Pain Issues from the Palliative Perspective: A Survey Among Doctors in Hospital Melaka

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Introduction

Pain is one of the most feared symptoms among cancer patients with metastatic disease. It is estimated that millions of patients with cancer worldwide experience moderate to severe pain1-3. There are existing protocols for treatment of cancer pain such as the WHO ‘pain ladder’ in which medications are escalated from the use of non-opioids, to mild and strong opioids as the severity of the pain increases ‘up the ladder’. However, despite the availability of potent analgesic medications and established protocols of treatment, a meta analysis of 11 published reports of cancer pain treatment covering nearly 2000 patients estimates that 50% to 80% of patients did not have adequate pain control. Up to 25% of all cancer patients die without adequate pain relief4. Studies of cancer pain conducted in the United States also show that it is often inadequately treated5. This survey was conducted with specific objectives; a) to determine the knowledge about cancer pain and its measurement amongst Melaka Hospital doctors, b) to gauge the extent of their understanding of their use of analgesia, c) to have a feedback on the adequacy of medical school training in pain management in cancer patients, and d) to suggest possible ways to improve the current situation.

Materials and Methods

This survey was carried out via a questionnaire covering five aspects of pain management i.e the recognition of the tools to measure pain, the use of analgesia via the WHO ladder technique, the method of administering analgesia e.g. morphine, non-steroidal anti inflammatory drugs (NSAIDS), the different types of pain and the drugs most suitable for these pains. It also gathered information on their training during medical school with regards to this matter. As a way of seeking more specific pain management questions, the questionnaire sought treatment options for a hypothetical patient. Of the 100 forms sent out, 68 were returned. Descriptive statistics (frequencies, percentages, means, and ranges) for each response are reported. Percentages were rounded up to the nearest number. Not all respondents answered each question.

Summary

This survey was intended to gauge the management of pain in palliative cancer patients by the doctors in Melaka Hospital. It also sought to identify possible barriers to adequate pain management among doctors and gauge their response to the adequacy of medical school teaching on cancer pain issues. A 39 item survey was used to cover the issues involved. Overall, the doctors displayed a lack of systematic approach to cancer pain management with inadequate knowledge of analgesia handling. Medical school exposure to cancer pain issues was lacking. Formulation of accepted clinical practice guidelines and new education strategies can improve cancer pain management.

Key Words: Pain management, Cancer patients, Survey
completely; therefore, the numbers that constituted the basis for the analysis of each item are included with the reported responses. The survey was given out randomly to the doctors, regardless of departments or seniority.

Results
All of the 68 doctors surveyed had at some point of their time managed cancer patients with pain, although only two had completed a four month rotation at the hospital’s palliative care unit. Concerning the use of analgesics for cancer pain in Melaka Hospital, 74% of the respondents thought that most of the patients with pain are undermedicated, although 19% thought that most patients receive adequate treatment for pain.

Pain Measurement Tools
Out of the 68 doctors who were surveyed, 74% were not aware of the usage of at least one form of unidimensional pain measurement tool (PMT) e.g. the visual analogue scale (VAS), the categorical verbal response scale (VRS) or the categorical numerical ratings scale (NRS). Almost 90% of them also were not familiar with multidimensional PMTs e.g. the McGill Pain Questionaire, the Brief Pain Inventory or the Memorial Pain Assessment Card. All 68 of the doctors could not tell correctly the circumstances in which a unidimensional or a multidimensional PMT is preferably used. Seventy-nine percent of the respondents would treat pain based on their ‘gut feeling’ of the patient’s pain and their previous experiences, with the rest at least incorporating a form of PMT in their management.

WHO analgesia ladder
Ninety-one percent (n=63) of the respondents were aware of this scale. Although 70% of them were able to correctly state the rungs in the ladder, only 39% of them used the ladder in their practice regularly.

Characterising Pain
On average, almost one third of the respondents were unable to categorically identify and divide pain aetologically from the short scenarios given, with a similar proportion prescribing an inappropriate analgesia for these hypothetical patients. Nearly all of them however knew that cancer pain is often multifactorial. Ninety-four percent (n=68) of respondents would start cancer patients with morphine as the first choice as long as they report pain as a complaint. Only 28% would actually try to characterise the type of pain i.e. neuropathic, skeletal etc, and then prescribe the appropriate medication.

Administering analgesia
To elicit a more definite treatment amongst the doctors, the following hypothetical case scenario was put forward:
A 60-year-old woman with breast cancer is hospitalized with severe untreated back pain of more than one month duration, attributable to bone metastases without vertebral collapse. She weighs 40kg and has no medical history of note. She is referred for palliation and is opioid naive. Respondents were asked on the analgesia of choice for this patient and the dose and method of administration.

Sixty-eight percent (n=59) of the doctors surveyed started the hypothetical patient on a dosing schedule of tds/qid syrup morphine 10mg. A further 20% would start the patient on syrup morphine 10 mg prn. Three percent did not know how to start morphine. Eight percent would start morphine at four hourly intervals, with a prn dose as well. Overall only 4% of the respondents correctly noted the need to review the total dose of morphine at the end of the day and recalculate the new dose for the subsequent day. Forty-one percent knew of the major side effects of morphine but only 15% would prescribe it with antiemetics and laxatives. Thirty-one percent of doctors thought that giving morphine for cancer patients would cause addiction as a major side effect. Ninety percent chose an oral route of administration. Twenty percent said that they would include an NSAID (e.g. meloxicam, diclofenac etc.) in the regime as well.

In a continuation of the scenario, the patient requests additional pain medication two hours before her next dose is due. Sixty-nine percent (n = 52) chose to give the next dose of analgesia and 20% gave another less potent non-narcotic analgesic and continued with the initial medication at the predetermined dosing schedule. Two percent of respondent chose to ignore the patients’ request and gave the reason of possible malingering or addiction to justify their actions.

A follow on from the scenario states that the patient had neuropathic pain as well and asked whether the analgesia would remain the same or be changed. Seventy-two percent (n=57) would continue with the morphine only while 23% would add a specific medication (e.g. gabapantine) for the neuropathic component.
The respondents were also asked about their apprehensions in prescribing more potent analgesics. Seventy-eight percent (n=63) gave concerns about the control of side effects as a reason to limit their use of maximum analgesia, while 59% identified concern about building patient’s tolerance too rapidly. However, 27% reported hesitation in prescribing more potent analgesics due to concerns about the possibility of addiction in palliative patients.

Management of Cancer Pain During Medical School Training

Only 18% (n = 68) of the sample reported medical school training in cancer pain management as excellent or good. Thirty-two percent reported their training in pain management to be fair, and 50% reported their training to be poor. Nearly 86% of them stated that their exposure to this issue at that time was limited to theoretical issues only with little hands on experience.

Barriers to Pain Control

Only about half of the sample n=68 (53%) believed pain control here was good or very good, (29%) described it as fair, and 18% rated it as poor or very poor. They were asked to rank a list of potential barriers to optimal cancer pain management in terms of how they might impede cancer pain management. Table III portrays the percentage of respondents ranking of the top six possible causes. Sixty-nine percent (n = 68) rated inadequate experience/knowledge of doctors in cancer pain management as one of the top three barriers to good pain management. Patient’s reluctance to take the opioids prescribed was second at 62% of respondents, and poor pain assessment was given as a reason by 60% of the doctors.

Table I: Responses to pain classification and treatment

<table>
<thead>
<tr>
<th>Pain Classification</th>
<th>Correct Aetiology (%)</th>
<th>Correct Analgesia (%)</th>
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</thead>
<tbody>
<tr>
<td>Scenario 1: Nociceptive - visceral</td>
<td>87</td>
<td>90</td>
</tr>
<tr>
<td>Scenario 2: Nociceptive- somatic</td>
<td>58</td>
<td>49</td>
</tr>
<tr>
<td>Scenario 3: Neuropathic</td>
<td>62</td>
<td>61</td>
</tr>
<tr>
<td>Average</td>
<td>69</td>
<td>67</td>
</tr>
</tbody>
</table>

Table II: Top five doctor’s apprehensions in prescribing more potent analgesia

<table>
<thead>
<tr>
<th>Apprehensions in analgesia prescription</th>
<th>Percentage (n=63)</th>
</tr>
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<tbody>
<tr>
<td>Adverse effects</td>
<td>78</td>
</tr>
<tr>
<td>Tolerance</td>
<td>59</td>
</tr>
<tr>
<td>Probable drug reactions</td>
<td>48</td>
</tr>
<tr>
<td>Lack of knowledge</td>
<td>33</td>
</tr>
<tr>
<td>Addiction to opioids</td>
<td>27</td>
</tr>
</tbody>
</table>

Table III: The top six potential barriers to good cancer pain management

<table>
<thead>
<tr>
<th>Potential Barriers</th>
<th>Percentage (n=68)</th>
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<tbody>
<tr>
<td>Inadequate experience/knowledge of doctors</td>
<td>69</td>
</tr>
<tr>
<td>Patients reluctance to take opioids</td>
<td>62</td>
</tr>
<tr>
<td>Poor pain assessment</td>
<td>60</td>
</tr>
<tr>
<td>Lack of proper local pain management protocols</td>
<td>54</td>
</tr>
<tr>
<td>Poor patient/caregiver compliance to medications</td>
<td>51</td>
</tr>
<tr>
<td>Limited emphasis from the psychological aspect</td>
<td>47</td>
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</tbody>
</table>
Discussion

This study, involving doctors of the main cancer hospital and the only one with palliative care in the state of Melaka, portrays the current status of cancer pain management there and provides data identifying the areas of pain management that can be improved. In a year the hospital sees approximately 1,200-1,400 patients with cancer (existing and new cases) and out of these around 8-10% are then referred for palliative care and these numbers are showing an increasing trend.

Pain Management Tools

The data suggest that use of PMT for assessment of pain is poor. Simple tools for assessing pain more objectively (especially the unidimensional tools e.g. VAR) are useful because they can help standardise the reporting of pain by patients. These allow repeated, consistent evaluation by multiple caregivers with little interobserver variability. Standard questions enable patients to report more easily the presence and the severity of pain. Increasing the use of these tools in everyday practice would also give doctors more confidence in assessing pain and would enable them to better gauge the efficacy of their treatment. This would also enhance patient/caregiver communication and improve cancer pain management.

Practice and educational changes will be needed before there are significant improvements in cancer pain control. A standard assessment of pain, most often cited by respondents as a barrier to pain management, is rarely a common practice among doctors. Inability to appreciate the severity and intensity of the patient's pain can only result in inadequate analgesic prescribing and administration. Doctors often underestimate the pain that patients have and one study found no statistically significant correlations between the patients' own pain score and that scored by his or her house officer, nurse, or oncology fellow in patients with pain scores greater than 4 (VAR PMT on a scale of 0 to 10). It is more often that patients are not even asked about their pain. In another study, fewer than half of inpatients who had pain ever had a member of the health care team ask them about their pain or note the pain in the patient's record within the first 72 hours of admission.

Prescribing Analgesics

The responses to the hypothetical case scenario also proved enlightening. The majority of the respondents seem to equate cancer pain treatment with morphine, regardless of aetiology. Doctors reluctance to prescribe opioid analgesics (opiophobia), was previously identified as a major barrier to adequate pain management in many studies, but this was not found in this survey. In fact the majority of the respondents would readily prescribe the opioid morphine, although again the majority of them prescribed it wrongly, with even fewer having a plan for limitation of its side effects e.g. constipation and nausea. Pain due to bone metastases should ideally be treated with anti inflammatory agents e.g. non-steroidal anti inflammatory drugs (NSAIDS) but only 20% would consider the use of such medications for the hypothetical patient. It is surprising to note that nearly 31% of the doctors were concerned about opioid addiction in the hypothetical patient.

It was also found that the doctors did not particularly follow the WHO analgesia ladder when prescribing analgesia, creating considerable differences in the practice of cancer pain management.

This may be due to the lack of a set of consistent pain management practice principles, including when and how to use opioid analgesics. Adopting one of the existing set of cancer pain management guidelines proposed by the World Health Organization (1), the American Pain Society (12) or the European Association for Palliative Care or creating a local guideline would provide a more solid foundation for agreed methods on pain management in cancer patients in Malaysia.

Education on Pain Management in Cancer Patients

When asked about possible barriers to good pain management, most cited poor assessment of pain, patient's reluctance to report pain or to take analgesics, and the doctor's unfamiliarity with various analgesics. A large majority of these doctors expressed dissatisfaction with their training for management of pain in cancer patients in medical school.

A need for improved training in cancer pain management at medical student levels at least was indicated by the responses to the survey. Although it would be ideal to start their exposure early in their medical student days, there are still many things that can be done to educate the doctors on pain management in palliative patients. Holding workshops, seminars and attachments to the palliative unit would give them a more hands on experience and the opportunity to practice what they have learnt. Cancer pain management training needs to become a part of
the day-to-day clinical evaluation and care of cancer patients. In fact pain evaluation has been frequently said to be the fifth vital sign that needs to be charted along with BP, temperature, respiratory rate and heart rate.

**Conclusion**

Pain is an important but often inadequately managed symptom among cancer patients. This survey brings concrete results against which to evaluate current and future issues on cancer pain control, locally, nationally and regionally. Despite the anxiety and morbidity that pain causes, both to the patients and their relatives, its control has historically been a neglected issue in cancer care. One thing is certain. The standards of pain management in cancer patients here have to be raised. Although management of pain in cancer patients is still in its infancy in Malaysia, it would be a good time now to design a national programme for its control, taking advantage of the lessons learnt from other countries. Positive changes to the education, attitude and structure of the medical system will improve the management of pain in cancer patients and strengthen the public's trust in the medical profession as a whole.

**References**