg) right thing in our religion. (Naema)

6.4.7.1 Relatives and Friends Believed That it Is Possible to Survive

A variety of relationships such as husbands, brothers and sisters, children, friends and colleagues helped the surveyed women to believe that they will overcome their disease:

Naema and Omm Mohamood found support from their husbands:

At the beginning you find that it is very hard to deal with because you lost part of you, but thanks God my husband was very supportive, even a plastic surgery I did not do it because my husband did not encourage me. (Naema, 47 years old, Palestinian)

My husband is supporting me, when we went to one of our friends and they started talking about cancer and how people die, he started telling me do not worry, this is not true and they do not know what they are talking about. (Omm Mahmood, 54 years old, Sudanese)

Salma and Suha found support from their children:

I have my mother-in-law, she supported me a lot. She took care of my children when I used to go the hospital. (Suha, 55 years old, UAE)
My children know everything about my sickness, they talk to the doctor continuously and they used to take me out to sit in restaurants to eat and take coffee because this is good for me, as it makes me relaxed. (Salma, 46 years old, Lebanese)

Hajje, Omm Ziad and Nancy found support from their brothers and sisters:

My sisters we very helpful and they took a very big load over my shoulders when I was in the hospital, even they stayed overnights to keep company and tell me jokes. I have a sister who is very funny when she is around I am laughing all the time. (Hajje, 65 years old, widowed, Palestinian)

My sisters supported me a lot. They used to call me every day as each one is living in a different country. They called me daily and followed up all the details of my life. (Omm Ziad, 32 years old, married, Egyptian)

My family did not leave me at all. They were my support all through my sickness. They gave me the strength to survive and they succeeded in lifting up my confidence. (Nancy, 58 years old, single, Jordanian)

Laudy, Nada and Najwa found support from their friends:

I got lots of help from my friends even if they only called me. Some they checked for good surgeons, others stayed with me during the chemotherapy. (Laudy, 40 years old, Lebanese)

I like my friends and when they are around I feel happy because we talk about many things and I forget my situation, I do not like to be alone. When I have visitors I am happy and when I am alone I feel sad I start praying until I feel tired and I sleep. (Nada, 55 years old, Yemeni)

I have a good relationship with my friends, I talk to them about my progress with the treatment, I am very sensitive with my friends if they are pregnant or about to deliver, or have young children, I do not visit them when I take the chemotherapy. I only phone them because I do not want to cause any irritation. (Najwa, 55 years old, Syrian)

Only Naema and Nada found support from their direct managers at work:

During the radiotherapy, I used to leave early because it was daily so I had to tell my direct manager and he supported me a lot but he did not tell anyone. He was very supportive, and he used to tell me go early and do not worry I’ll take care, so he knew the story but no one else. (Naema, 47 years old, Palestinian)

I told my direct boss, she is very good she told me let us make some arrangements and I’ll cover up for you and we will see what will happen, now go to the hospital and later we will see what we can do. (Nada, 55 years old, Yemeni)
6.4.7.2 Support from Medical Professionals

Omm Ziad, Sana and Nada found support from the medical team who gave them support and time to express their worries:

My doctor was a real human being, she dealt with me with extreme politeness, and kindness and ethical way. She started reassuring me and supporting me. She told me it is a matter of six months and everything will go back to normal. (Omm Ziad, 32 years old, Egyptian)

I used to ask my doctor, after how long I will die? He used to tell me to stop saying that. You will be ok. He told me once that there are other women whose cases are worse than yours and much younger, you have to thank God. (Sana, 42 years old, Syrian)

The team members in the hospital were good, they explained to me everything and I felt better as they gave me hope that things will be better. The nurses are good as they used to come every now and then when they see me alone and sad they start talking to me. (Nada, 55 years old, Yemeni)

Mona stated that the hospital setting and the other patients’ conditions gave her support and an optimistic feeling:

I see here in the hospitals that all women are healthy while in my country women are very sick either in bed and sleeping or very skinny and cannot talk. I do not know the reason but what I know is that here women are healthy and this is very good and makes me feel more optimistic that I can overcome this problem. (Mona, 42 years old, UAE)

Most of the surveyed women from different nationalities wished that their doctors would listen to their worries and allow them to express their feelings:

Let me tell you in what sense they did not help. They did the surgery for the breast, it was a huge one, the wound was scary. After the surgery, they told me if I want to do a breast reconstruction, but did not discuss my feeling, my emotions, what to do, they did not tell me that there are exercises for my hand, from where to get special bras, like this. (Mona, 42 years old, UAE)

No one helped me; no one told me that after the operation I will have a weak hand and what to do. When I used to visit the doctor he used to encourage me and tell me that things will be better in the future. (Nancy, 58 years old, Jordanian)

Once the doctor tells you what you have and the treatment plan, thousands of questions appear that the doctor is not ready to answer. He answered two or three questions and then he told me do not worry, and do not think; we will take care of you, so I went home and started downloading all the answers to
my questions and I learnt that if you need anything we will find it on the net. (Naema, 47 years old, Palestinian)

I wish the doctors will deal with us differently, they all consider us as patients and not as human beings, if you do not ask they will not answer and I prepare questions to ask them otherwise they will not tell you anything. (Najwa, 55 years old, Syrian)

It is very important the way you deal with your patients, I could not deal with some doctors, some of them you feel that there is a revenge between him and you. When I saw him he told me why you are here, the cancer spread all over your body, no need for any treatment. He dealt with me as if I am hopeless; whatever he will do I will die. He was wrong and the proof is I am here with you after two years from his conversation. (Noura, 38 years old, Omani)

Some doctors the way they talk to you is terrible. He said: your cancer is has spread in your body, no use from treatment. The way he talked to me was as if he was telling me: go home prepare your coffin, and get ready and pray that you will die soon. (Omm Mazen, 58 years old, Palestinian)

I cannot forget that day, I was standing and the doctor was sitting and simply she said ‘suspected cancer’, so imagine what a 30-year-old engaged lady who is preparing for her wedding do! I could not hold my legs, the doctor did not offer me a chair so I had to sit on the floor and I started crying, so my friend helped me to leave. The doctor did not bother herself to tell me what is the next step! So I said I will not continue in this hospital. (Fatima, 57 years old, Saudi Arabian)

6.4.8 Accepting Changes to Body Image. The Wound Affected Me a Lot

Laudy, Omm Ziad and Sana, women who were all young married women, declared that they did not dare to look into the mirror again:

Things were under control until I saw my wound, when they came and told me to remove the bandage, it was ugly, you know the thickness and the pain, it was very bad. That was the first time I cried, and cried heavily, you know till now I cannot use this hand, and I cannot have a good relationship with my husband, because I cannot use this hand. (Laudy, 40 years old, Lebanese)

Even though I thank God that I am still alive, but believe me there is nothing harder for a woman more than going out of a surgery and finding out that she is without a breast. (Omm Ziad, 32 years old, Egyptian)

I was not able to look at the wound. I felt that this scar will always stay with me to remind me of my weakness, so I decided to remove this scar by doing breast reconstruction surgery. (Sana, 42 years old, Syrian)
Women from different age groups and nationalities claimed that the wound affected their relationship with their husbands:

The wound affected my relationship with my husband, he changed, he is so careful now, he does not want to hurt me, he keeps on saying no need to hurry take your time, but till now I did not know is he say this to me or to himself. (Suha, 46 years old, Lebanese)

The relationship with my husband changed as I do not feel like doing it, even he has changed, I feel he is afraid to touch me so will not hurt me and sometimes he moves his face away so he will not see accidently the wound. (Omm Mohamed, 46 years old, Palestinian)

I feel very shy now specially from my upper part, and it is a must that during my intimate relationship with my husband to keep this part covered as much as possible because I feel embarrassed so he learnt to look aside so he will not see anything. (Mona, 42 years old, UAE)

Omm Khalid, Omm Salem and Salma blamed the disease itself for causing their divorce:

My husband could not see the wound, he stayed with me six months after the operation and then he got married to another woman. He used to come every now and then; afterwards, he stopped seeing me or coming home to see the kids. He lives with the other woman next door, but he never visited me. (Omm Khalid).

It was hard for me to do any intimate relationship with my husband after the operation. Afterwards, he used to do it very quickly with my clothes on, and then he left me and got married to another one and I did not see him although we are still married. (Omm Salem)

When my husband saw the wound, he was shocked and then he left me to do the treatment alone and came back home. After that our relationship started to deteriorate till one day I heard that he got married. We are still married but I do not see him unless there is a problem with the kids. (Salma)

Noura and Salma gave a very pessimistic description about their condition after they got the cancer:

Cancer left me crippled, no face due to the loss of hair, no body due to the operation, and no life because I do not know when it will end, life is not fair at all. (Noura)

I used to be an art teacher, married to a successful man, beautiful, and young. Suddenly after the operation I lost my marriage, my beauty and my hope in a brighter future. This disease is like a storm once it passes it only leaves death. (Salma)
Laudy, Omm Khalid and Hajje mentioned that the wound affected their daily habits:

I cannot swim anymore although swimming is very important for me and I gained 10 kg, I became another person, a person that I could not accept at the beginning. (Laudy)

I cannot use my hand; I cannot hold more than half a kilo. I cannot use my hand while fixing the hose or cooking like before. This affected me a lot even though I try my best not to give it attention. (Hajje)

Everything bad started after the operation, let me tell you one thing before I used to cook and prepare everything to my family, now look to my hand it is swollen and I feel too weak to do anything. (Omm Khalid)

Sana believed the wound had an effect on her social life:

As the wound was too big, I had to cover it so people will not start asking, and some people might not accept it so they will talk to me without looking into my direction. (Sana)

Conversely, Fatima declared that she was relieved when she looked into the mirror and found out that the scar was barely seen:

When I looked into the mirror and the doctor encouraged me to look although that time I told him I do not care about the shape of the breast, what I really care is not to feel pain anymore, but the doctor insisted to look. When I looked at first I did not feel any change as if nothing has been removed, only a scar that could be due to any wound. Thanks God, this gave me lots of support and helped me to support my family. (Fatima)

6.5 Summary

After reviewing the coping patterns experienced by the participants during the interviews, eight categories were evident from the qualitative data. The theme of reducing threats to identity encompassed the typical and common deleterious consequences of the diagnosis on the women’s lives. For many women, denial was a coping method that helped them to overcome their stress; while others tried to convince themselves that the problem was a temporary one. Some women believed that their disease was due to inaccurate medical interventions and the remaining women simply stopped thinking of their disease.
Another coping pattern used by the surveyed women to reduce their threats to identity was keeping a sense of humour. Some women started laughing when the doctor told them about their diagnosis and considered it a joke. Some women had noticed that they started to get angry quickly since they knew about their sickness; while others considered that their illness was someone else’s fault. The surveyed women acknowledged the need to search for the best doctors and treatments as they did not trust their previous doctors.

The surveyed women had to cope with changes in body image. Other women considered themselves as now weak and capable of more sickness. Some women considered themselves as featureless when they lost their hair. A few women expressed that they started exaggerating any simple symptoms.

The third theme was seeking a healthy identity. The women could cope with this feeling by either changing their occupation or talking to healthy women who used to have the same disease.

Most women used religion as an effective coping strategy and they perceived that this was effective. The women acknowledged that the religious beliefs were common for themselves and their husbands and other support people. Reading holy books, praying and visiting holy places were the practices that helped the women to overcome their uncontrollable emotions.

Stigma and isolation was the fifth theme identified by the surveyed women. These women acknowledged a decrease in the nature and frequency of their social relationships either because they did not want to see anyone or because others did not enjoy their company anymore. The women coped with their disease by talking to people who had cancer and were passing through the same feelings and emotions.
The women explained how the community looked at the people who suffered from cancer. Cancer is a deadly disease that people should not talk about or even mention by name.

The surveyed women chose not to express feelings of uncertainty to those closest to them to avoid causing them anxiety. Some women accepted support from husbands, children, relatives, friends or even their managers to achieve autonomy and independence. Moreover, women tried to seek support from medical professionals to overcome the feeling of uncertainty. The women wished that their doctors would listen to their worries and allow them to express their feelings.

Finally, the women accepted changes to identity, but they admitted that the wound had affected their social life and their daily habits. Others believed that the visibility and unsightliness of the wound was chiefly contributory to their divorces.

The next chapter presents the critical discussion of both sets of data in light of the current national and international literature, while also examining the alignment of the conceptual frameworks of the participants’ coping patterns.
Chapter 7: Discussion of Quantitative and Qualitative Data

The aim of this chapter is to discuss the findings and identify the coping patterns exhibited by the women and to address the research questions in relation to findings from the study, research hypotheses and current literature. Then the chapter will conclude by putting forward the key components needed to create a sustainable culturally appropriate program in light of the results. A critique of the conceptual framework will also be developed. The chapter aims to present the subjects listed below:

- 7.1 Introduction
- 7.2 Demographic Findings
- 7.3 Coping Patterns of Arab Women with Breast Cancer As Measured by the JCS
- 7.4 Coping Patterns Exhibited by Arab Women Living in the UAE
- 7.5 Barriers to Coping with Breast Cancer
- 7.6 Participants’ Recommendations for Improved Services
- 7.7 Application of Coping Theories and Models within the Context of Arabic Culture
- 7.7.1 Psychological Coping Resources
- 7.7.2 Social Coping Resources
- 7.8 Latent Social Resources
- 7.9 The Cultural Consideration
- 7.10 Towards a Social Model of Coping
- 7.11 Cultural Capital and Choice of Coping Patterns
- 7.12 Cultural Understanding
- 7.13 Social and Cultural Influences on Coping Outcome
- 7.14 Summary
7.1 Introduction

Numerous studies have emphasised the importance of providing healthy coping patterns to help women suffering from chronic illness such as breast cancer to overcome their feelings of uncertainty (Wonghongkul et al., 2006; Halstead & Hull, 2001). Such empirical work provides a guide for effective and appropriate ways for these women to adjust their daily lives. The research findings from this study indicated the multiple and complex coping patterns this cohort of Arab women with breast cancer used to deal with depression, frustration, fears and changes in body image.

Faith in God was identified by all Arab women to be perceived as the most effective coping pattern. Historical literature in the Arabic Islamic culture has long pointed to the importance of both visiting religious places and praying when faced with illness and hardships in life (Chiedozi et al., 2003). Empirical studies testing the coping patterns of Arab women have similarly reported religious responses—particularly the use of prayer as common coping mechanisms among Arab women when facing personal problems (Alford et al., 2009; Doumit, 2010; Alawadi & Ohaeri, 2009). The current study has examined and expanded on the cultural coping patterns of Arab women suffering from breast cancer and living in the UAE.

7.2 Demographic Findings

Breast cancer is an extremely common malignancy, affecting one-in-eight women in the USA (NWHIC, 2007) and it is the most common cancer in women in the UK, accounting for 31 per cent of all cancer cases (National statistics, 2007). In fact, in women, 32 per cent of all cancers arise in the breast, but they only account for eighteen per cent of female cancer deaths. Designating an individual as high risk for breast cancer depends primarily on a positive family history as well as ethnic origin.

In Arab countries, breast cancer is the most common cancer in females (Abulkair, Al-Tahan, Young, Musaad & Jazieh, 2010). The true incidence is difficult to report as the
majority of the population is migratory. Arabic researchers reported that around 50 per cent of women suffering from breast cancer were younger than 50 years old (Faris, Asinghe, Al Lawaty & Thomas, 2002; Al Moundhri et al., 2004; Al Bahrani et al., 2004). It has been established that in the Arab nations, women tend to develop breast cancer at least a decade earlier than their counterparts in Western countries (Abulkair et al., 2010). The reasons for this have been cited to be due to social customs, whereby many Arab women do not present for regular medical examination and this usually results in late diagnosis (Abulkair, 2010). This finding is mirrored in this current study, in which the majority of the Arab women only reported the presence of a lump six months after first noticing it. Potentially, this is indicative of personal perceptions of susceptibility to breast cancer, since a correct perception usually has a positive impact on women’s health-screening behaviours (Bener et al., 2002).

Literature on breast cancer among Arabic women is limited. Generally, it is believed that the incidence of breast cancer in Arab women is low when compared with other populations (Denic & Al-Gazali, 2003). Fakhro et al. (1999) undertook a study to compute the survival rate among 93 Bahraini breast-cancer women discharged from hospital. The majority of the women were between 40 and 49 years of age (33.3 per cent) and 48.4 per cent of women were younger than 50 years of age. The results indicated that most cancer patients in Bahrain visited the physician late in the progress of the disease. In Jordan, breast cancer was the leading type of cancer and represents 28 per cent of all female cancers. The latest figures recorded on the Jordanian Cancer Registry showed that breast cancer was the leading type of cancer and represented 16.5 per cent of all cancers (MOH, 2000).

In the current study, 54 per cent of women diagnosed with breast cancer were younger than 50 years of age. These results are very similar to reported results by Najjar and Easson (2010), who conducted a literature review of 28 articles on breast cancer in Arab countries, where it was found that the average age for breast cancer at diagnosis was 48 (SD = 2.8), range 43–52, median 48.5 and mode 45 years.
The surveyed women with breast cancer were distributed into 41 per cent \( (n = 103) \) from the UAE, six per cent \( (n = 14) \) from other Gulf countries, 29 per cent \( (n = 73) \) from Middle East countries and 24 per cent \( (n = 60) \) from the Arab African countries. In the current study, the distribution of the nationalities does not represent the UAE general population; where only 21 per cent of the population has UAE nationality due to many reasons. Firstly, the majority of the women in this study were from the UAE (41.2 per cent) because usually women stay at home during sickness, and for the same reason sick women from other countries would be encouraged to go back to their home countries. Second, most women travel abroad for treatment, so no accurate national-registration records are available for them.

Moreover, the diverse make-up of the UAE population gave the study richness in revealing the coping patterns that were revealed by the Arab women. The study was conducted in a Muslim country, so unsurprisingly, 95 per cent of the participants were Muslims and four per cent were Christians. Although more than 50 per cent of the participants were younger than 50 years of age, the results showed that 76 per cent \( (n = 189) \) of the women had children above ten years old. The reason behind this is that the legal age for marriage in Islam is at puberty, which is assumed to be at age nine for girls (Hamoudi, 2008). All the surveyed women were educated because of the eligibility criteria. Most of the participants recorded that they left their jobs during or after the treatment (74 per cent; \( n = 184 \) ) due to their physical weakness or that they were asked to resign due to their illness.

The current study showed that 87 per cent \( (n = 218) \) of the surveyed women discovered the lump by chance; suggesting the need for more awareness and campaigns to encourage the women to check their breasts regularly and convince them about the importance of utilising the national-screening programs. The results support Bener et al. (2002), who contended that all UAE patients had delayed presentation for treatments and that the majority presented to the clinics six months after noticing the lump by chance. Abulkhair et al. (2010) contended that in the Kingdom of Saudi Arabia (KSA) the low utilisation of mammography was mainly attributed to lack of education and awareness.
among females. Moreover, Remennick (2006) reviewed the barriers for breast-cancer screening and breast-cancer assessment experienced by women from more traditional cultures such as the KSA, and found that women did not use breast-cancer screening services in their native countries, nor as immigrants and minority groups in multicultural Western societies and they usually presented with advanced symptoms. There were many identified common barriers for breast-cancer screening in Remennick’s study and in this current study such as poor health motivation, denial of personal risk, fatalism, mistrust of cancer treatments and the fear of becoming a burden on family members. Moreover, in many traditional societies, especially Muslim ones, women’s decisions and actions were controlled by men, and men might be unaware of or disapprove of breast screening.

In the current study, 79 per cent \( (n = 179) \) of the women declared that their husbands were the first people who knew about their diagnosis. Moreover, 72 per cent \( (n = 180) \) of the women considered their husbands as their first effective informal support and if we combine the husbands and the children the percentage rises to 76 per cent \( (n = 189) \). These results are similar to those of many studies that report that breast cancer is a challenging disease for women and their partners, and women often depend on their partners and family members for support and adjustment throughout the disease process (Carlson, Ottenbreit, St. Pierre & Bultz, 2001; Northouse, Dorris & Charron-Moore, 1995; Samarel, Fawcett & Tulman, 1997). Moreover, results of other international research reported on the role of the family as the most important source of emotional and tangible support for women with cancer and identified a need for increased informational support for both parents and families in the face of cancer (Falagas et al., 2007; Mokuau & Braun, 2007).

In the current study, 77per cent of the women did not have a positive family history of cancer, which coincides with Abulkhair’s (2010) finding that family history accounts for approximately fifteen per cent of all breast-cancer cases. Women who have a first-degree relative (mother, sister or daughter) or other relative with breast cancer may be at increased risk of developing this cancer and are two to three times more likely to
develop the disease than women with no such family history (Lynch, Silva, Snyder & Lynch, 2008; Gilbar, 1998).

7.3 Coping Patterns of Arab Women with Breast Cancer as Measured by the JCS

As discussed in Chapter 4, the JCS is based on Lazarus and Folkman’s theory of stress and coping (Lazarus & Folkman, 1984; Lazarus & Folkman, 1991). The JCS has been designed to measure how people cope with various types of physical, emotional and social stressors, as discussed previously in Chapter 2. The strategies are grouped into eight coping dimensions: confrontive, evasive, optimistic, fatalistic, emotive, palliative, supportive and self-reliant.

7.3.1 Confrontive Coping Scale

There were ten items in the scale that tested the confrontive coping scale, but only three items were used by the participants and were perceived as effective. These items were: ‘Tried to examine the problem objectively and see all sides’, ‘Tried to keep the situation under control’ and ‘Tried to find out more about the problem’. These three items were perceived by the participants as ‘fairly helpful’ and ‘very helpful’ (71 per cent, 65 per cent and 95 per cent), respectively. The interviews added further support; for example Mona and Laudy explained how they felt that the disease had controlled their emotions. Laudy compared the breast cancer to back pain that she suffered from a few years previously; the comparison relieved her and motivated her to continue with the treatments. Mona mentioned that every disease needed specific treatment to be undertaken by every person in order to overcome the disease, while four women (Fatima, Suha, Najwa and Noura) had begun to search for hope for a cure by searching for the best doctors or the best treatment available in the country.

Similar findings had been reported by LandMark et al. (2008) and Rees and Bath (2001), in which women related to their need for knowledge, which influenced their ability to
confront their disease. These women declared that confronting their disease was the only effective way to cope with breast cancer. Moreover, Culter et al. (2004) found that white American women use confrontive coping more than African-American and Tanleighani, Parsa and Nasrabadi (2006) indicated that Iranian women use confrontive coping among other coping strategies to cope with breast disease.

7.3.2 Evasive Coping

In the evasive coping style, only three items out of the thirteen items were used by the participants and perceived as helpful. These items were ‘Tried to put the problem out of your mind and think of something else’ (60 per cent used this and 67 per cent perceived this as helpful); ‘Daydreamed about a better life’ (89 per cent used this and 71 per cent perceived this as helpful); and ‘Wished the problem would go away’ (88 per cent used this and 75 per cent perceived this as helpful). The women during the interviews used all thirteen items in the evasive coping style; even those that were not used by the participants in the questionnaire during phase one of the study. For many women, denial was a very helpful coping pattern that they used to overcome their stress; other women went further and thought that their disease was due to a medical fault. Moreover, Mona and Omm Salem were not able to face their problems, so they simply stopped thinking about them.

Manne et al. (1994) found that patients reported using avoidance strategies to deal with chemotherapy, and this was associated with lower QOL. Coyne and Borbasi (2009) contended that the diagnosis of breast cancer for all American women was a shock, creating a sense of disbelief described as a period of ‘Why me?’, during which the participants grieved for life aspirations that had been suddenly lost.

7.3.3 Optimistic Coping Scale

The optimistic coping scale was highly used by most of the participants. Even the items that were not frequently used by the participants were perceived as helpful. The most
commonly used coping item in this scale that was perceived as most effective was ‘Hoping that things would get better’ (77 per cent and 73 per cent). During the interviews, two women expressed optimistic views. Naema and Fatima appreciated life more after the diagnosis. Naema started spending summer vacations by travelling abroad and declared that she did not appreciate the importance of this relaxing period before her sickness, while Fatima started praying regularly after her sickness and appreciated every day and she started appreciating life.

Most of the participants did not use any of the four items discussed in the questionnaire. On the contrary, Omm Mohamed considered that she had become a weak person and she would never be the same person again. Others did not want to think about the future and they were even not able to sleep at night because the future was frightening.

Women suffering from cancer experienced uncertainty about their future due to the uncertainty around the recurrence of the disease (Wonghongkul et al., 2006); still some women had the sense of hope for a better future (Taleghani, Yekta & Nikbakht, 2006). Research on breast cancer often reported distress at diagnosis with additional distress responses to various aspects of treatment and their outcomes (Royak-Schaler, Stanton & Danoff-Burg, 1997). Studies had varied in the length of follow-up and in the extent of reported continuing distress and there is evidence for persistent psychological distress for some women (Remennick, 2006; Lee et al., 2006). However, at the same time, many studies report improvement in psychological distress for a majority of women after a year or more. Moreover, many women were able to resume their activities, and fulfil their family and work roles, despite the fact that they are dealing with a chronic life-threatening disease (Errico & Rowden, 2006; Johnson, 2002; Holland & Holahan, 2003). Therefore, it is important to understand how women can maintain positive approaches to life while dealing with the challenges of breast cancer.
7.3.4 Emotive Coping Scale

In the questionnaire, most of the women reported that they did not use any of the items in the emotive coping style. For example, even though 98 per cent of the surveyed women reported that they seldom used the emotive coping pattern ‘Nor did anything impulsive or risky that you would not usually do’, 38 per cent of the women who used this coping pattern considered it as ‘very helpful’. This is related to the Arabic and Islamic culture, where women are usually raised in a conservative way that discourages emotional displays. This was explained during most of the interviews when the women revealed that they used emotive coping styles. Some women noticed that they got angry more quickly since they knew about their sickness. For example, Omm Ziad felt that she had started shouting at her children once she started her chemotherapy, while Noura noticed a severe change in her temper and how quickly she started shouting whenever one of her kids started playing at home.

Sellick and Edwardson (2006) reported that American women with cancer had enduring, marginally higher levels of distress than comparison control women who had benign tumours and that, although the level of distress decreased over time, fifteen months after the diagnosis they were still more distressed than comparison controls and also more so than their partners. Studies that followed breast-cancer patients over time showed a decrease in distress within the first months after the diagnosis (Koopman et al., 2002; Heim, Valach & Schaffner, 1997; Griemel, Thiel, Peintinger, Cegnar & Pongratz, 2002). However, when confronted with cancer, a woman may be restricted in her capabilities to carry out family functions, and family becomes the most important source of emotional and tangible support and a major element in stabilising the family and managing the stressors associated with a life-threatening disease (Mokuau & Braun, 2007).

Studies of social support and adjustment to breast cancer have examined support from several sources other than the family. Henderson et al. (2003) found that social support, including relatives and friends, were related to adjustment to the diagnosis of breast cancer. Other studies have included peers at work (Mathews, Baker, Hann, Denniston &
Smith, 2002) and medical professionals (Hammed, 2008) among the sources of support studied. Holland and Holahan (2003) showed that perceived social support and related coping strategies were associated with reducing uncertainty (Sammarco, 2001) and inducing positive adjustment to breast cancer. Taleghani (2006) reported support from significant others helped the Iranian women to cope and get involved with the process of healing from breast cancer. The surveyed women in the current study revealed the change in their ability to control their emotions after diagnosis of breast cancer. Moreover, the surveyed women reported that the uncontrolled emotions had a great effect on decreasing their social-support system.

7.3.5 Palliative Coping Scale

Most of the participants reported that only two of the items that reflected palliative coping styles were considered as very helpful. These items were ‘Tried to distract yourself by doing something that you enjoy’ and ‘Tried to keep busy’: 69 per cent and 77 per cent. Moreover, 75 per cent and 86 per cent of the same participants perceived these two items as fairly or very helpful. During the interviews most of the women reported that they tried to be engaged in work so they could cope with their feelings of uncertainty. Laudy and Hajje liked to start cooking and cleaning their houses in order to stop thinking of their condition.

Arab women in this study reported significantly high levels of uncertainty. The presence of concurrent illness can place breast-cancer survivors at increased risk of uncertainty and emotional distress. Uncertainty occurs because a woman is unable to sufficiently understand or make sense of the illness event because the event is unexpected, unfamiliar, or highly complex or the individual lacks information (Gil et al., 2006; Mast, 1998). Uncertainty is a stressful and pervasive part of life for breast-cancer survivors and strongly influences their adaptive behaviours (Knobf, 2007). Breast-cancer survivors often experience continuing uncertainty in response to fear of recurrence of the disease, decreased contact with health-care professionals after treatment concludes and long-term treatment related to side effects (Dirksen & Erickson, 2002). It appears in the current
study that increased uncertainty undermined the ability of the Arab women breast-cancer survivors to sustain helpful coping patterns.

7.3.6 Supportant Coping Style

The only item that was reported by the participants as often used and perceived as very effective was ‘Prayed or put your trust in God’ (96 per cent and 98 per cent), respectively. These results were supported during the interview. The women discussed different ways they used God and perceived this as effective when dealing with their disease. For example, some women believed that their life and recovery were in God’s hands. Other women believed that God had given them the strength to support others. Fatima, Hajjie and Omm Mahmood believed that praying and reading the holy books helped them to continue treatments and control their emotions, while Rula and Naema had chosen to visit the holy places and even brought holy water home and used it as a way of coping with their illness.

Moreover, women identified their husbands, children, friends and health professionals as supportive either in decision making or in helping them to pass through their stress, while Nada reported her female boss as her main source of support during her illness. Omm Ziad was one of the few women who reported their doctor as supportive during their treatment period.

Shock and disbelief, fear, uncertainty, a sense of intense loneliness and isolation and loss of control reflect a spiritual disequilibrium that occurs because cancer disrupts people’s lives at least temporarily and perhaps permanently (Coward, 1997; Halstead & Hull, 2001; Taylor, 2000). The surveyed women felt relieved when they practiced their religious beliefs. Women restore equilibrium through resolving their sense of disconnectedness and regaining a positive self-identity (Coward & Kahan, 2004). Clarifying, and sometimes modifying beliefs and behaviours relieved spiritual distress through restoring a sense of control, self-confidence and hope for their future. New insights also facilitated communication within important relationships with God that helped participants to restore a sense of purpose and meaning in their lives (Kemp, 2001). Similarly, McIlmurry, Francis and Harman, (2003) found that patients who do not have religious faith have a greater amount of unmet psychosocial needs,
possibly because they are unable to find support from their religious communities or in their relationship with God. The surveyed women had strong religious beliefs and continuous practice of religious activities that resulted in experiencing lower levels of pain than non-religious patients, as also found by Gibson, Pessin and McLain (2004).

This study is the first mixed-method study that that had described how Arab women cope with breast cancer and it has highlighted important aspects of the complexity they faced when they were diagnosed. According to the findings, one of the most important aspects of coping with breast cancer in Arab women was their religious and spiritual approach. In line with many studies (Gall, 2004; Henderson et al., 2003; Ashing Padilla, Tejero & Kagawa-Singer, 2003), these sorts of strategies framed by deep religious roots are considered to be active strategies in helping patients refine their thoughts and focus on the problem and decision making. In this study, the surveyed women believed their disease to be a spiritual fate, a test bestowed on them by God. Many women believed all power rested with God and they surrendered themselves to their fate. This finding was similar to that of Ashing et al. (2003), who reported that Asian American women believed their disease was in God’s hands. They believed that religious aspects played a more important role in getting rid of the disease than health care. Another aspect of religion helping in the fight against the disease was Arab women’s views of the disease as an examination by God. As mentioned in the Qur’an:

God examines people in different ways so that the true believers can be found and rewarded with moral happiness after death.

In the Qur’an, version 155 Baqarah, God said:

Be sure we shall test you with something of fear and hunger, some loss in goods or lives or the fruits (of your toil), but give glad tidings to those who patiently persevere.

Women in this study believed that if one was facing a disease and did not lose their belief and passed the test successfully, God would be satisfied with them and they will be rewarded.
7.3.7 Self-Reliant Coping Style

There were two items that were considered by 69 per cent and 56 per cent of the participants as mostly used and these were: ‘Told yourself that you could handle anything no matter how hard’ and ‘Thought about how you had handled other problems in the past’, respectively. Moreover, the same participants perceived these items as fairly and very helpful (76 per cent and 80 per cent). During the interviews, none of the women wanted to handle the situation alone. For example, Najwa was upset because her husband asked her to handle the situation by herself and Omm Mohamed wished that she could sleep and not wake up until everything had finished, as she did not want to handle anything.

As breast cancer is a challenging disease for women and their partners, women often depend on their partners for support and adjustment throughout the disease process (Carlson et al., 2001; Morgan et al., 2005). Women in relationships with partners reported that their relationships were strengthened by coping together with the women’s breast cancer (Holmberg, Scott, Alexy & Fife, 2001). In the Middle East, the impact of a woman’s cancer has unique ramifications because of the central role that women assume in family life. Arab women are responsible for their unit families as well as the extended families, alongside her occupation. Commonly, internationally, women tend to be responsible for the management of the home, nurturing the children, and the care of nuclear and extended family members, as supported by Northouse (1995).

7.4 Coping Patterns Exhibited by Arab Women Living in the UAE

The coping patterns were revealed by the Arab women living in the UAE through the questionnaire and were clarified during the interviews. Table 7.1 demonstrates how data from the interviews affirmed the findings of the questionnaire.
Table 7.1:

<table>
<thead>
<tr>
<th>Coping Style</th>
<th>Questionnaire (Jalowiec Coping Scale)</th>
<th>Interviews</th>
</tr>
</thead>
</table>
| Confrontive | - Tried to examine the problem objectively and see all sides  
- Tried to keep the situation under control  
- Tried to find out more about the problem | - Tried to find reasons and explanations for the disease to control their emotions  
- Tried to search for the best doctors and best treatments |
| Evasive | - Tried to put the problem out of your mind and think of something else  
- Daydreamed about a better life  
- Wished the problem would go away | - Denial  
- Disease due to medical fault  
- Stopped thinking about the problem |
| Optimistic | - Hoping that things would get better | - Enjoy every minute in life  
- Appreciate life  
- (Most women were pessimistic) |
| Emotive | - (Did not use any of the emotive coping style) | - Get angry quickly |
| Palliative | - Tried to distract yourself by doing something that you enjoy  
- Tried to keep busy | - Tried to engage in work either at home or outside to cope with the feeling of uncertainty |
| Supportant | - Prayed or put trust in God | - Life and recovery are in God’s hands |
- God has given the strength to support others
- Praying and reading holy books
- Visiting holy places
- Support from husbands, children, friends and health professionals

<table>
<thead>
<tr>
<th>Self-Reliant</th>
<th>- Told yourself that you could handle anything no matter how hard</th>
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<tbody>
<tr>
<td></td>
<td>- Thought about how you had handled other problems in the past</td>
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<tr>
<td></td>
<td>- None of the items used in phase one were mentioned in phase two, but on the contrary, women reported being:</td>
</tr>
<tr>
<td></td>
<td>Upset because her husband did not help her</td>
</tr>
<tr>
<td></td>
<td>Wished to sleep and only wake up when everything was over</td>
</tr>
</tbody>
</table>

7.5 Barriers to Coping with Breast Cancer

7.5.1 Body Image

Concern about body image was one of the main barriers that delayed the Arab women from actively managing their breast cancer. For example, Omm Ziad, a 32-year-old married woman and a mother of two children, one child being two years old, felt like ‘a woman without features’ due to her hair loss.
This change in body image affected their relationship with their husbands. For example, Suha, a 46-year-old, Lebanese married woman felt that her husband became very worried, while Omm Khalid, a 60-year-old, UAE divorced woman mentioned that her husband left her and married another woman six months after her diagnosis.

Women felt that the wound affected their role as mothers, and they had to change their lifestyles and routine lives to fit their new condition. For example, Omm Khalid, 60 years old and a UAE house wife felt that she could not fulfil her role as a mother because she could not fix the house and prepare food as she used to do before her sickness. While Laudy, a 40-year-old, married Lebanese house wife mentioned that she could not resume her daily activities anymore, especially swimming, as she could not wear her swimming suit because she could not cover the scar and because she gained 10 kg in weight. While Sana, a 42-year-old Syrian woman was concerned because she had to search for new clothes to cover the wound so that her friends did not notice the scar.

7.5.2 Stigma

Another barrier was the social isolation and stigma associated with the disease. Most of the women discussed societal reactions and others’ perceptions about the disease. Commonly in the Middle East cancer is a word that people do not pronounce when they are talking about the disease. It is ‘that disease’, as mentioned by Laudy and the rest of the women. As a result of this, the women tried to hide their disease from anyone outside their families because this would cause them social isolation or the possibility of losing their job if their companies found out about their disease.

7.6 Participants’ Recommendations for Improved Services

The researcher divided the interview data into three separate categories: the need for support groups, the need to include a breast-cancer specialist in the treatment team and the need for awareness campaigns.
First, women asked for support groups consisting of women who had breast cancer and were able to pass through the processes successfully:

There are lots of women who do not have support at home so they need encouragement from someone who passed through this experience who knows better. (Naema)

Programs in the hospitals to inform ladies about: exercises for the arm adjacent to the surgery, physiotherapist bras, protective. (Suha)

There is an urgent need for a support group of ladies who passed through the same experience to talk to the ladies who were recently diagnosed with breast cancer. (Najwa)

We need support from those who passed through this experience. (Laudy)

When I had stomach ache I asked the doctor to give me medication, but it caused me allergy so my neighbours helped me and gave me the name of herbs that helped me a lot. The best person who would help us is a person who passed through the same situation. (Hajje)

Second, the women asked to include a psychologist or a professional person who has the time to answer their non-medical, but rather emotional questions that are related to the effect of the disease:

There is an urgent need to include a psychologist among the medical team who is taking care of these ladies. (Mona)

I ask one thing, please include a professional person who can sit and talk to the ladies who are still not accepting the problem and help them to continue this hard journey. (Omm Mohamed)

We need a psychologist to take care of our emotions during treatment. We need someone who can treat our soul at the same time the doctor is treating our body. (Omm Ziad)

Third, the women asked for more awareness campaigns that support women suffering from breast cancer and help them to continue their roles as mothers, workers and members of their own society.
7.7 Application of the Coping Theories and Models within the Context of Arabic Culture

Further, findings from this research indicate distinctive differences in the coping behaviours and resources of Arab women with different nationalities who are living in the UAE. Faith in God was identified by 98 per cent of Arab breast-cancer survivors as their most important coping pattern. Choumanova, Wanat, Barrett and Koopman’s (2006) meta-analysis contends that more than 80 per cent of currently published studies had emphasised the contribution of religion to the psychological or physical health benefit of people’s lives. In addition, empirical studies using data from different national surveys have also found that religious responses—particularly the use of prayer—are common among women when addressing personal problems (Hebert et al., 2009; Stephon et al., 2001; Ramondetta & Sills, 2004; Musicks, Koenig, Larson & Mathews, 1998). While these studies were not specifically designed to examine coping patterns of Arab women, findings were able to clearly suggest a pattern in how women deal with stress in their lives when faced with breast cancer.

Moreover, studies using other large nationally based samples had found that women who reported higher levels of the use of praying and other types of private religious activities were more likely to seek spiritual support in the face of problems such as terminal illness (Mazanec & Tayler, 2003; Johnson, 2002; Taleghani et al., 2006).

Clearly, the study of social influences, including culture, were important variables used in coping but had been underemphasised by scholars or simply overlooked altogether (Folkman & Moskowitz, 2004). The underestimation of this factor was attributed in part to the circumscribed perspective of psychology, the discipline from which much of the coping literature emanated (Landrine & Klonoff, 1992). Pearlin (1989) observed, ‘because interest in coping was rooted initially in clinical concerns, researchers tended to think of a person’s coping repertoire as representing a clinical profile unique to the individual and to ignore the shared, normative basis of individual coping’ (p. 250). As a
result, coping research has examined individual responses without much, if any, consideration of broad social or cultural patterns or influences.

In this study, the surveyed women were all Arabs within one community and they shared similar cultural beliefs. They all reported the need for faith to support them in coping with their illness.

7.7.1 Psychological Coping Resources

7.7.1.1 Mastery

Among identified psychological coping resources, a sense of mastery over life and self-esteem are the most commonly recognised and studied by researchers (Thoits, 1995; Turner & Roszell, 1994). A sense of mastery over life is defined as ‘the extent to which one regards one’s life-chances as being under one’s own control in contrast to being fatalistically ruled’ (Pearlin & Schooler, 1978, p. 5). Feeling less mastery is associated with a sense of powerlessness and tends to occur when a person feels unable to achieve certain ends or objectives. Structural constraints such as inadequate resources, restricted opportunity and employment in jobs in which a person has little control over the work or how to do it also contribute to a sense of powerlessness (Wheaton, 1985). In the context of the cancer experience, a feeling of mastery may deal with a woman’s belief in her ability to gain control over her disease (Taylor, 1983). The surveyed women found a sense of control through prayers and reading holy books. The women believed that God would help them and that they would be cured if they were patient and believed in God’s power. Some of the surveyed women used the holy water daily when showering under the belief that this water protected them.

7.7.1.2 Self-Esteem

Self-esteem, another commonly studied psychological coping resource, is ‘the evaluation which the individual makes and customarily maintains with regard to himself or herself: it expresses an attitude of approval or disapproval toward oneself’
The formation of self-esteem involves three basic components. The first, reflected appraisal, deals with how an individual perceives she is viewed by others. Social comparison is the second component of self-esteem. This process occurs when there is an absence of objective information about one’s self or one’s situation. Under these conditions, individuals make judgments about themselves on the basis of comparisons with others. The third component of self-esteem, self-attribution, involves drawing conclusions about the success or failure of one’s own actions or efforts (Rosenberg, 1986).

The stability and level of a person’s self-esteem are believed to be ‘determined by the nature and consistency of one’s cumulative experiences of reflected appraisals, social companions, and self-attributions’ (Turner & Roszell, 1994, p. 191). An individual’s social resources, in turn, are believed to be effected by a person’s level of self-esteem (Thoits, 1995; Turner & Roszell, 1994). Little attention, however, has been paid to the interaction between social and psychological resources.

Evidence exists that the distribution of self-esteem and sense of mastery is linked to an individual’s position in the social structure; that is, to her social status. Women and members of minority groups, unmarried people and persons with lower income and education have been observed to have a lower sense of self-esteem and mastery (Turner & Roszell, 1994). As studies indicate that higher levels of mastery and self-esteem buffer the negative effects of stress, researchers posit that individuals with greater psychological resources choose to use more effective coping strategies (Thoits, 1995; Turner & Roszell, 1994). In the current study, married Arab women used the confrontive and the optimistic coping styles more than the unmarried Arab women; they, however, perceived the supportant coping style as the most ‘helpful’—the contention being that when a woman is able to confront the disease and is optimistic, then she has potentially higher self-esteem and believes that she is able to control her disease.
7.7.2 Social Resources

In addition to psychological resources, the surveyed women’s coping resources included their family and friends. Social support, the term most often used in the literature to refer to this network of family and friends, had both structural and functional dimensions. The structural dimension was concerned with the type and number of relationships a person had as well as frequency of contact with these relationships (Berkman, 1985). However, the most basic structural measure of social support was less concerned with number or type of relationships, but rather with whether or not a person had some form of intimate relationship. This type of relationship has been linked to reductions in stress (Cohen & Willis, 1985).

The functional dimensions of social support involved either the receipt (actual or perceived) from various network members of emotional concerns, information or instrumental aids (e.g. goods, services, money) or of appraisal (e.g. information important to self-evaluation) (House, 1981; House & Kahn, 1985). The perceived availability of social support has been demonstrated to have a stronger positive effect on mental health than the actual receipt of support (Thoits, 1995).

Previous coping research has also noted some of the effects of social status on perceived support. Women, who were married, and those of higher socioeconomic status tended to report higher levels of perceived support (Thoits, 1984, 1995). Network size and contact between members also varies by social status. In the current study, the married women had higher socio-economic status than the divorced and widowed women. This finding compares with that of socio-economic status but is negatively related to age (Thoits, 1995).

7.8 Latent Social Resources

In the existing coping literature, social resources were conceptualised as latent and viewed as ‘a potential source of crucial support’ from which a woman may choose to
draw when dealing with a particular stressor (Pearlin & Schooler, 1978, p. 5). The conceptual emphasis is on an active individual who freely draws on social and psychological resources in order to orchestrate a response to a given stressor.

Scant consideration has been given to the direct pressures exerted on the woman by other members in her network to influence coping choices. This theoretical omission had drawn criticism from some scholars who quip, ‘Even the Lone Ranger had Tonto’ (Dunahoo et al., 1998, p. 137). Indeed, a woman’s social network was also impacted by her diagnosis of breast cancer as the members of that network must also respond to the illness. In the current study, interaction with others in the social network was shown to help frame an understanding of the illness and its severity and was a critical component in decision-making processes.

Another criticism of the literature on coping is that little attention has been focused on how an individual’s place in the social structure might affect her appraisal of a stressor or choice of coping strategies. However, Bourdieu (1986) argues that an individual’s social class is predicated upon her relative possession of four different kinds of resources or capital. Economic capital refers to her financial status (income, assets) and also includes employment benefits such as health insurance and paid sick leave. Social capital involves both familial and extra-familial connections. It also includes membership or affiliation with formal organisations such as clubs. Bourdieu (1986) defines the third type of capital, symbolic capital, as ‘the form that various species of capital assume when they are perceived and recognized as legitimate’ (p. 17). For example, a medical degree is symbolic of the recognition of doctors as legitimate healers in Arabic society. Other types of healers lack this symbolic recognition. Finally, cultural capital refers to such things as educational credentials, linguistic style and manners.

Bourdieu’s (1986) multifaceted approach to class is a useful tool for examining the impact of various forms of capital in shaping a woman’s choice of coping strategies. For example, lower quantities of economic capital pose real barriers to the receipt of treatment and also affect how the disease is experienced. Moreover, interaction between
the health-care provider and the patient may be impaired if each possesses different quantities of cultural capital. In the UAE, the majority of the health-care providers come from non-Arabic countries and do not share common cultural backgrounds, opening up the possibility of cultural and linguistic misunderstandings and mistrust; hence, a diminished propensity to discuss sensitive issues surrounding the nature of the disease.

Cultural impact and role strains serve as both demands and constraints in the experience of stress. If a person violates cultural group norms of the meeting of values to familial, occupational and gender role expectations, stress occurs. Employment is a highly valued cultural norm that will provide social, psychological and financial benefits. Work offers status, regulates life activities, permits association with others and provides a meaningful life experience. Gender expectations often became a source of demands and constraints for women, who assume multiple roles. Hammed (2008), in a quantitative study, examined the relationships between stress, social support and work–family conflict on women’s mental health. The findings of the study revealed that there is a significant difference between young and old women in the level of stress experienced, and there is a significant difference between single and married women based on their experience of work–family conflict. Based on these findings, one particular recommendation was that direct efforts specific to primary prevention of mental disorders should be made, that employers of labour should establish family supportive and friendly interventions to assist women in their ability to cope with competing demands, and that women should be integrated into social networks with high levels of social support as this will neutralise and control situations of stress, work–family conflict and mental problems.

Social support can be critical in helping people cope with difficult situations. Successful coping with life stresses is linked to QOL, as well as to physical and mental health (Lazarus, 2001). So, if a person copes successfully with stress, then he or she returns to a previous level of adaptation. Adaptation can be conceptualised as a person’s capacity to survive and flourish (Lazarus, 1999). Adaptation or lack of it affects three important areas: health, psychological wellbeing and social functioning. Therefore, successful coping results in an improvement in health, wellbeing and social functioning.
Unfortunately, at times, maladaptation occurs. It is impossible to completely separate the adaptation areas of health, wellbeing and social functioning. A maladaptation in one area can negatively affect the other areas.

Health can be negatively affected when coping is ineffective. When the damaging condition or situation is not ameliorated or the emotional distress is not regulated, stress occurs that, in turn, affects a person’s health. Some coping strategies actually increase the risk for mortality and morbidity, such as excessive use of alcohol, drugs or tobacco. Many people begin to exaggerate eating, smoking or drinking to reduce stress. They may feel better temporarily, but are actually increasing their risk for illness. For people whose behaviours exacerbate their illness, learning new behaviours becomes important. Healthy coping strategies such as exercising and obtaining adequate sleep and nutrition contribute to stress reduction and the promotion of long-term health. In the current study, many of the surveyed women revealed the importance of adapting to healthy coping strategies such as exercising and following a healthy diet in order to reduce stress and promote long-term health.

7.9 The Cultural Consideration

The coping literature has also ignored the role of culture in shaping an individual’s coping behaviours as well as her interaction with others in the process of coping. Again, the possibility of a connection appears logical, and Bourdieu provides a framework for examination of the relationship. For Bourdieu (1990), culture is more than one form of capital. It is also connected with ‘habitus’, a concept which provides the linkage between the structural properties associated with social class and those of individual cognition and agency. He argues that the experience of operating for long periods within an objective class location in the social world has the effect of producing in the individual ‘schemes of perception, thought and action’, which he refers to as habitus (p. 54). Those who occupy basically the same social positions (hold similar forms and quantities of capital) tend to have similar habitus.
Habitus, however, is not a deterministic concept. That is, habitus is formed through an individual’s interaction with the social world and collective individual action serves to further recreate the social world.

Habitus conditions an individual’s approach to life and decision making in such a way that acting is more a matter of routine behaviour than of rational decision making. It provides guidelines by which people make choices and is manifest in an individual’s manner of coping pattern. Arab women have learnt to hide their feelings and pretend that they are healthy, especially when they have any disease that might affect their social life such as cancer.

Swidler (1986) takes Bourdieu’s argument on culture further by posing that culture’s influence on action is not merely the result of the psychological proclivities of habitus or value orientations. Rather, she opines that culture influences individual action directly by providing a group of habits, skills and beliefs that ‘people may use in varying configurations to solve different kinds of problems’ (p. 273). In this study, whenever a person is faced with a problem that little is known about such as cancer, people get closer to religious practices to overcome this problem. Several interviewed women insisted that any disease with an unknown origin is sent by God to examine people’s beliefs and only God can cure it and this comes about by praying and religious practices.

7.10 Towards a Social Model of Coping Patterns of Arab Women with Breast Cancer Residing in the UAE

The data in this study supports elements of both Swidler’s and Bourdieu’s framework notions on the role of culture in shaping individual action (Figure 7.2). Results from this study suggest that cultural influences, more than any other factor, account for the variance between nationalities in the coping patterns as well as the importance of the social influences of Arab women diagnosed with breast cancer. These findings suggest that cultural and social factors are important variables that shape individual action in
every stage of the coping process. These influences are shaped in how Arab women appraise a stressor such as breast cancer and in how they activate strategies to deal with the various threats associated with the disease.

Figure 7.2: Social model of coping
Cultural and social influences affect the respondents’ appraisal of their diagnosis such that a diagnosis of breast cancer is not just a disorder that a woman confronts as an isolated incident. Rather, it is a major life stress occurring in relation to, and converging with the other stresses she currently faces and has faced in the past. Pealin (1989) observes that it is difficult to examine a stressful life event in isolation because ‘stressors typically surface as groups or constellations of stressors, some primary and others secondary, that blend events with more durable strains’ (p. 254).

A life-event stressor such as breast cancer requires an immediate adjustment for a relatively short period of time followed by ‘durable strains’, which Pearlin refers to as chronic persistent demands that require adjustment over much longer periods of time (Thoits, 1995). The types of chronic strains that people typically experience vary according to their social status (Pearlin, 1989; Pearlin & Schooler, 1978). Thus, women tend to be exposed to different chronic strains than men, Arab women to different strains than Western women.

Varying experiences with chronic strains indicate a direct effect on how a diagnosis of breast cancer is appraised by Arab women. Over half of the Arab women in this study pointed to stressors in their life that they considered more difficult to deal with than the breast cancer. For many of the survivors, their most stressful experiences emanated from intimate relationships with their husbands. For example, Salma had battled stage-three breast cancer for the previous four years and had experienced a myriad of complications, including a stroke. She reflects, ‘Looking back on it now, I don’t think it was any more difficult than some of the other things I’ve had to deal with … I still think mentally and emotionally, my divorce was harder than the cancer’. Salma was married and had two daughters and claimed that the experience of divorce left her feeling like she had failed.

Similarly, Mona pointed to her marriage as the most significant challenge in her life, in spite of the problems she experienced with her cancer. She was first diagnosed at age 38 and had a mastectomy along with reconstructive surgery. However, about three years later, she had a recurrence in the reconstructed breast and had to undergo a lumpectomy
and more chemotherapy. She asserted, ‘I don’t know that the cancer was the most
difficult part. My life before cancer was difficult’. Mona, who had been married for over
twenty years, claimed that the real challenge for her was with her relationship with her
husband. They fought frequently over how to discipline their children. Mona stated that
her husband was emotionally abusive and that he never believed that she really had
breast cancer and even encouraged her to discontinue chemotherapy treatments.

Even though Fatima was diagnosed with stage-two breast cancer at age 40 and required
a mastectomy, she asserted that ‘the relationship with my husband was the most difficult
thing I have ever faced in my life. We had differences over decisions I made regarding
telling my parents about my disease’. Fatima was not allowed to tell her parents about
her disease because her husband thought that no one should know as it was a shameful
thing to declare to anyone.

The relationships with husbands registered as more difficult than those posed by breast
cancer would appear to be reflective of the social context in which these women live.
Living in a Muslim country and following the Islamic law that allows marriage at a very
young age (at puberty), it is normal to have a high percentage of women married below
eighteen years of age. In this same age group, over twice as many Arab women reported
that they had never been married and a roughly similar percentage of Arab women in
this age group are divorced (UAE, 1993).

In contrast to the appraisal of most Gulf Arab women survivors, almost all Arab women
from the Middle East countries viewed their breast cancer as the most difficult
experience they had ever faced. For the most part, the Arab women from the Middle
East countries described lives that were freer of generalised stressors than did the Arab
women from the Gulf countries. For example, Omm Mazen, a Palestinian married house
wife, reported that her cancer was ‘probably the most difficult thing I’ve ever had to deal
with’. She was diagnosed in stage two, but her cancer was a particularly aggressive type,
and as a result she had a double mastectomy and reconstruction. Omm Mazen had been
married for over 25 years and had four grown children.
Laudy, a stay-at-home mom, and her husband are also comfortable financially. She recognised that her life prior to her breast cancer was not particularly difficult. She explained, ‘Being 40 in a community like ours, we have a lot—everything we need. It’s very upper middle-class, and people just haven’t been through a lot of difficult things in life really, for the most part … and so my cancer was, like, the first big hit in the community of believers that I’m in’.

Laudy saw her life before breast cancer as similar to that of her friends—relatively easy. Other less-affluent breast-cancer survivors also considered their life ‘easy’ before their diagnosis. Omm Mohamad, who was married with five grown children and worked in a company, had a mastectomy followed by chemotherapy four years previously. She indicated, ‘for me this has been the most difficult. Up until then I thought my life was pretty easy’.

The difference in appraisal of a diagnosis of breast cancer by Arab women from Gulf countries and Arab women from Middle East countries evident in this research may appear in conflict with the findings of Bourjolly and her colleagues (2003), who reported no difference in appraisal between American women suffering from breast cancer and having a different ethnic origin. Those researchers conceptualised breast cancer as a single clinical stressor and all the women that they surveyed appraised the cancer as a potential threat to their health or physical wellbeing. However, when the socio-economic status of the study’s respondents was examined a difference in appraisal by the respective groups was found. The Arab women survivors from Gulf countries in this study had significantly fewer financial resources than the Arab women survivors from Middle East countries, but viewed the threat of their cancer as being of the same magnitude. The failure of Arab women from Gulf countries to view breast cancer as more threatening in the face of access to fewer economic resources, may be evidence of a cultural distinction in appraisal. However, Bourjolly and her colleagues (2003) do not reach such a conclusion in their study.
When social context is specifically examined, as it was in this study, the potential importance of social characteristics, income, state of marriage and working situation in the appraisal of stressors becomes apparent. Even though a stressor such as breast cancer may be similar (e.g. stage, treatment), the women appeared to appraise it differently based on their position in the social structure.

7.11 Cultural Capital and Choice of Coping Patterns

The coping strategies that are mobilised to deal with a stressor such as breast cancer also appear to be directly affected by a woman’s position in the social structure and her ability to utilise varying quantities of economic, social, symbolic and cultural capital in order to cope with her situation. The direct impact of social structure—especially as reflected in cultural capital—on a woman’s choice of coping strategies is evident in the differences identified in this study between Arab women survivors’ coping responses.

Although Arab women survivors used different coping patterns to deal with their stressors, they all tended to have a definitive primary coping pattern to deal with their illness. For Arab women survivors, faith that God would get them through the illness was identified as the most important way to deal with their cancer. The faith expressed by these survivors was characterised by conversation-like prayers with God and a sense of God’s personal direct involvement in their illness. Ninety-six per cent of the Arab women survivors reported that the coping pattern ‘Prayed or put your trust in God’ was often used and 98.4 per cent of these women perceived this coping pattern as very effective. The majority of these survivors prayed for healing, visited Islamic holy places (Mecca, Hajj), or even washed their bodies with holy water and reported accounts of healing that they attributed to God’s intervention. Arab culture seems clearly evident in this choice of coping pattern and the importance accorded it.

Religious practices are central features of Arabic culture. Empirical studies substantiate the importance of prayer and of the practice of Islamic obligations to Arabs. These studies have indicated that prayer is the most effective means of dealing with personal
problems (Doumit, Huijer & Nassar, 2010) and a substantial number (78 per cent) have reported praying every day. Regular praying and visiting Mecca are other elements of these practices (Najjar, 2010).

Due to the minimal research related to the Arab countries, empirical evidence indicated that 62 per cent of African Americans believe in the healing power of prayer (Klonoff & Landrine, 1996). Moreover, Kuwaiti women consider praying as the most effective coping pattern in dealing with breast cancer (Awadi & Ohaeri, 2009). This belief cuts across socio-economic lines. Neither the practice of seeking God’s assistance in the face of problems nor this demonstrated belief in the healing power of prayer is associated with socio-economic status (Ferraro & Koch, 1994; Klonoff & Landrine, 1996). The pervasiveness of these spiritual attributes among Arab women provides evidence that spiritual coping is a form of cultural capital.

Unfortunately, the religious coping literature, especially in the Arab world, has intended to ignore culture as an important variable. Many studies have used samples that were predominantly Western (e.g. Gall, 2000; Pargament, Smith, Koenig & Perez, 1998) or tended to collect data on race/ethnicity for control purposes (e.g. Pollner, 1989). To assume that the religious coping strategies of Arab women are similar to Western women, or to fail to specifically examine these coping patterns, is to neglect the potential effect of structural forces on individual action.

Culture would also appear to explain differences in the use of social support by Arab women survivors. Arab women from Middle East countries have historically tended to have access to a greater array of institutional support due to their lower feelings of stigma and larger support networks. This access is a part of their culture and may account for their greater use of the social coping resources available in that culture. The stigma of having cancer delayed the Arab women from presenting and seeking medical help or discussing their problem with their family members or friends. One area of social support in which this difference appears most evident is in Arab women survivors from Middle East countries’ reliance on their husbands.
Indeed, some husbands of the survivors figured prominently in their coping processes. Immediately after diagnosis, husbands tended to encourage problem-solving coping by participation in treatment decisions. Suha’s husband, for example, encouraged her to see a doctor after she found a lump on her breast. When the treating radiologist recommended a delay of six months before doing a biopsy, her husband directly intervened. Suha recalled, ‘being in the health-care business, he found a top surgeon and sent me there’.

Laudy’s husband also encouraged active problem solving by going with her to buy books about breast cancer. She asserted, ‘my husband and I went and bought a lot of the books that were recommended, read, and gathered a lot of information’. In a similar vein, Omm Mazen’s husband actively participated in formulating questions for the doctor’s visits. She reported, ‘So I just made my list of questions. And (my husband) would add to it, and so between the two of us we figured out all of the questions we wanted to ask, and he wrote down the answers to all of them’.

In contrast, some of the Arab women survivors who were married and most of the divorced survivors did not report active problem solving by their husbands or the other support people. The reason for this difference also appeared connected to culture. The Arab husbands are likely to operate with cultural support that is similar in many aspects to those of their wives. For example, Omm Mahmoud, a Sudanese survivor, describes her husband as ‘phenomenal’. She reports that after the biopsy, ‘we went in to talk to (the surgeon) so she could say, ok, here are your options, and that sort of thing. And pretty much, my initial response at that point was to immediately pray’. She explained that ‘the doctor was positive, so we were positive, and we know (my husband and I) God is in control’.

Culture also seems implicated in the differences evident in the social networks of the Arab women survivors. They tended to conceive of God as a member of their social support networks, just as real as any person and equally or more capable of exerting influence and providing direct support. The potential importance of non-human network
members has been suggested in previous research. Pollner (1989) observes that there is evidence that ‘divine relationship may approximate concrete social relationship in intensity’ (p. 92) contending that participation in this type of relationship was positively related to psychological wellbeing.

Arab women breast-cancer survivors reported regular conversations with God. In some cases, survivors indicated that God spoke to them even when his direction was not specifically sought. The stated belief of the Arab women survivors that God would get them through their illness suggests a different form of empowerment or personal mastery. Such a belief may increase the individual’s perception that daily stress, chronic strain and major life stresses such as cancer are more manageable through an alliance with a more powerful force. Indeed, all Arab women breast-cancer survivors in this study would consider their faith in God as a problem-focused coping strategy.

The faith in God expressed by the Arab women survivors in this study did not impede their use of medical care. They actively and aggressively sought medical treatment for their breast cancer. However, their belief in God as the ultimate healer would appear reflective of different institutional relationships. Most of the survivors reported un-humanistic approaches from the medical team, others insisted that there were lots of medical errors during procedures and finally, most of the survivors reported contradiction in treatment and action plans between and among the medical teams. Research indicates that breast-cancer survivors often receive substandard treatment for a range of physical conditions, even after controlling for socio-economic status and coverage by private insurance (Williams, 2002).

7.12 Cultural Understanding

In addition to faith that God would get them through the illness, keeping personal matters such as illness confined to the family or to very close friends was a recurrent theme. This theme was mentioned by almost all the Arab breast-cancer survivors and the
majority of key informants. However, the practice was not followed by the majority of the Arab survivors in this study.

The distinction between awareness of the appropriate cultural practice (e.g. keep it to yourself) and the decision-making process of determining whether or not to use it, has important implications for the manner in which culture may influence action. Swidler (1986) argues that a ‘culture is not a unified system that pushes action in a consistent direction’ (p. 277). Rather, Bourdieu’s ‘structured structure’ consists of varying prefabricated links of actions that a woman may elect not to use in constructing strategies of action. It also demonstrated that cultural tools can function at a cognitive level and are not merely subconscious influences.

For Arab women with breast cancer, faith and prayer appear to be indispensable, as the practice of not disclosing personal matters, while available, appears less important as a result of ongoing change in the larger culture in which Arab women reside. According to Swidler (1986), people do not ‘build lines of action from scratch, choosing actions one at a time as efficient means to given ends’ (p. 277). Instead, they construct chains of action beginning with at least some prefabricated and cultural knowledge that provide those links.

7.13 Social and Cultural Influences on Coping Outcome

Coping outcome is the end product of an individual’s action(s) to deal with a particular stressor. Outcome is also viewed as the manner in which a person expresses her reaction to stress. Although this study did not specially explore the outcome aspect of coping, Pearlin argues (1989) that social and cultural characteristics may be involved in how the outcome to a stressor is manifested. For example, depression may be a more typical outcome or expression of stress among women, while abuse of alcohol may be more typical among men.
It is reasonable to assume culture may also shape the outcome an individual expects to experience from employing a given coping pattern. This expectation is shaped by an awareness of the outcomes others in their social networks expect of their coping efforts. Arab women are subject to ‘double-consciousness’—an awareness of the expectations of their own networks as well as that of the dominant Western culture. A sizable proportion of coping research has utilised outcome measures reliant on various self-reported indicators of psychosocial wellbeing (Lazarus, 1993). An important question is what these indicators are actually measuring.

Cultural and social influences are also apparent in the research bias expressed over outcome efficacy. Researchers in the behavioural, social and health sciences are less religious than the general population (Chatters, 2000; Dossey, 1993). Moreover, their belief systems may influence research design and interpretation of findings (Chatters, 2000). For example, Dunkel and her colleagues (1992), in their study of the coping patterns of cancer patients, conceptualised prayer as an indicator of ‘cognitive escape avoidance’—a pattern of coping associated with poor outcomes.

More disturbing is the racial bias evident in coping research. Arab women have long drawn on their faith as a means of dealing with life stress. Simple logic would suggest that a focused study of the coping processes of populations that have faced higher levels of stress would yield fruitful information. However, general coping literature and even the more recent religious coping literature tends to ignore Arab women (and other minorities). Doumit et al. (2010) observe that ‘only a few studies examine the relationships among religion, stress, and well-being among Arab women’ (p. 34). Findings from those Western-based studies indicate that their faith is positively associated with psychological wellbeing (Bearon & Koenig, 1990; Ellison & Taylor, 1996; Lincoln & Chatters, 2003).

In this research, Arab breast-cancer survivors emphasised the importance of faith and prayer as a means of coping with their illness. Almost all indicated a fervent belief that God not only provided emotional comfort, but actively healed their bodies. They pray
because they believe it is effective. In her interview, Hajji told others of God’s healing power. She exclaimed, ‘God is the only one who can save us from any evil thing and doctors are only tools in His hands’.

A growing body of research substantiates that spiritual coping generally has salutary effects on mental health (Ellison, 1991; Pollner, 1989; Seybold & Hill, 2001), is an effective means of dealing with uncontrollable situations (Pargament et al., 1998) and provides important emotional support in coping with breast cancer (Feher & Maly, 1999; Gall & Cornblat, 2002). Empirical research has also begun to demonstrate the beneficial effects of religious coping and prayer on physical health (Chatters, 2000; Dossey, 1993; Levin & Vanderpool, 1992; Seybold & Hill, 2001).

7.14 Summary

This chapter was divided into two main parts. The first part identified the coping patterns, answering the research questions in relation to findings from the study and current literature. Fifty-four per cent of the surveyed women diagnosed with breast cancer were younger than 50 years of age. The JCS used in the current study is based on Lazarus and Folkman’s theory of stress and coping. The coping patterns were divided into eight coping styles: confrontive, evasive, optimistic, fatalistic, emotive, palliative, supportant and self-reliant. A comparison was made between the surveyed women who answered the questionnaire and those who attended the interviews. Faith in God was identified by all Arab women to be perceived as the most effective coping pattern. The second part of this chapter critiqued the application of the eclectic model taken from the coping models and theories discussed in Chapter 3 to Arabic culture and in light of the findings of the study. The contextual model of coping was discussed and an application of the model was fully explained. The importance of integrating the findings of this study in the national programs was explored in the introduction.

The next chapter will include the limitations, recommendations and implications for future studies as well as draw conclusions on the work.
Chapter 8: Conclusion

8.1 Introduction

The aim of this chapter is to critically summarise the key findings in light of the relevant literature and to present a number of strategic health services, education and policy recommendations that included specific interventions. In addition, the limitations of the study, the recommendations arising from these findings will be presented. Moreover, implications for clinical practice and future avenues of research are postulated. The chapter aims to present the subjects listed below:

- 8.2 Summary of the Major Findings
- 8.3 Limitations
- 8.4 Recommendations
- 8.5 Recommendations for Further Studies

8.2 Summary of the Major Findings

The researcher will restate the objectives of this research in order to examine if the research was able to fully or partially achieve these objectives. To examine the coping patterns of Arab women living in the UAE post-diagnosis of breast cancer, the researcher needed to:

1. Identify the current self-care practices of the women with breast cancer.
2. Examine the coping patterns after being diagnosed with breast cancer.
3. Compare and contrast coping patterns of Arab women of different nationalities living in the UAE.
4. Design breast-cancer health-education and management programs tailored to suit the specific subpopulation of Arab women living in the UAE.
Irrespective of the nationality or ethnicity, breast cancer presented this cohort of Arabic woman with a number of demands with which to cope, including pain, physical disfigurement, treatment decision and fear and uncertainty about the future. Compared with the international research documented, the Arab survivors in this study tended to be diagnosed in later stages of breast cancer—a finding consistent with previous research in the Middle East (Al Alawadi & Ohaeri, 2009; Abulkhair, 2010). Thus, for the Arab women survivors, the physical threats posed by the disease tended to be more serious than for non-Arab women suffering from breast cancer.

The Arab women breast cancer survivors were also more likely to face illness with fewer economic resources when compared to their counterparts in the West due to lack of insurance coverage and the need to travel abroad for further treatments. A total of 85 per cent of participants were married in phase one of the research and 55 per cent of the married women in phase two—during the interviews. These marriage patterns were fairly consistent with those from the national data (UAE Stat., 2005). The resulting lack of a second income for some of the Arab survivors was translated into fewer financial resources and a need to work full time when diagnosed. The decrease in their income caused further stressors because many of these women felt that they had to hide their illness from their direct managers to prevent a potential termination from their job once their direct managers knew that they had cancer. This result was different from other international findings where women diagnosed with breast cancer were reported to be supported by the occupational medical services once they were diagnosed.

Even though the Arab survivors tended to be diagnosed at later stages and had fewer resources with which to address the disease, over half of these women pointed to stressors in their life that they considered more difficult to cope with than their breast cancer. These stressors included divorce, hiding their disease from their employers and struggling with several painful operations they had to go through once they decided to undergo breast reconstruction.
Arab survivors tended to appraise difficulty of their breast cancer in different ways. They chose to activate different coping patterns to those documented in other international studies. For example, faith and a belief that God would get them through the illness were identified by all women surveyed as their most important coping pattern irrespective of their physical or emotional status. The Arab breast-cancer survivors reported a comforting relationship with God, characterised by regular conversation-like prayer and a sense of God’s personal direct involvement in their illness. In addition, a majority of Arab survivors indicated that they prayed for healing, and they visited the holy places and washed their bodies with holy water while considering that these practices contributed to their cures.

The Arab breast-cancer survivors also expressed different social-support needs as those services provided to UK or US women passing through the same situations. These women, in general, believed that God would see them through their illness and tended to be reserved in discussing illness with any person outside their close family circle. They did not like to say the name of the disease because having cancer was a stigma that no one wanted to be identified with.

Moreover, this study suggests that socio-economic status alone cannot be considered as determinative of cancer support-group attendance among Arab breast-cancer survivors. The ranking of religious coping as a primary coping strategy by Arab breast-cancer survivors held constant in this study regardless of their socio-economic status. The virtual absence in the structure of many cancer support groups to express that religious mode of coping must also be viewed as a potential cause of low attendance. Further, it was possible that religious coping completely displaced the value historically attributed to cancer support groups.

An illness such as breast cancer is never experienced in isolation and must be viewed in the context of the individual’s experience along with other chronic strains or other major life challenges. The chronic strains in the life of an individual, in turn, are affected by
her social status. Thus, women tended to be influenced by different chronic strains to those of men, and Arab women encounter different chronic strains than Arab men.

These women’s stresses and strains often filtered over into other social networks. Indeed, a major life stressor such as breast cancer was experienced as a threat not only by the woman who received the diagnosis, but also by her closest family members and friends. The reaction of the network to the illness, or the patient’s expectation of what that reaction might be, might also affect her reaction to the illness. The findings from this study indicated that members of a woman’s support network were actively involved in efforts to influence the choice of her coping strategies after a diagnosis of breast cancer.

Moreover, some of the Arab breast-cancer survivors in this study indicated an awareness of certain cultural practices but did not use them in the context of their cancer experience. For example, the demonstrated awareness of the Arabic cultural maxim to ‘keep it to yourself’ was evident, yet the decision of the surveyed women not to use this strategy pointed to the interaction between structure and agency. Structure provided the boundaries for certain choices and yet the choices people made determined future boundaries. Culture, as a particular arrangement of social structures, was not static but could be evoked at certain times when needed.

The main finding in this study was that religion and spirituality played a central role in coping with breast cancer. Of the participants in the questionnaire, 96 per cent reported that they used prayer and putting their trust in God, and 99 per cent of the participants considered this coping pattern as effective. The surveyed women’s response reflected three distinct ways they used religion and spirituality to cope with breast cancer: Women saw God as the only resource for healing and guidance; women calmed themselves by praying about their illness; and women used religion and spirituality as an alternative to their previous social-support networks and to find meaning in their experience of cancer. The majority of the surveyed women saw God as a resource in helping them cope with breast cancer. One woman noted that she found comfort in God being close to her and
pointed to her side as if to demonstrate God’s proximity to her. Other women mentioned the essential role God played in physically helping them manage their illness. Most women could not afford private services because public counselling services were sparse and largely inaccessible in the UAE; therefore, religion was one of few resources available for them.

Among those women who relied on prayer for coping, most explained they did so to achieve a calmer state of mind. Repeated prayers could distract attention from stressful thoughts and emotions. Such prayers might be viewed as a similar approach to the ‘relaxation-response’ techniques recommended by Benson (2000) that have been associated with benefits such as symptom reduction. With the capacity for religion and spirituality to explain misfortunes and human suffering, it was expected that women would draw on this resource as a kind of meaning-focused coping to better understand their diagnosis and implications. Kleinman (1988) discussed this with respect to explanatory models of illness and healing, noting the importance of understanding why a particular condition happened to a particular person in a particular place and time. Using the same concept and without knowing, most of the surveyed women discussed how their faith allowed them to understand the underlying meanings of their breast-cancer diagnosis. Moreover, all the surveyed women concentrated on describing how religion and spirituality helped them cope by allowing them to use God as a resource and by providing social support. The women received social support at the Mosque that was specifically related to arranging trips to religious places such as Mecca or meeting as groups for praying.

8.3 Limitations

Despite efforts to address several methodological shortcomings documented in previous research on similar topics, the findings of this study must be interpreted in the context of a number of limitations. The researcher was able to identify the coping patterns, but unfortunately, it was unclear from these findings to what extent women were able to cope with breast cancer, versus a determinant of feelings of uncertainty that these
women were suffering from. To quantify and measure the outcome, the researcher should have added further questions in the questionnaire such as assessing how the coping pattern helped each participant to cope with the disease and how these coping patterns, in turn, may have reduced their feelings of uncertainty. In addition, there remained the possibility that this relationship was confounded by extraneous variables not controlled for in this study such as family support, children or the presence of a support person. Questions concerning cause–effect relationships between feelings of uncertainty and coping with the breast cancer clearly warranted further exploration through longitudinal and experimental research designs.

A further limitation was related to exclusive reliance on self-report measures. While the inherent subjectivity of constructs such as coping patterns and feelings of uncertainty necessitated self-report data, it presented some issues concerning response bias such as the level of stress needed to trigger different coping patterns. Further, since both independent and outcome variables were assessed by self-report, some of the association measures in the study might have been, in part, due to shared-method variance. Although testing the coping pattern is subjective due to the nature of the topic, future studies are still needed to replicate these findings using more objective measures where possible in order to generalise the findings.

In addition, as in the case of all mail surveys, the conditions under which the questionnaires were completed were not controllable and this, in turn, may have affected the study findings. It was likely that some participants did not complete the questionnaire independently and were assisted by family members or care givers. This was a particularly salient issue for the population, given that impaired manual dexterity may pose difficulties in completing written questionnaires. In these cases, there might have been some degree of response bias, particularly for questions concerning personal or sensitive issues such as medical and family relationships and support.

Moreover, since a large number of statistical tests were performed, there was a risk of type 1 and type 2 errors. However, it was argued that this kind of exploratory approach
was justified at this relatively early stage in understanding the coping patterns adopted by women with breast cancer in the community. It would have been of interest to explore potential interrelationships among variables, viewing the potential negative consequences of divorce or leaving a job as seriously affecting the coping patterns of the surveyed women. Thus, further research is needed to determine which of the differences found in the current study need replication.

Finally, although this study drew on the national breast-cancer population from the registry-based sample, the generalisability of these findings may be affected by several factors. As the sample was restricted to Arabic women who completed grade ten, it might have excluded less educated and less wealthy individuals outside this category. These findings also excluded women with mild cognitive impairment or who were currently in the hospitals for treatment such as women taking their treatments. Despite the methodological challenges they would present, studies including women with different stages of breast cancer would have provided more generalisable results. Still this study was not able to differentiate the coping patterns identified by the women with breast cancer according to the stages of their disease, nor according to the time of their diagnosis. The nature and extent of these challenges, obviously, varied by the stage and the severity of the disease.

8.4 Recommendations

Nurses and allied health professionals in contact with Arab women with breast cancer need to approach the topic of patients’ religious and spiritual beliefs with awareness and sensitivity. The centrality of ascertaining patients’ views about spiritual and religious matters and spiritual communities would provide religious-based resources for coping with cancer. Importantly, these resources might provide support that was not always supplied by a spouse or other relatives or friends.

Health-profession educators who train nurses, doctors and clinical support staff should include courses and modules in undergraduate, post-graduate studies and refresher
courses that address the importance of religion and spirituality for coping with cancer and also provide basic cultural and sociology studies courses on the importance of religious-belief systems and cross-cultural nursing. Research findings and testimonials from patients that illustrated the role of religion and spirituality in coping with cancer should be discussed in the medical and nursing schools’ curriculum. This needs to be done in culturally appropriate ways, as findings from this study may not be generalisable to women living with breast cancer in other cultures and from other religious backgrounds (Musicks et al., 1998). Moreover, relationships needed to be forged between representatives from the health-care community and local spiritual leaders to ensure that insights about how patients could use religion and spirituality to cope with breast cancer could inform clinical practice in Mosques, women’s associations and could stimulate further research. The participation of the breast-cancer survivors in curriculum design and delivery of classes and workshops would be highly beneficial.

Other main findings in this study were that women with breast cancer needed both knowledge and psychosocial support in order to manage the challenges of everyday life. Results indicated that women had needs that were not met by the present standards for breast-cancer treatment in the UAE. These standards lack the criteria for interventions aiming at meeting women’s emotional and social needs. Official UAE documents (Country Cooperation Strategy for the WHO and UAE 2005–2009) highlighted the need for user-based health-care services for breast cancer. Therefore, the results from this study were important, and should be included in the National Standards for breast cancer care.

The women surveyed described common needs for knowledge and support at the time of diagnosis and throughout treatment. They appeared to be generally satisfied with the quality of the medical treatment, but lacked information appropriate to specific individual needs and reacted to the ways in which information was provided. These findings confirmed the previous studies (Ellis & Tattersall, 1999) that question the way in which information and support were transformed into meaningful knowledge. A
The women in this study expected to be fully recovered on the completion of the treatment. They were unprepared for the reactions that occurred on discharge from hospital services. They felt deserted by health professionals after the intensive-treatment period and were unsure of their recovery and their ability to cope on their own. These findings affirm those of Lethborg, Kissane and Burns (2003), who stated that the greatest divergence of opinion between providers and receivers of health-care services occurred on completion of medical treatment. Women saw themselves as ill, while at the same time significant others gave the impression that they should return to a normal life. In acknowledgment of, and respect for the women’s perspectives as identified in this study, health-care services should be designed to bridge the gap between intensive treatment and the return to an ordinary everyday life.

These findings suggested that both the physical and the psychological implications of fatigue need to be addressed in health-care contexts. This could be addressed during group sessions and when approaching the women during health-education sessions. Health professionals need to prepare DVDs or special courses such as relaxation sessions when dealing with women suffering from breast cancer. Holistic care is very crucial when approaching these ladies and their physio-psychosocial needs during the assessment and implementation of care should be considered. The role of specialised breast-cancer nurses is very important when dealing with women suffering from breast cancer where a bio-psychosocial assessment is provided before preparing and implementing the applicable care.

Women with young children (thirteen per cent) wanted to be open about their illness at least with their families, yet they did not want to make their children worry unnecessarily. Compas, Worsham, Epping-Jordan, Mireault and Howell (1996) showed that children were often exposed to a high level of psychosocial stress when a parent had cancer. Some women in this study expressed uncertainty connected to the results of
treatment and feared that death would end their involvement in the children’s development. These findings suggested that health-care services should include the provision of knowledge and support for women in their role as a parent. Parental counselling would be an important way of education for both parents in order to enlighten them about the best way to approach their children regarding their mothers’ cancer.

Results from this study showed that self-image and sexuality were central themes for discussion during the interviews, even though these two points were not identified when analysing the results of the questionnaires. Possible reasons for this may be due to a cultural taboo, shame, shyness and lack of suitable vocabulary. Other studies registered that self-image and sexuality are closely linked. According to Karesen and Langmark (2000), women’s self-image was impaired after breast cancer. Fismen and Stanghelle (2007) used a brief version of the World Health Organization QOL (WHOQOL) and found low scores on questions regarding sexual issues. Both the results from this study and other studies should not be interpreted as a lack of interest in sexual issues. Many health professionals are embarrassed and ill-equipped when discussing sexual issues and there was a need to increase their knowledge about the effects of illness and treatment on sexuality (Anllo, 2000; Rice, 2000). Therefore, a course should be added to the annual mandatory courses suggested by health facilities. This course should emphasise the effect of certain chronic diseases on the couple’s intimate relationship and should be delivered by specialist breast-cancer care nurses who undertake a specialised education.

Even though the results of the questionnaires (phase one) showed that only fifteen per cent of the surveyed women were not married, 45 per cent of the interviewed women (phase two) were not married (divorced or widowed). This indicated that high percentages of these women were selected for interviews because they either coped very well or did not cope. All the divorced women in the interviews expressed a need for their partners to be involved throughout treatment and follow-up. These findings coincide with other studies (Samms, 1999; Be-Zur et al., 2001). Sexuality and the break-down of a partnership are not necessarily connected; however, the possibility of a connection
between these two issues should not be excluded. Rabinowitz (2002) states that sexuality
is the most neglected of all themes connected to breast cancer. Findings in this study
suggest that partners and themes related to partnerships should be included in the
development of health-care services such as evening community classes to address
sexuality, and that these should be taught by experienced female nurse practitioners.

In this study, women described negative experiences in connection with the provision of
welfare services. They did not necessarily trust their doctors and they experienced that
recommendations from doctors were questioned by other health professionals in other
facilities. These experiences increased the level of everyday stress. The need for
knowledge and psychosocial support concerning social-welfare issues appeared to
increase on the completion of medical treatment. Results from this study suggested that
health carers should provide information about welfare services and patient rights in
order to empower women as they struggle to cope with newly diagnosed breast cancer.
Health-care providers should have clear information about insurance coverage for cancer
treatments in order to reduce discrepancies between different insurance companies with
respect to treatment of cancer patients.

The differences evident in this study between the Arab and Western survivors in their
coping responses to breast cancer suggested the importance of culturally relevant
implications in the form of cancer support groups. If such groups were to be effective for
Arab women, this study indicated that they must be designed specifically for Arab
women. The support groups should be led by Arab facilitators. Prayer was indicated as
an essential component of such groups. In addition, the group might need to change their
emphasis from providing assistance to providing some opportunities to render
assistance. The women highlighted the opportunity to share experiences within the
confidentiality of the focus group. The women recommended an organised support
group managed by the hospitals so that they could talk about common aspects of breast
cancer. This would enable exchange of information and advice, as sharing with others in
the same situation appeared to widen the perspectives on personal challenges. Studies
showed that strengthening the ability to gain control created a positive self-image and
supported empowerment. Empowerment improved the development of coping strategies and strengthened health (Astin et al., 1999).

8.5 Recommendations for Further Studies

Understanding the roles of religion and spirituality in Arab women’s coping patterns with breast cancer needs to be developed into longitudinal research on changes in coping patterns after a cancer diagnosis. One of the study’s most interesting results was that only two per cent of the participants and only one woman during the interviews felt a decrease in her faith as a result of their cancer diagnosis, while more than 98 per cent of the surveyed women observed that their faith either increased or remained the same. Further research exploring such changes in religiosity may offer a better understanding of how a potential health crisis can affect religiosity. Women suffering from breast cancer might benefit from their health providers’ active encouragement to draw upon their religious and spiritual beliefs and practices to help them cope with their breast-cancer diagnosis and treatment. One reason doctors might refrain from initiating discussions of religion and spirituality with breast-cancer women was their uncertainty about how to approach such a discussion (Ramondetta & Sills, 2004).

Consideration of the impact of culture on coping cannot be accomplished by research that uses samples consisting predominantly of Arab women. Future research should be directed at specifically studying the effectiveness of these coping processes of Arab women and compare the results with other racial and ethnic groups. Moreover, the comparison should be directed at uncovering differences as well as assigning value to the difference.

Researchers should also consider the effect of other social characteristics on coping processes. For example, prayer is widely employed by Arab women as a response to serious personal problems; however, there is no research testing the same coping pattern employed by Arab men. Therefore, more information is needed on how Arab men
specifically, as well as men from other racial and ethnic groups, cope with a serious stressor such as cancer.

Findings from this study indicate that the majority of Arab breast-cancer survivors did not consider breast cancer as their most difficult life challenge. This finding underscores the importance of social context in the appraisal of a stressor.

More longitudinal studies also need to be directed at how culture influences an individual’s selection of coping patterns, including how Arab women’s coping responses compare with those of Asian, European and Western women. This study indicated that Arab survivors who used religious coping did so in different ways. The result also suggests that there is no variance in socio-cultural and historical experiences in terms of religious coping between Arab women regardless of their country of origin.

Coping patterns that are religious or spiritual in nature have only recently begun to receive serious attention from researchers. A new theoretically based coping measure has recently been developed to measure the range of religious coping patterns (Pargament, Koenig & Perez, 2000). Unfortunately, the religious coping literature, like the more general coping literature, has tended to ignore culture as an important variable. Many studies have used samples that were predominantly Western (Gall, 2000; Pargament et al., 1998) or tended to collect data on race/ethnicity for control purposes (e.g. Pollner, 1989). There is a need for research that specifically examines the religious coping responses of Arab women. In addition to prayer, more information is needed on other aspects of their religious coping. For example, one Arab survivor drew inspiration by relating her ability to overcome her illness to washing herself daily with the holy water, ‘Zamzam water’, which she brings regularly from Saudi Arabia—from Mecca City. Future research should examine what scriptural passages, or what hymns or other religious activities are most meaningful or comforting to persons confronting serious personal illness or other major life stresses.
In addition, researchers should explore the outcomes associated with various forms of religious coping among Arab women. Arab women need to know the meaning of such phases. Women who have strong beliefs about God’s presence in their immediate social network need to understand the meaning of personal mastery. These various religious forms consider the social and cultural implications associated with coping outcomes.

Results from this study suggest that cultural and social factors also account for the way in which social support is given and received by Arab women coping with breast cancer. Arab survivors perceived God as a member of their support networks and, if married, after that they tended to look to their husbands for support. Findings from these studies suggest that relationships with men may pose a special form of chronic strain for Arab women. Some women pointed at their stressful relationships with their husbands and the effectiveness of these relationships when choosing their coping patterns. More information is needed on the extent and composition of this type of strain and its impact on the receipt of support by Arab women who are experiencing serious or chronic illness.

However, faith that God would get them through their illness was a primary means of coping for the Arab women. Clearly, cancer support groups need to be tailored for this difference if they are to be effective in serving the needs of Arab women. It may well be that interventions other than cancer support groups would more effectively address the needs of Arab women who are confronted by the stresses of breast cancer. Future research should examine the efficacy of support groups or other interventions that are specifically designed to meet the needs of Arab women.

Arab women survivors may be wholly comforted in that their reliance on God will get them through their illness; however, it is important to explore the kinds of coping assistance that other institutions might provide. Moreover, further studies should start from the perspective of Arabic culture and women’s gender and familiar roles within this as a theoretical framework and not from models predicated by other Western notions of coping or social support. Future research in this area can also be informed and
enhanced by thinking that is akin to the traditional Arab process of reciprocal obligation. That is, it can seek to determine how best to serve Arab breast-cancer survivors and it can seek to learn from Arab breast-cancer survivors so that other survivors can be better served.

### 8.6 Summary

In summary, I would like to revisit the research objectives and hypotheses and affirm how they have been addressed within this thesis. The first objective was identifying the self-care practices of breast-cancer survivors. It was revealed that irrespective of the nationality or ethnicity of the breast-cancer survivors, breast cancer presented this cohort with a number of demands with which to cope with, including pain, physical disfigurement, treatment decisions and uncertainty about the future. Moreover, the breast-cancer survivors were also most likely to face illness with fewer economic resources due to lack of insurance coverage and support from local occupational medical services.

In answering the second objective, faith and a belief that God would get them through the illness were identified by all women surveyed as their most important coping pattern irrespective of their physical and emotional status. Moreover, the women’s stresses and strains often spilled over into other social networks. Women saw their perceived support networks were actively involved in efforts to influence the choice of their coping strategies after a diagnosis of breast cancer. When the researcher started answering the hypotheses, it was reported that first, the young (aged less than 50 years) Arab women used the emotive coping style more than the older (aged over 50 years) women and perceived it as more effective, and the older women used the remaining seven coping styles more than the younger women and perceived these as more effective. Secondly, married Arab women used the confrontive and the optimistic coping style more than the non-married Arab women, but perceived the supportant coping style as the most ‘helpful’. Third, the UAE women ‘used’ the fatalistic and palliative coping styles more than the women from other Arab countries, but perceived the optimistic and the emotive
coping styles to be more ‘helpful’. Fourth, the unemployed Arab women used the supportant coping style more than the employed Arab women. Fifth, Arab women with a positive family history of breast cancer ‘used’ all the coping styles more than the Arab women with a negative family history of breast cancer and perceived them all as ‘helpful’. Sixth, the Arab women who were university graduates ‘used’ all the coping styles and perceived them as ‘helpful’ more than the Arab women who were high-school graduates. The results of the seventh hypotheses revealed Arab women who had children below ten years of age ‘used’ fatalistic, emotive and supportant coping styles more than the Arab women with children over ten years of age who ‘used’ more of the confrontive, evasive, optimistic, palliative and self-reliant coping styles, and perceived the emotive and evasive coping styles as ‘helpful’. In general, participants from different age groups, with different marital status, parities, nationalities, educational levels, employment before and/or after the diagnosis of breast cancer, and with or without a family history of cancer ‘mostly used’ and perceived the supportant coping style as ‘mostly effective’.

When comparing the coping patterns of Arab women of different nationalities living in the UAE, the study divided the Arab countries into four categories: the UAE, other Gulf countries, Middle East countries and Arab African countries. The study reported women in the UAE mostly ‘used’ the fatalistic and palliative coping styles, although they perceived the optimistic and emotive coping styles as ‘helpful. The surveyed women from other Gulf countries ‘used’ the confrontive, evasive, optimistic and self-reliant coping styles more than the other Arab women did, and perceived the confrontive, evasive, fatalistic, palliative, supportant and self-reliant coping styles as helpful.

The last objective stated recommending health-education and management programs tailored to suit the specific subpopulation of Arab women living in the UAE. This objective was discussed fully in the recommendations’ section with the suggestion of including breast-cancer survivors in the design and implementation of these programs and curriculums as soon as possible in the nursing and other health science universities in the UAE.
Appendices
Appendix 1: Ethics Committee Approval from RMIT

17th September 2008

Ghada Assaf
5 Donald Street
Frascat VIC 3072

Dear Ghada

BSETAPP 22 - 08 ASSAF Coping Patterns Among Arab Women Post Diagnosis of Breast Cancer

Thank you for submitting your amended application for review.

I am pleased to inform you that the committee has approved your application for a period of 2 Years to September 2010 and your research may now proceed.

The committee would like to remind you that:

All data should be stored on University Network systems. These systems provide high levels of manageable security and data integrity, can provide secure remote access, are backed up on a regular basis and can provide Disaster Recover processes should a large scale incident occur. The use of portable devices such as CDs and memory sticks is valid for archiving, data transport where necessary and for some works in progress;

The authoritative copy of all current data should reside on appropriate network systems; and the Principal Investigator is responsible for the retention and storage of the original data pertaining to the project for a minimum period of five years.

Annual reports are due during December for all research projects that have been approved by the Human Research Ethics Sub-Committee.

The necessary form can be found at: Human Research Ethics Committee

http://www.rmit.edu.au/browse[1D-5F7F1C35F60]

Yours faithfully,

Associate Professor Barbara Polus
Chair, Science Engineering & Technology Portfolio
Human Research Ethics Sub-Committee 'B'

Cc: HRE-SC Member: Keith McVilly School of Health Sciences
Supervisor: Eleanor Holroyd School of Health Sciences
Appendix 2: Permission from the Ministry of Health Federal Department

Dr. Abdal Ghaffar Abdul Ghaffour,
Assistant Undersecretary,
Curative Medicine Department,

Dear Dr. Abdul Ghaffour,

This is to ask your permission to access the breast cancer registry in Tawam Hospital. The aim is to secure a random sample of women with breast cancer so that I can conduct a study on the coping patterns used by women diagnosed with breast cancer in U.A.E. The findings have the potential to provide important information to health care practitioners and health care organizations regarding primary, secondary and tertiary interventions for young women suffering from breast cancer.

I would like to introduce myself, I am a mental health nurse working as a lecturer in the Institute of Nursing in Abu Dhabi. Currently I enrolled in a Doctor of Philosophy program in R.M.I.T university in Melbourne, Australia. As a part of my studies, I need to conduct a study, which I chose it to be about breast cancer in UAE. My research question is “What are the coping patterns used by women diagnosed with breast cancer in UAE”.

Moreover, I would like to assure you that the participants in this study will only include completion of questionnaire (approximately 15 minutes). All information discussed will be treated in the strictest confidence, and the questionnaire will have no identifying features. Access to the data will be restricted to the researcher and will be destroyed at the completion of the study. The participants will have the freedom to withdraw their participation at any stage.

Thanking you,

Ghada Naji Assaf
Mental Health Lecturer, RN, MS
Institute of Nursing, Abu Dhabi.
Appendix 3: Ethics Committee Approval from the UAE

19 October, 2009

Dr. Ghada Najjar Assaf  
Fatima College of Health Sciences  
Abu Dhabi, UAE

Dear Dr. Ghada,

Re: Al Ain Medical District Human Research Ethics Committee - Protocol No. 09/35 – Coping Patterns among Arab women post diagnosis of breast cancer.

Thank you for submitting your application to the committee.

Your application was reviewed by the committee and found that it is an interesting and important study without any ethical concerns and I am pleased now to provide you ethical approval of your project.

May I reiterate, should there be any ethical concern arising from the study in due course the Committee should be informed.

Annual reports plus a terminal report are necessary and the Committee would appreciate receiving copies of abstracts and publications should they arise.

I wish to take this opportunity to wish you success with this very important study.

With kind regards,

Yours sincerely,

Dr. Fawaz C. Torab,  
Chair, Al Ain Medical District Human Research Ethics Committee

Phone: (971) 3) 767 2000 · Fax: (971 3) 767 2001, P.O.Box 17666, Al Ain, United Arab Emirates  
www.fmhs.uae.ac.ae
Appendix 4: Consent Form

Prescribed Consent Form for Persons Participating in Research Projects Involving Interviews, Questionnaires or Disclosure of Personal Information

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<tr>
<th>Portfolio</th>
<th>Science Engineering &amp; Technology</th>
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<td>Health Sciences, RMIT University, Australia</td>
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<tr>
<td>Name of participant:</td>
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</tr>
<tr>
<td>Project Title:</td>
<td>Coping Patterns Among Arab Women Living in United Arab Emirates Post Diagnosis of Breast Cancer</td>
</tr>
<tr>
<td>Name(s) of investigators:</td>
<td></td>
</tr>
<tr>
<td>(1)</td>
<td>Ghada Najjar Assaf</td>
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<td>(2)</td>
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</table>

1. I have received a statement explaining the interview/questionnaire involved in this project.
2. I consent to participate in the above project, the particulars of which—including details of the interviews or questionnaires—have been explained to me.
3. I authorise the investigator or his or her assistant to interview me or administer a questionnaire.
4. I acknowledge that:

(a) Having read Plain Language Statement, I agree to the general purpose, methods and demands of the study.
(b) I have been informed that I am free to withdraw from the project at any time and to withdraw any unprocessed data previously supplied.
(c) The project is for the purpose of research and/or teaching. It may not be of direct benefit to me.
(d) The privacy of the personal information I provide will be safeguarded and only disclosed where I have consented to the disclosure or as required by law.

(e) The security of the research data is assured during and after completion of the study. The data collected during the study may be published, and a report of the project outcomes will be provided to_____________(researcher to specify). Any information that will identify me will not be used.

Participant’s Consent

Participant: ___________________________ Date: ________________

(Signature)

Witness: ___________________________ Date: ________________

(Signature)

Any complaints about your participation in this project may be directed to the Executive Officer, RMIT Human Research Ethics Committee, Research & Innovation, RMIT, GPO Box 2476V, Melbourne, 3001. The telephone number is (03) 9925 2251. Details of the complaints procedure are available from the above address.
Appendix 5: Plain-Language Statement

Invitation to Participate in Research Project

Plain-Language Statement

The researcher is interested to hear from you as an Arabic woman between 18–70 years of age. You are invited to participate in a research project entitled ‘The Coping Patterns among Arab Women after Diagnosis of Breast Cancer’. The study is being conducted by Mrs Ghada Najjar, a PhD student researcher from the Division of Nursing and Midwifery at RMIT University in Melbourne, Australia. I hope to recruit approximately 250 women in total for the study. The study has gained approval from the RMIT Human Research & Ethics Committee.

The research project is trying to find out the coping patterns of Arab women who are living in the UAE community after a diagnosis of breast cancer.

The information that is gathered from this study will provide important material for nurses and other health-care practitioners to help Arab women suffering from breast cancer. The information from the questionnaires is being collected for scientific research purposes only, and will not be used for any other purpose. The questionnaires will be stored in a locked filing cabinet in a locked office, and only the researchers will have access to the information. The questionnaires will be kept for 5 years, then shredded and destroyed.

The survey is numbered; no personal identification is requested or required. This means that no one will be able to identify you from the information that you provide in this survey. The combined results of this survey will be published in a research journal, will be made available to the public and will be specifically presented to the Arab women who participated in the survey during the annual general nursing workshop.
If you agree to participate in the study, please complete the attached questionnaire. Answer each question by either ticking the box next to the statement that best answers the question or is closest to your present situation or belief. Alternatively write your response in the space provided using BLOCK letters.

If you would like more information, please contact Mrs Ghada Najjar Assaf, Phone Number 00971505926694, or n_ghada@hotmail.com. or Prof. Eleanor Holroyd, Division of Nursing & Midwifery, RMIT University, PO Box 71 Bundoora VIC 3083, ph 99257179, email Eleanor.Holroyd@rmit.edu.au, or Assoc Prof. Lina Shahwan-Akl, Division of Nursing and Midwifery, RMIT University, PO Box 71, Bundoora VIC 3083, ph 99257443, email lina.shahwan-akl@rmit.edu.au.

Thank you for agreeing to participate in this study. Your participation is appreciated sincerely.
Appendix 6: Questionnaire

JALOWIEC COPING SCALE
COPYRIGHT DR ANNE JALOWIEC, USA, 1987

I- Breast Cancer Registry Information:

1- Participant #:---------------------

2- Participant contact #:---------------------

3- Breast cancer diagnosis’s date:---------------------

4- Breast cancer stage at diagnosis:---------------------

5- Breast cancer treatment (s):---------------------

6- Presence of other health problems---------------------

7- After contacting the participant, did she accept to participate in this survey?

☐- Yes

☐- No, What was the reason?---------------------
You are invited to participate in a research project entitled ‘The Coping Patterns among Arab Women after Diagnosis of Breast Cancer’. The study is being conducted by Mrs Ghada Najjar, a PhD student researcher from Division of Nursing and Midwifery at RMIT University in Melbourne, Australia. The study has gained approval from the RMIT Human Research & Ethics Committee.

The research project is being carried out to find how much is known about the coping patterns revealed by Arab women who are living in the UAE community after diagnosis of breast cancer.

The researcher is interested to hear from you as an Arab women aged between 18–70 years of age. We anticipate recruiting approximately 200 women for the study.

If you agree to participate in the study, please complete the attached questionnaire. Answer each question by either ticking the box next to the statement that best answers the question or is closest to your present situation or belief. Alternatively write your response in the space provided using BLOCK letters.

The information that is gathered from the questionnaires will provide important information to health care practitioners in setting in place culturally appropriate material to help Arab women suffering from breast cancer. The information from the questionnaires is being collected for scientific research purposes only, and will not be used for any other purpose. The questionnaires will be stored in a locked filing cabinet in a locked office, and only the researchers will have an access to the information. The questionnaires will be kept for 5 years, then shredded and destroyed.

The survey is numbered, but is anonymous; no personal identification is requested or required. This means that no one will be able to identify you from the information that
you provide in this survey. No individual will be identified in any publication based on
the information provided in this survey. The combined results of this survey will be
published in a research journal, will be made available to the public, and will be
specifically presented to Tawam Hospital and Arab women who participated in the
survey during the annual general nursing workshop.

If you would like more information, please contact Prof. Eleanor Holroyd, Division of
Nursing & Midwifery, RMIT University, PO Box 71 Bundoora VIC 3083, ph 99257179,
email Eleanor.Holroyd@rmit.edu.au, or Assoc Prof. Lina Shahwan-Akl, Division of
Nursing and Midwifery, RMIT University, PO Box 71, Bundoora VIC 3083, ph
99257443, email lina.shahwan-akl@rmit.edu.au.

Thank you for agreeing to participate in this study. Your participation is sincerely
appreciated.
II- Personal Characteristics

Please tick the appropriate box that best represents your answer.

1- What is your age?

<table>
<thead>
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<th>25–30</th>
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<tr>
<td>Widowed</td>
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</tbody>
</table>

2- What is your current marital status?

☐- Single
☐- Married
☐- Divorced
☐- Widowed

3- Do you have children?

☐- No children
☐- Children below 10 years.
☐- Children above 10 years.

4- What is your nationality?-----------------------------

5- What is your ethnic group?

☐- Arab   ☐- Turkman
☐- Caucadians ☐- Kurds
6-What is highest level of schooling you have completed?

- Post graduate.
- Degree.
- Diploma.
- Secondary.

7- Occupation before your illness?

- Home duties.
- Self-employed. Please state--

8- Do you currently work?

- Full time
- Part time
- Do not work

9- What is your religion?

- Muslim
- Christian
- Other, Please state:

10-What is your monthly family income?
☐- Less than 10000 Dirhams
☐- 10000–30000 Dirhams
☐- 30000–50000 Dirhams
☐- More than 50000 Dirhams

11- How did you first discover the breast lump?

☐- During monthly self-breast exam
☐- Routine physician check-up
☐- Annual breast self-exam
☐- By chance
☐- Other, specify---------

12- What was your next step after diagnosis? Where did you go?

☐- Private Doctor
☐- Breast cancer screening clinic
☐- Primary health care centre
☐- Hospital
☐- Other, specify---------

13- Who knew first about your illness?

☐- Your husband
☐- Family member
☐- Friend
☐- Family Dr.
☐- Religious person
☐- Other, specify---------
14- What treatment(s) have you undertaken for your breast cancer? Please indicate all forms of treatment you have had.

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
<th>Don’t Know</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Surgery (if so, mastectomy?---------or lumpectomy?--------</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Chemotherapy</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Radiotherapy</td>
</tr>
</tbody>
</table>

If other treatments, Please state:-----------------------------

15- Where did you receive your first formal support system after diagnosis with breast cancer?

☐- Hospital  
☐- Breast cancer clinic  
☐- Health visitors  
☐- Other: Specify-----------------------------

16- From whom did you receive informal support after a diagnosis of breast cancer?

☐- Parents  
☐- Husband  
☐- Children  
☐- Relatives  
☐- Friends  
☐- Other: Specify-----------------------------

17- Do you currently have any other health problem?

☐- Yes, Specify-----------------------------
☐- No

18- Have you had any previous operation(s)?

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
<th>Don’t Know</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Hysterectomy</td>
</tr>
<tr>
<td></td>
<td></td>
<td>An ovary or ovaries been removed</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Breast reconstruction</td>
</tr>
</tbody>
</table>

19- Are you still having your menstrual period?

☐- Yes

☐- No. When was your last natural menstrual period? (natural refers to the last menstrual period prior to menopause)? ----/--/----

20- Are you taking any hormonal therapy?

☐- Yes, the name of the therapy is--------------------------

☐- No

21- Does any member of the family have a history of cancer?

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>Do not know</th>
<th>Type of Cancer (if known)</th>
<th>Age at Diagnosis (if known)</th>
<th>Living/Deceased</th>
</tr>
</thead>
<tbody>
<tr>
<td>Your mother</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Your father</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Your sisters</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
This questionnaire is about how you cope with stress and tension, and what you do to handle stressful situations. In particular, how you coped after your diagnosis of breast cancer. This questionnaire lists many different ways of coping with stress. Some women use a lot of different coping methods; some women use only a few.

You will be asked two questions about each different way of coping with stress: if you did not use a particular coping method in part A, please do not circle any number in part B for that coping method.

<table>
<thead>
<tr>
<th>COPING METHODS</th>
<th>Part A</th>
<th>Part B</th>
</tr>
</thead>
<tbody>
<tr>
<td>and brothers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Your children</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Your mother’s sisters and brothers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Your father’s sisters and brothers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Your nieces and nephews</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Your mother’s parents</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Your father’s parents</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number</td>
<td>Description</td>
<td>Never used</td>
</tr>
<tr>
<td>--------</td>
<td>------------------------------------------------------------------------------</td>
<td>------------</td>
</tr>
<tr>
<td>1.</td>
<td>Worried about a problem</td>
<td>0</td>
</tr>
<tr>
<td>2.</td>
<td>Hoping that things would get better</td>
<td>0</td>
</tr>
<tr>
<td>3.</td>
<td>Ate or smoked more than usual</td>
<td>0</td>
</tr>
<tr>
<td>4.</td>
<td>Thought out different ways to handle the situation</td>
<td>0</td>
</tr>
<tr>
<td>5.</td>
<td>Told yourself that things could be much worse</td>
<td>0</td>
</tr>
<tr>
<td>6.</td>
<td>Exercised or did some physical activity</td>
<td>0</td>
</tr>
<tr>
<td>7.</td>
<td>Tried to get away from the problem</td>
<td>0</td>
</tr>
<tr>
<td>8.</td>
<td>Got mad and let off steam</td>
<td>0</td>
</tr>
<tr>
<td>9.</td>
<td>Expected the worst that could happen</td>
<td>0</td>
</tr>
<tr>
<td>10.</td>
<td>Tried to put the problem out of your mind and think of something else</td>
<td>0</td>
</tr>
<tr>
<td>11.</td>
<td>Talked the problem over with family or friends</td>
<td>0</td>
</tr>
<tr>
<td>COPING METHODS</td>
<td>Part A</td>
<td>Part B</td>
</tr>
<tr>
<td>----------------</td>
<td>--------</td>
<td>--------</td>
</tr>
<tr>
<td></td>
<td>How often you used each coping method?</td>
<td>If you have used that coping method, how helpful was it?</td>
</tr>
<tr>
<td></td>
<td>Never used</td>
<td>Seldom Used</td>
</tr>
<tr>
<td>12. Accepted the situation because very little could be done</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>13. Tried to examine the problem objectively and see all sides</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>14. Daydreamed about a better life</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>15. Talked the problem over with a professional person (such as a doctor, nurse, teacher, counsellor)</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>16. Tried to keep the situation under control</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>17. Prayed or put your trust in God</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>18. Tried to get out of the situation</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>19. Kept your feelings to yourself</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>20. Told yourself that the problem was someone else’s fault</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>21. Waited to see what would happen</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>
22. Wanted to be alone to think things out | 0 | 1 | 2 | 3 | 0 | 1 | 2 | 3
23. Resigned yourself to the situation because things looked hopeless | 0 | 1 | 2 | 3 | 0 | 1 | 2 | 3
24. Took out your tensions on someone else | 0 | 1 | 2 | 3 | 0 | 1 | 2 | 3
25. Tried to change the situation | 0 | 1 | 2 | 3 | 0 | 1 | 2 | 3
26. Used relaxation techniques | 0 | 1 | 2 | 3 | 0 | 1 | 2 | 3
27. Tried to find more about the problem | 0 | 1 | 2 | 3 | 0 | 1 | 2 | 3
28. Slept more than usual | 0 | 1 | 2 | 3 | 0 | 1 | 2 | 3
29. Tried to handle things one step at a time | 0 | 1 | 2 | 3 | 0 | 1 | 2 | 3

<table>
<thead>
<tr>
<th>COPING METHODS</th>
<th>Part A</th>
<th>How often you used each coping method?</th>
<th>Part B</th>
<th>If you have used that coping method, how helpful was it?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Never used</td>
<td>Seldom Used</td>
<td>Sometimes used</td>
<td>Often used</td>
</tr>
</tbody>
</table>

30. Tried to keep your life as normal as possible and not let the problem interfere | 0 | 1 | 2 | 3 | 0 | 1 | 2 | 3
31. Thought about how you had handled other problems in the past | 0 | 1 | 2 | 3 | 0 | 1 | 2 | 3
<p>| | | | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>32</td>
<td>Told yourself not to worry because everything would work out fine</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>33</td>
<td>Tried to work out a compromise</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>34</td>
<td>Took a drink to make yourself feel better</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>35</td>
<td>Let time take care of the problem</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>36</td>
<td>Tried to distract yourself by doing something that you enjoy</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>37</td>
<td>Told yourself that you could handle anything no matter how hard</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>38</td>
<td>Set up a plan of action</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>39</td>
<td>Tried to keep a sense of humour</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>40</td>
<td>Put off facing up to the problem</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>41</td>
<td>Tried to keep your feelings under control</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>42</td>
<td>Talked the problem over with someone who had been in a similar situation</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>43</td>
<td>Practiced in your mind what had to be done</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>44</td>
<td>Tried to keep busy</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>45</td>
<td>Learnt something new in order to deal with the</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>
### COPING METHODS

<table>
<thead>
<tr>
<th>COPING METHOD</th>
<th>Part A</th>
<th>Part B</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Never Used</td>
<td>Seldom Used</td>
</tr>
<tr>
<td>46. Did something impulsive or risky that you would not usually do</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>47. Thought about the good things in your life</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>48. Tried to ignore or avoid the problem</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>49. Compared yourself with other people who were in the same situation</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>50. Tried to think positively</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>51. Blamed yourself for getting into such a situation</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>52. Preferred to work things out yourself</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>53. Took medication to reduce tension</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>54. Tried to see the good side of the situation</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Question</td>
<td>Score 0</td>
<td>Score 1</td>
</tr>
<tr>
<td>-------------------------------------------------------------------------</td>
<td>---------</td>
<td>---------</td>
</tr>
<tr>
<td>55. Told yourself that this problem was really not that important</td>
<td></td>
<td></td>
</tr>
<tr>
<td>56. Avoided being with people</td>
<td></td>
<td></td>
</tr>
<tr>
<td>57. Tried to improve yourself in some way so you could handle the situation better</td>
<td></td>
<td></td>
</tr>
<tr>
<td>58. Wished that the problem would go away</td>
<td></td>
<td></td>
</tr>
<tr>
<td>59. Depended on others to help you out</td>
<td></td>
<td></td>
</tr>
<tr>
<td>60. Told yourself that you were just having some bad luck</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
If there are any other things you did to handle the stress mentioned at the beginning, that are not on the list, please write those coping methods in the space below. Then circle how often you have used each coping method, and how helpful each coping method has been.

<table>
<thead>
<tr>
<th>COPING METHODS</th>
<th>Part A</th>
<th>Part B</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>How often you used each coping method?</td>
<td>If you have used that coping method, how helpful was it?</td>
</tr>
<tr>
<td>61.</td>
<td>1</td>
<td>2 3 0 1 2 3</td>
</tr>
<tr>
<td>62.</td>
<td>1 2 3 0 1 2 3</td>
<td></td>
</tr>
<tr>
<td>63.</td>
<td>1 2 3 0 1 2 3</td>
<td></td>
</tr>
</tbody>
</table>
Appendix 7: Permission to Use the Jalowiec Coping Scale

PERMISSION TO USE THE JCS

PERMISSION IS HEREBY GRANTED TO:

Shafa Najjar Assaf

TO USE THE JALOWIEC COPING SCALE IN A RESEARCH STUDY OR CLINICAL PROJECT

IF REQUESTED, PERMISSION IS ALSO GRANTED TO TRANSLATE THE JCS INTO ANOTHER LANGUAGE:

Arabic

FOR TRANSLATED VERSIONS OF THE JCS, THE TITLE OF THE INSTRUMENT SHOULD REMAIN AS: JALOWIEC COPING SCALE AND THE COPYRIGHT NOTATION ON THE TRANSLATED VERSION SHOULD READ AS FOLLOWS:

COPYRIGHT DR ANNE JALOWIEC, USA, 1987
TRANSLATED BY: [YOUR NAME, COUNTRY, YEAR]

Anne Jalowiec 10-16-07

DR ANNE JALOWIEC DATE
Appendix 8: Invitation for Interview

Personal Interview

If you would like to participate in a personal interview to discuss further these coping patterns, please complete the following and the researcher will contact you for an interview at a time convenient for you.

Name----------------------------------------

Contact number----------------------------

Convenient time to call-------------------

Please fold separately to return to researcher.
Appendix 9: Semi-Structured Interview Questions

<table>
<thead>
<tr>
<th>Coping Style</th>
<th>Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>Confrontive coping style</td>
<td>How do you face up or confront your illness?</td>
</tr>
<tr>
<td>Evasive coping style</td>
<td>What do you do to avoid confronting your illness?</td>
</tr>
<tr>
<td>Optimistic coping style</td>
<td>How do you make it possible to think positively about your problem?</td>
</tr>
<tr>
<td>Fatalistic coping style</td>
<td>How do you feel when you think pessimistically or you act in a pessimistic way when dealing with your illness?</td>
</tr>
<tr>
<td>Emotive coping style</td>
<td>How do you usually express or release your emotions when facing a problem?</td>
</tr>
<tr>
<td>Palliative coping style</td>
<td>What do you do to help yourself feel better when facing a problem?</td>
</tr>
<tr>
<td>Supportant coping style</td>
<td>How much you rely on support systems (including religious support systems) when facing your problem?</td>
</tr>
<tr>
<td>Self-Reliant coping style</td>
<td>To what extent you depend on yourself to deal with your problems, rather than on others?</td>
</tr>
<tr>
<td></td>
<td>Any other ways of coping that were important or influential? Please describe.</td>
</tr>
</tbody>
</table>


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