

## EXPERIENCES IN MIDDLE EASTERN POPULATIONS

# Pain Coping Behaviors of Saudi Patients Suffering from Advanced Cancer : A Revisited Experience

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### Abstract

**Background:** Cancer is one of the major health problems throughout the world. The number of cancer patients is increasing, out of the estimated nine million new cancer cases every year, more than half are in developing countries. The majority of these patients are incurable by the time their disease is diagnosed. Therefore, cancer mortality is expected to continue to rise in those regions of the world (WHO, 2002). In Saudi Arabia, the latest report from the Saudi Cancer Registry SCR for 2004 registered 9,381 new cases, of these cases 7,138 were Saudis. The crude incidence rate CIR of all cancers among Saudis was 41.9/100,000. The total number of adult cancer incidence cases reported was 8595, and for children were 713 cases (NCR, 2004). The most common feared symptom encountered in advanced cancer is pain. Through their perpetual encounter with pain, advanced cancer patients usually maintain different coping behaviors. Internationally speaking, there are limited researches and investigations that deal with cancer pain, and the importance of using adaptive coping behaviors to control it. In Saudi Arabia, specifically, pain coping behaviors has never been assessed or discussed before, so is the impact of cancer pain on the quality of life. The presence of any maladaptive coping behaviors with cancer pain will interfere with the patient's life style and their quality of life, and will affect the nurse's role in caring, planning, and implementing effective nursing interventions to reduce and control cancer patient's pain. **Materials and Methods:** A descriptive design was used for this study to assess the pain coping behavior Among Saudi patients suffering from advanced cancer. The study was conducted at the two tumor centers which deal with cancer patients in Jeddah City. A convenient sample of 132 patients with advanced cancer who were returning to the clinics, radiation therapy and medical oncology departments of the aforementioned tumor centers were included in the study. Data were collected by an interview schedule specially designed for this study, and the time ranged between 20-40 minutes. Tool's content validity and reliability were checked and established at 89% and 85%, respectively. Administrative approval from the two tumor centers in Jeddah City was obtained for study conduction. Different statistical methods were used for data analysis and interpretation to specify the value of correlation between study variables using SPSS v 10. **Results:** Patients age were almost equally distributed among thirties (22%), forties (24.2%), fifties (20.5%), and sixties (22.7%). Females (59.1%) were slightly more than males (40.9%). About one half (47%) of them were diagnosed since one - two years age, and slightly more than half (56.8%) of them were unaware of their diagnosis. The major adaptive and Active pain coping behaviors included: religious practices such as: praying (99.2%); and listening or reciting the Holy Qura'an (98.5%). Cognitive methods such as: thinking that one is more stronger than the pain (99.2%); thinking that one is still in a satisfactory health despite the pain (98.5%); distracting oneself from pain (93.9%); visualization of pleasant scenes (92.4%); thinking about pleasant things (90.9%). The major maladaptive and passive pain coping behaviors included: decreasing activities by: specified positioning (97.7%); protecting the painful area (90.9%); and remaining still and avoiding movement (78%). Expression of feelings by: seeking help from others (90.2%); and crying or moaning (80.3%). Suppression of feelings and tolerating pain as it is (97%). **Conclusions:** Most of the adaptive and active pain coping behaviors were coming from patient's belief in god & their faith and trust and holding and obeying Islamic commands. The informational support by the health care professionals was unprovidable in the study sample, which brings the attention to the importance of nursing interventions in this area by providing coordinated and directed programs.

**Keywords:** Pain coping behaviour - beliefs - coordinated programs - Saudi Arabia

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### Assessment of Coping Behaviour

Cancer is one of the major health problems thought out the world. The number of cancer patients is increasing,

out of the estimated nine million new cancer cases every year, more than half are in developing countries. The majority of these patients are incurable by the time their disease is diagnosed. Therefore, cancer mortality is

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expected to continue to rise in those regions of the world (WHO, 2002).

Cancer is defined as a disease of the cell in which the normal mechanisms of control of growth and proliferation are disturbed. This results in distinctive morphologic alterations of the cell and aberrations of tissue patterns. Advanced cancer is defined as the neoplastic process that have metastasised and/ or no longer fully controlled by antineoplastic treatment, and they produce increasing symptoms and dysfunctions. Palliation rather than cure becomes the focus of medical treatment at that stage (Carnevali & Reiner, 1990; & NCP, 2004). In Saudi Arabia, the latest report from the Saudi Cancer Registry SCR for 2004 registered 9381 new cases, of these cases 7138 were Saudis. The crude incidence rate CIR of all cancers among Saudis was 41.9/100,000. The total number of adult cancer incidence cases reported was 8595, and for children were 713 cases (NCR, 2004).

The most common feared symptom encountered in advanced cancer is pain (Bruera 1992; Fisher and Penson, 1995; WHO, 2002; NCP, 2004). In the U.S.A., the incidence of pain in the cancer population is one third of patients in active therapy, and 60% - 90 % of patients with advanced disease. The severity of pain ranges from moderate to severe, and it is chronic in nature (Grant & McCorkle, 1994; Ferrell et al., 2005). Chronic pain, in general, is caused by persistent or progressive disease. It is defined as an unpleasant sensory and emotional experience associated with actual or potential tissue damage that recurs or persists over an extended period of time and interferes with functioning (Burckhardt, 1990). Such pain can cause physical disability and psychological distress, which may have impact on patients' quality of life (Zimmerman et al., 1996). Much of the care provided to patients with advanced cancer-experiencing pain - occurs in the home environment. Increased length of patient survival and growing demands on already burdened health care resources have contributed to the increased use of the home as the primary setting for the advanced cancer patients care (Ferrell et al., 2005). Through their perpetual encounter with pain, advanced cancer patients usually maintain different coping behaviors.

Coping refers to the specific thoughts and behaviors people use to manage their pain or their emotional reactions to their pain. Patients employ a wide variety of behaviors for coping with their pain. Coping behaviors are classified as adaptive or maladaptive based on their relationship to pain indices. Patients may use active or adaptive pain coping behaviors when attempting to control or to function in spite of their pain. Alternatively, patients may use passive or maladaptive pain coping behaviors when relinquishing control of their pain to others, or when allowing other areas of their life to be adversely affected by pain (Brown & Nicassio, 1987). The presence of any maladaptive coping behaviors with cancer pain will interfere with the patient's life style and their quality of life, and will affect the nurse's role in caring, planning, and implementing effective nursing interventions to reduce and control cancer patient's pain (Arathuzik, 1994a).

Internationally speaking, there are limited researches and investigations that deal with cancer pain, and the importance of using adaptive coping behaviors to control it. In Saudi Arabia, specifically, pain coping behaviors has never been assessed or discussed before, so is the impact of cancer pain on the quality of life.

The importance of promoting the quality of life of people with cancer through good palliative care is paramount. Community health nurses are part of the health care professionals who are most frequently and consistently in contact with people with cancer. So, it is expected from them to become more involved in the assessment and management of cancer pain at homes and in the hospitals. They can do much to validate with cancer patients what their illness means to them, support them as they grieve, aid them to adapt - as much as possible - to their altered state, and either enhance or modify their pain Coping behaviors (Grant and McCorkle, 1994). The present study was conducted to assess pain coping behavior among Saudi patients suffering from advanced cancer.

## Materials and Methods

A descriptive design was used for this study to assess the Pain Coping behaviors Among Saudi Patients Suffering from advanced cancer. The study was conducted at the two tumor centers which deal with cancer patients in Jeddah City. A convenient sample of 132 patients with advanced cancer who were returning to the clinics, radiation therapy and medical oncology departments of the aforementioned tumor centers were included in the study. Patient's selection was based on the following criteria: (1) Patients should be Saudi; (2) Age 30 years and above; (3) Confirmed Medical diagnosis of advanced cancer; (4) Receiving prescribed pain treatment regimen on ambulatory basis; and (5) Welling to participate in the study.

### Data Collection Tool

Data were collected by an interview schedule specially designed for this study. It entails 64 Questions divided into four parts: The first part is a specially designed assessment sheet to identify the: demographic data such as: age, sex, etc.; and the medical history such as diagnosis, its date, etc. This part consists of 11 Questions. The second part is a modified version of the Duke-UNC functional social support questionnaire -DUFSS (Broadhead & et al, 1988). It consists of the source and the types of social support. This part comprises 9 Questions. Thee third part is a modified version of Arathuzik's (1994b) pain inventory which contains items concerning pain intensity, location, duration, and patient's perception of pain effect on daily life. This part contains 17 questions. The last part is a modified version of: Vanderbilt's pain management inventory (Wallston, 1984; Brown & Nicassio, 1987); and Arathuzik's (1994b) Pain Coping Tool. It was used to assess the adaptive and maladaptive pain coping behaviors. This part entails 27 Questions. Approvals for using these tools was obtained from the authors prior to commencing the study.

Tool's content validity and reliability were checked and established at 89% and 85%, respectively. The tool was piloted on a sample of 15 patients with advanced cancer to test its feasibility. Little changes has been done to the tool after the pilot test to ensure good patients response at data collection time.

*Data Collection Method:*

Administrative approval from the two tumor centers in Jeddah City was obtained for study conduction. The data was collected through the structured interview method by meeting patients individually and reviewing patient's medical files for a period of 7 months divided between the two centers. Interview time ranged between 20-40 minutes.

*Data Analysis:*

Different statistical methods were used for data analysis and interpretation to specify the value of correlation between study variables. The SPSS v 10 computer program was used to analyze the data, and calculate the frequency distribution and correlation between Study variables and pain coping behaviors.

**Results**

Patients age were almost equally distributed among thirties (22%), forties (24.2%), fifties (20.5%), and sixties (22.7%). Females (59.1%) were slightly more than males (40.9%). Most of them (75%) were married, half of them (50.8%) were illiterate, and the majority (88.64%) were either not working or holding a non professional job. As

substantial proportion (66.7%) of them have a monthly income less than 6000 Saudi Riyals.

About one half (47%) of them were diagnosed since one - two years age, and slightly more than half (56.8%) of them were unaware of their diagnosis. The main diagnoses were (see Tables 1 and 2) breast cancer (30.3%), and cancer in the respiratory tract (20.5%). Patients were receiving radiation therapy (57.6%), or symptomatic therapy (31.8%), or chemotherapy (6.8%), or combination of chemotherapy and radiation therapy (3.8%). For pain management most of them (72%) were on non steroidal anti inflammatory drugs, 20.5% were on palliative radiation therapy, 3% were on palliative radiation therapy, 3% were on narcotics drugs, 3% were on combination of more than one type, and 1.5% were on adjuvant drugs.

Nearly a half (49.2%) of them were socially supported by their spouse, and 37.1 % by their children. All of them were receiving affective and emotional social support. Most of them were receiving instrumental and confident social support.

More than one half (53.8%) of them had been suffering from pain for < 6 months, and 24.2% since 6 - 12 months. Pain lasted for several minutes for 59.1%, for one hour for 13.6%, for several hours for 11.4%, for more than one day for 8.3%, and for < one minute for 7.6% of them. And pain was repeated several times during the day in 49.2% of the patients, and for the whole day in 48.5% of them.

The pain was either pricking in (51.5%), or squeezing in (18.2%), or burning in (8.3%), or throbbing in (6.1 %), or tearing in (1.5%). The pain was either severe in (18.2%), or moderate in (37.1 %), or mild in (44.4%); where as pain distress was either severe in (30.8%), or moderate in (40.8%), or mild in (28.4%).

The physiological adverse effect of pain was on performance of daily activities in (93.2%), sleeping patterns in (80.3%), and ability to concentrate in (34.1%). While its social effect was obvious in the social (75%) and family (43.2%) relationship and activities. However, the pain provoked the sense of challenge among about more than one half (57.6%) of the patients, yet it was also perceived as a threat for less than a half of them.

The adaptive and active pain coping behaviors included: religious practices such as: praying (99.2%); and listening or reciting the Holy Qura'an (98.5%). Cognitive methods such as: thinking that one is more stronger than the pain (99.2%); thinking that one is still in a satisfactory health despite the pain (98.5%); distracting oneself from pain (93.9%); visualization of pleasant scenes (92.4%); thinking about pleasant things (90.9%); relaxation of ones muscle 33.3%) and using previous successful experiences to handle pain (13.6%). Physical and local application methods such as: massage (81.8%); hot or cold compress (71.2%); and aromatic oils usage in massage or hot both (17.4%); ncreasing activities (87.1 %); acceptance of the situation by understanding the causes of pain (87.1%); use of pain killer medications (81.1 %).

The maladaptive and passive pain coping behaviors included: decreasing activities by: specified positioning (97.7%); protecting the painful area (90.9%); and

**Table 1. Cancer Morbidity by Gender and Mortality Rate**

Male Cancer	%	Female Cancer	%
Colo-rectal	12.1	Breast	25.9
NHL	9.1	Thyroid	10.4
Lung &	7.6	Colo-rectal	9.4
Prostate	7.6	NHL	6.5
Liver	6.1	Corpus Uteri	4.0

Overall mortality 40,101 deaths, cancer mortality 5.4% related to neoplasms (MOH, 2006)

**Table 2. Demographic Characteristics of Saudi Patients with Advanced Cancer**

Demographic Characteristics	% (N=132)
Awareness of Diagnosis	No 56.8
Type of Cancer	Breast cancer 30.3
	Respiratory tract 20.5
	Different types of cancers 49.5
Treatment	Radiation therapy 57.6
	Symptomatic therapy 31.8
	Chemotherapy 6.8
	Chemo + radiation 3.8
Pain	NSAIDS 72.0
Management	Palliative radiation therapy 20.5
Regimen	Opioids therapy 3.0
	Combination >one type 3.0
	Adjuvant drugs 1.5

NSAIDS, Non steroidal anti inflammatory drugs

remaining still and avoiding movement (78%). Expression of feelings by: seeking help from others (90.2%); and crying or moaning (80.3%); suppression of feelings and tolerating pain as it is (97%). Traditional methods such as: natural herbs (49.%); cauterization (6.1 %); cupping (3%); bathing with salt and water (0.8%); and restraining the painful area (0.8%).

## Conclusions

This study was conducted to find out a baseline data on the experience of pain of Saudi patients suffering from advanced cancer and the behaviors they were utilizing to deal and control their pain whether was active (adaptive) or passive (maladaptive). The study findings presented the picture of how the patients coping with their chronic pain relying on their spiritual and cultural background affecting they way they deal and express the pain and also utilize different approaches to control it.

Most of the adaptive and active pain coping behaviors were coming from patient's believe in god & their faith and trust and holding and obeying Islamic commands. The informational support by the health care professionals was unprovidable in the study sample, which brings the attention to the importance of nursing interventions in this area by providing coordinated & directed programs. The correlation's of adaptive and active pain coping behaviors & even the maladaptive & passive ones with most of the demographic characteristics, medical history, and social support of patient's were weak. However, on the other hand, the correlation's of adaptive and active pain coping behaviors and the maladaptive and passive ones with most of the pain experience elements, and psychological effect of pain on daily life were strong.

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