

PAIN MANAGEMENT IN CANCER PATIENTS IN TERTIARY CARE HOSPITALS

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ABSTRACT

Objective: To examine available treatment approaches in managing pain in cancer patients.

Methodology: The target population of the study entailed patients who were diagnosed with cancer having acute or chronic pain, from five different tertiary care hospitals A, B, C, D, E. A data collection form was designed and distributed among the 100 patients, gathering information about the pain intensity and the pain management therapy.

Results: In 63% of the patients with cancer pain, NSAIDs were being prescribed and only 25% of patients were receiving strong opioids. The most common side effects were nausea and vomiting which accounted for 42%. Anti-emetics were given in 56% of patients to avoid these unwanted side effects. For 49% patients the pain relief was in the range of 65%. The drug taking behavior of patients was monitored and documented in 68% of the cases. There were no referrals to pain or palliative care specialists. In rare cases patients were reluctant to take opioids. There was a need for coordination between physicians, pharmacists and nurses for adequate pain management of cancer patients.

Conclusion: Pain management in cancer patients was inadequate, though analgesics were being given properly and the physicians were following the WHO pain ladder to quite an extent. Use of opioids and mild opioids was limited.

Key Words: Analgesics, Opioids, Pain intensity, Quality of life, Cancer.

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INTRODUCTION

Pain is fundamentally a personal experience so any other person cannot ascertain it directly. Sometimes the cancer pain is due to the medical interventions for diagnosis and treatment of disease or tumor itself. The specialized pain sensitive nerve endings or nociceptor which are responsible for nociceptive pain are activated due to damage or disease affecting body tissues or neuropathic pain is produced by disease or damage affecting the nervous system.

Cancer pain patients experiencing neuropathic pain are between 40 to 80 percent¹. Cancer pain caused by medical interventions or treatment is classed as acute (short term) or chronic (long term)². Cancer itself has produced chronic pain in almost 75% of cancer patients. Pain is the result of treatment in majority of the remainder³.

Despite of lot of scientific affirmations and ready availability of clinical guidelines, still there is lack of awareness on the part of doctors and nurses about important parameters relating to pain management (such as proper assessment, adequate dose selection, patient's ability of tolerance and chances of addiction). Mostly are unaware that in majority of instances removal of pain is attainable, so wherever's feasible it should be provided. In cases where the drug side effects are intolerable due to which total removal of illness is not possible the patient should be provided maximum tolerable dose. In pain management delivery, faulty clinical setting, insufficient indemnification, shortage of pain eliminating drugs in poorer areas, obsolete government policy, and legal restrictions on prescription of opioids are the systematic problems⁴.

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The aim of pain treatment in cancer patients is to make patient free from pain with reduced adverse treatment effects, providing the patient a quality life time and painless death to some extent⁵. Although 80 to 90% of cancer pain can be handled well or alleviated yet almost 50% of the patients which are suffering in cancer pain have less than optimum care⁶. This article discusses the available treatment approaches in managing pain in cancer patients with consideration of rational and optimal use of opioids.

METHODOLOGY

The study was carried out to appraise the severity and management of pain in cancer patients in tertiary care hospitals. The target population of the study entailed patients who were diagnosed with cancer having acute or chronic pain, from five different tertiary care hospitals. Convenience sampling technique was employed to extract the sample for the study. A sample of 130 patients were selected for filling questionnaires however 100 patients fully responded and filled each and every aspect of questionnaire making a response rate of 76%. The duration of study was two months.

A knowledgeable research questionnaire was used through field survey for the data collection. Questionnaire was made by the help of pharmacy professors and hospital doctors. Questionnaire was in English language but from all the patients questions were asked in their own language which they understood very well and side by side the questionnaire was filled according to the answer of patients. Patients just answered the questions they did not fill the questionnaire by themselves because majority of them were illiterate, and secondly for the convenience of the patients this method was adopted.

The survey comprised of 30 questions intended to measure different aspects of pain management including severity of pain, its duration, pharmacological treatment, and reluctance to take opioids.

Each patient’s physician was asked to describe the patient’s current treatment for pain (drugs, doses, and routes used and non-pharmacologic treatments used), to characterize the patient’s cancer and to attribute the patient’s pain to the patient’s disease, treatment, or other medical or psychological causes. For example two questions are:

1. When was pain first experienced?
 First symptom was pain
 After diagnosis
 After chemotherapy
 After radiotherapy
 Other (Specify: _____)

2. How bad is it? (Intensity of Pain: scale 1-10; 1 being mild, 10 being severe)
 1.0-2.5
 2.5-5.0
 5.0-.7.5
 7.5-10

Unfortunately there is no direct scale or instrument to measure the intensity of pain. The pain intensity was measured by Wong-Baker faces pain rating scale, numeric pain intensity scale, verbal scale and by visual observation in this study (Figure1).

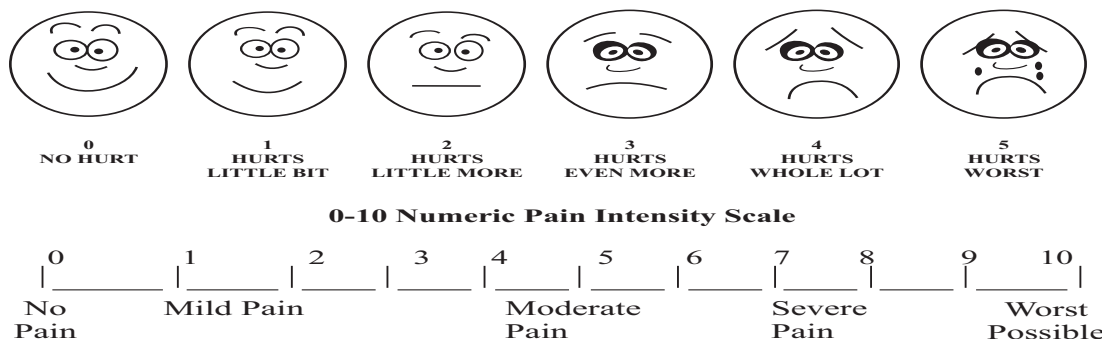
Patients diagnosed with cancer of all age groups were included in the study. Patients who had undergone surgery within 30 days of the study were excluded because of the possibility that post-surgical rather than disease-related pain was being reported.

The collected data was analyzed by using MS EXCEL software. Percentage values were calculated and data is shown in graphical representation.

RESULTS

In 84% of patients (males, females and children ratio was 40% : 30% : 30% respectively) pain appeared as first symptom in cancer (Table 1). To dis-

Figure 1: Wong-Baker FACES Pain Rating Scale



criminate the pathophysiology of pain, to find out how intense the pain is, and to determine the pain impact on patient's performance, were the objectives of early pain assessment. On pain scale 58% of patients held that their pain intensity lies in range of 5.0-7.5 which accounts for moderate to severe pain (Table 2). They had pain that was rigorous enough

to spoil performance, regardless of the fact that most were receiving some treatment for the pain.

Sixty three percent of patients with pain were receiving NSAIDs such as diclofenac, ketorolac and many were receiving paracetamol. They were still having severe pain. Only 25% of patients were re-

Table 1: First Incidence of Pain (n= 100)

Incidence	No. of Patients	Percentage
First symptom was pain	84	84%
After diagnosis	10	10%
After chemotherapy	6	6%
After radiotherapy	0	0%
Other	0	0%

Table 2: Intensity Of pain (n= 100)

Intensity	No. of Patients	Percentage
1.0-2.5	5	5%
2.5-5.0	22	22%
5.0-7.5	58	58%
7.5-10.0	15	15%

Table 3: Management Of Pain (n= 100)

Management	No. of Patients	Percentage
NSAIDs	63	63%
Weak Opioids (codeine)	12	12%
Strong Opioids (morphine, oxycodone, methadone, etc.)	25	25%
None	0	0%

Table 4: Pain Relief (n= 100)

Pain Relief	No. of Patients	Percentage
0%	5	5%
1-25%	1	1%
25-50%	36	36%
50-75%	49	49%
75-100%	9	9%

FOR PHARMACISTS:

Table 5: Chemotherapeutic Agents Causing Pain (n= 100)

	No. of Patients	Percentage
Yes	6	6%
No	70	70%
May be	24	24%

ceiving strong opioids i.e. morphine. The use of mild opioids i.e. intermediate management of cancer pain was quite limited (Table 3). For 49% of patients the pain relief is in the range of 50-75%. Only 9% patients had 75-100% pain relief (Table 4). Some chemotherapeutic drugs such as paclitaxel, vincristine, oxaliplatin, cisplatin, etc. may also induce pain in cancer patients. Only 6% of pharmacists considered that pain could be a cause of chemotherapeutic agents (Table 5).

DISCUSSION

According to the most recent international study on cancer pain, 80.5% of the patients suffered in pain⁷. Pain is one of the most undesirable factors in cancer. Our study coincides with it and identified that in 84% of the patients, pain was the first symptom and it was experienced even before the cancer.

In another study, 65% of the patients had "significant worst pain" (worst pain level at or above five on a ten-point scale)⁸. The current study revealed almost similar results that 58% of the patients suffered in intense pain which lies in the range of 5.0-7.5 of pain scale.

More than half of the patients (62%) receive inadequate analgesic treatment⁹. Our study reconfirmed it that 63% of the patients were treated only with NSAIDs and these people were still having pain. The use of opioids was quite restricted.

Available options for the successful treatment of cancer pain are still massively underutilized by physicians, and many patients suffer from insufficiently controlled pain despite available treatment options¹⁰. The results of the current study coincide with it and identified that only 9% of the patients got complete relief from pain.

The incidence of Chemotherapy induced peripheral neuropathies (CIPN) varies from 10 to 100% depending on the anticancer drug. The characteristics of CIPN are related to dose intensity, cumulative dose and anticancer drug. CIPN can profoundly affect the quality of life, often compelling clinicians to lower the chemotherapy regimen, consequently limiting therapeutic efficacy¹¹. The current study identified that in only 6% of the patients chemotherapy was responsible for pain which reflects that physicians' priority is to suggest the dosage regimen that is appropriate to discourage the CIPN.

CONCLUSION

Pain management in cancer patients in tertiary

care hospitals is inadequate, though analgesics are being given and the physicians are following the pain ladder (WHO) to quite an extent yet the quality of life of patients is not considered as priority. In many cancer patients severe pain is being managed with only NSAIDs. Many patients are not getting complete relief from pain. Only 25% of patients were receiving strong opioids and use of mild opioids was also limited. The intensity and category of pain should be accurately assessed first. Drugs should be prescribed considering the pain intensity as in the pain ladder and use of opioids should be enhanced to make better pain management.

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CONTRIBUTORS

SSB conceived the idea, planned and wrote the manuscript of the study. WLT and MZB helped in the acquisition of data and approved the final draft of manuscript. FA supervised the study. All the authors contributed significantly to the research that resulted in the submitted manuscript.