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# Knowledge and Attitude of Oncology Nurses toward Cancer Pain Management: A Review

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## Abstract

Pain is one of the main symptoms involved in cancer patients receiving treatment or because of the disease itself. Approximately, 30% to 50% of cancer patients receiving treatment experience pain and 70% to 90% with advanced stages of cancer experienced moderate to severe pain. Reducing the pain and suffering of cancer patients is essential to delivering quality care. Pain experienced by cancer patients affects quality of life, physical functioning, social relationship, and mental health, pain often co-occurs with additional symptoms, such as fatigue, sleep disturbance, loss of appetite, and anxiety.

**Keywords:** Cancer; Pain management; Anxiety

## Introduction

Pain is one of the main symptoms involved in cancer patients receiving treatment or because of the disease itself. Approximately, 30% to 50% of cancer patients receiving treatment experience pain and 70% to 90% with advanced stages of cancer experienced moderate to severe pain [1]. Reducing the pain and suffering of cancer patients is essential to delivering quality care. Pain experienced by cancer patients affects quality of life, physical functioning, social relationship, and mental health, pain often co-occurs with additional symptoms, such as fatigue, sleep disturbance, loss of appetite, and anxiety [2].

The essential goal of nursing care is providing of optimal wellness of the patients through, attainment or maintenance, of system stability by strengthening the lines, of resistance. One barrier in the management of cancer pain is the lack of knowledge on the part of healthcare providers, including staff nurses [3,4].

Cancer pain is a multidimensional and complex phenomenon requiring appropriate assessment, management, and evaluation based on current knowledge. Cancer pain has many dimensions: physical, emotional, social, spiritual, and behavioral [5]. It is an

undesirable sensory and emotional experience characterized by actual or potential tissue damage [6]. Cancer pain management and treatment are complicated and requires frequent assessment, reassessment, evaluation, and constant observation by health care providers.

The effective pain management from cancer includes pharmacological and non-pharmacological approaches; nociceptive pain can be caused by damage to body tissue and may the patient describe as a throbbing, sharp, aching, or pain. This type of pain can be due to benign pathology; or by cancer cells that are growing larger and compressing other body parts near the cancer site. Neuropathic pain occurs when there is actual nerve damage. Nerves connect the spinal cord to entire body and enable the brain to send signal to the skin, muscle and the internal organs. Alcoholism, toxins, nutritional imbalance, infections, or auto-immunity can all damage this pathway causes the pain experience. Neuropathic pain can also occur due to a cancer tumor pressing on a nerve or a group of nerves [7].

Nurses are playing essential role in development of pain management plan. Inadequate pain relief of cancer related pain can be attributed to nurse's lack of knowledge about pain assessment and management and incidence of narcotic addiction as well as negative attitude regarding therapeutic level of analgesia, under-treatment of cancer-related pain increases patient suffering and increases the rate of experiencing pain.

## Purpose

The purpose of this review is to explore the current knowledge of nurses regarding cancer-related pain management.

## Methodology

In this review a comprehensive literature search was conducted using the electronic databases of CINAHL, Medline, PubMed, EPSCO, Science Direct for articles published between 2008 to 2015 by using keywords: "pain management", "knowledge and attitude", "oncology nurse", "cancer pain". 50

articles were found after extensive searching via electronic database, seven articles were met the inclusion criteria.

The inclusion criteria during searching were to meet following criteria:

- The participants were more than one-year experience in oncology unit.
- The studies that used Nurses Knowledge and Attitudes Survey Regarding Pain'' (NKAS) tool.
- Articles were written in English language.
- Research study (2008-2015).

### Methodological and sample characteristics

After extensive search in electronic database seven research articles conducted to this review, all the studies were quantitative, descriptive, cross sectional study by using (NKAS) tool, the sample size in seven studies were ranged between 58 to 669 nurses, The articles were published in Nursing Journal in many countries, Turkey, Italy, Jordan, Ethiopia, and Australia, Iran, and Saudi Arabia.

## Result

Researchers provide insight into knowledge about cancer pain management; this leads us to question whether we fully understand the knowledge of nurses who care for cancer patients. Literature suggested different factors play a role in the under treatment of cancer-related pain.

Among the most frequently cited factors behind the under treatment of cancer pain are nurse's knowledge deficit, negative attitude about pain assessment, management, and evaluation. Shahriary et al. [8] conducted study in west of Iran in 2015, the purpose of study was to explore oncology nurses knowledge and attitude regarding cancer pain management. Cross-sectional study invited all registered nurses and licensed practical nurses working on oncology units at Shahid Sadoughi hospital in Iran, the sample for the study consisted of 62 oncology nurses which all of the nurses were female. The majority of the nurses in this study answered less than 80% of the questions correctly indicating that nurses continued to lack sufficient knowledge regarding pain management. 66.6% the average of correct response rate for oncology nurses, ranging from 12.1% to 94.8%. The survey conducted regarding the knowledge and attitude of showed the nurses mean score of pain management was 28.5%. Results revealed that the mean percentage score overall was 65.7%. A data of 8.6% nurse participants acquired passing score of 75% and above. Widespread knowledge deficits and poor attitudes were noted in this study [8].

While Nega et al. [9] conducted a study in Ethiopia, 2013 about Knowledge of Nurses regarding cancer pain and its management, the conducted to assess knowledge of nurses regarding cancer pain management at selected health institutions, offering cancer treatment in Addis Ababa, which the method was Cross-sectional study with supplement of qualitative study design was carried out among 82 nurses, by using Nurses' Knowledge and Attitudes Survey Regarding Pain (NKARSP) questionnaire for self-administered, and three focus

group discussions were used to collect data, by using the SPSS for data analysis the result revealed that only 35.4% of the respondents had good knowledge on cancer pain management.

The mean score for correctly answered items was 12.6 (37.1%). They conclude that inadequate knowledge regarding cancer pain management was observed. Inadequate education, lack of both pre service and in service trainings were major barriers for acceptable knowledge on cancer pain management [9].

In another study conducted in Saudi Arabian by Kaki [10], an epidemiological study was conducted from May 2008 to October 2009 at King Abdul-Aziz University Hospital, Jeddah, Kingdom of Saudi Arabia to evaluate students' knowledge and attitude toward cancer pain management. A survey in the form of self-conducted questionnaire was distributed among their Response rate was 55% (N=325). 54% of the respondents believed that <40% of cancer patients experienced pain. 46% of them considered cancer pain as untreatable, while 41.6% considered pain as insignificant, and 58.6% considered the risk of addiction is high with legitimate opioids' prescription. There are 23.1% of students believed that patients poorly judged their pain, 68% of them limited opioids prescription to patients with poor prognosis, and 77.1% believed that drug tolerance or psychological dependence, rather than advanced stages' cancer is the cause of increasing analgesic doses. The study revealed poor knowledge and negative attitude of medical students toward cancer pain; to improve knowledge of nursing a structured teaching pain program is necessary [10].

Rahel et al. [11] conducted study to assess the attitude, practice of nurses' and barriers regarding cancer pain management at selected health institutions offering cancer treatment in Addis Ababa city, Ethiopia. Where there Methods was Cross-sectional study design was conducted. Anonymously structured self-administered questionnaire and focus group discussion was carried out among 82 nurses. Nurses' Knowledge and Attitudes Survey Regarding Pain (NKARSP) questionnaire was used for data collection. P-value and 95% confidence interval was used to determine the association. The result revealed that majority or 53.7% of nurses have negative attitude toward cancer pain management. Likely, 65.9% of nurses had poor cancer pain management practice. Poor of courses related to pain management in the under graduate classes, lack of continuing training, work overload, role confusion, lack of motivation including salary were the identified barriers for adequate pain management. Negative attitude of nurses regarding cancer pain management were observed.

While a study conducted in Turkey 2008 by Yildirim and colleagues to assess knowledge and attitude for Turkish oncology nurse toward cancer pain management. Which the study conducted in two different hospitals that included 68 oncology nurses, by using the tool Nurses Knowledge and Attitudes Survey Regarding Pain (NKARSP) and a demographic questionnaire. The (NKARSP) consist of 22 true or false questions, 13 multiple-choice questions, and two case studies with two questions each. The result showed that nurses have insufficient knowledge and inadequate attitude about cancer pain management [12].

A study conducted in Jordan, which the aim was to investigate Knowledge and attitude of nurses by using the same tool Nurses' Knowledge and Attitudes Survey Regarding Pain Survey", the sample size was 211 nurses from four hospitals, the result showed that 52% of nurses reported no previous pain education in the last five years. The average of correct answers was 19.3 out of 40. Jordanian nurses expressed a lower level of pain knowledge than that reported worldwide [13].

Furthermore, in 2013, a study conducted to assess and compare oncology and non- oncology nurses' knowledge and attitudes toward pain management in Jordan, which cross sectional descriptive comparative design was used by using (NKARSP) tool, the total number of participants were 207 nurses (124 oncology and 93 non-oncology nurses). In conclusion, oncology nurses scored higher in the overall knowledge and attitude toward pain compared to non-oncology nurses. Nurses showed knowledge deficit in assuming the risk for addiction and the use of narcotics in pediatric patients [14].

## Summary

To summaries the literature, many studies has shown that, nurses have lack knowledge and inadequate attitudes toward the assessment of cancer pain and its treatment with analgesics. These deficiencies include misunderstanding about pain assessment and the incorrect belief that patients overstate their pain; inconvenient beliefs about drug tolerance and addiction, poor knowledge of analgesic drugs pharmacology. Therefore, this conclusion highlighted the need for pain management continuous education within hospitals. Furthermore, improve undergraduate curricula to address pain management in its content is suggested. The author decided to conduct a study to assess the knowledge and attitude of oncology nurses regarding cancer pain management in the resident country United Arab Emirate.

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