



Audit at the Jigme Dorji Wangchuck National Referral Hospital's Palliative Care Unit, Covering the period from August 01, 2022 to August 01, 2023

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INTRODUCTION

According to the World Health Organization (WHO), palliative care is defined as an approach that improves the quality of life of patients- adults and children- and their families who are facing problems associated with life-limiting illness. It caters to the physical, psychological, and spiritual aspects of care while also preventing and reducing suffering through the early detection, evaluation, and treatment of pain and other symptoms¹.

There were around 56.8 million people in dire need of the palliative care worldwide among which 25.7 million of them are nearing the end of their lives as per the WHO report dated August 5, 2020. However, only about 14% of these people are currently receiving the necessary palliative care in those low and middle income countries¹.

Similarly, in Bhutan, as a developing country, it is reported that chronic respiratory disorders, heart diseases and cancer are the main causes of death².

Among others, pain and dyspnoea are the most frequently common and severe symptoms experienced by patients who need palliative care. In order to tackle these symptoms, opioids play a vital role¹. The strong opioids like morphine, which is extracted from the opium poppy, plays an effective pain reliever for people with cancer. Furthermore, Morphine can be used in a number of ways for patients with advanced illnesses, such as injectable, oral immediate-release, and regular oral sustained-release^{3,4}.

For patients with hepatic or renal comorbidities, and also for those who cannot take morphine, a synthetic and strong

opioid, such as fentanyl transdermal patches and injectable fentanyl, are good substitutes^{5,6,7}. Thus, this particular audit is concerned with the quantity of cancer patients and the use of opioids. The audit aims to examine the length of opioid usage over a given period of time, however, it will not specify the types of cancers.

Aim of the audit

The audit aims to determine the prevalence of cancer patients receiving palliative care and assess the use of opioids in order to help symptom control.

METHODS

The Palliative home Care Unit of JDWNRH was the site of the audit. The data from initial nursing assessment form used for the admission registration in the palliative home care unit were collected and it was kept in hard copy files for the period between August 1, 2022, and August 1, 2023. To minimise entry errors, two PC nurses double-entered data into Google Forms. Initial nursing assessment forms are mostly focused on documenting participants' diagnoses and opioid usage, however, it has no details on specific symptom details.

A descriptive analysis was used to ascertain the prevalence of cancer patients on 126 patient records. The analysis included an investigation into the average duration of opioid usage, as well as exploration of use of morphine and fentanyl. In the framework of the audit, this procedure offered complete understanding into the general patterns of morphine and fentanyl utilisation.

RESULTS

Out of the 126 participants, 88.8%(112) were cancer patients, and 11.2%(14) were other categories of patients or non-cancer patients. Of the cancer patients, 66.6%(84) were given prescriptions for morphine tablets, 0.7%(1) had regular intravenous morphine injections, and 8.7%(11) used fentanyl patches. Remarkably, 23.8%(30) participants did not receive any opioid prescription. The details of duration and dosage of

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morphine is given in Table 1 and Figure 1. The different dosage is presented in Figure 2.

Table 1 . Duration of morphine use and percentage of patients on different dosage of morphine

Duration of morphine in months	Number of patients	Percentage of patients
0-1 month	45	53.5
1-3 months	30	35.7
3-6 months	8	9.5
> 6months	1	1.1

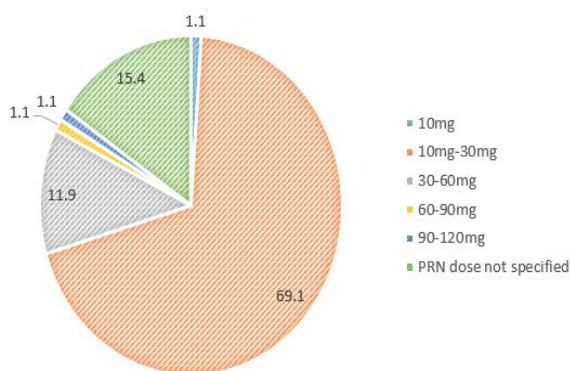


Figure 1. percentage of patients with daily morphine dosage

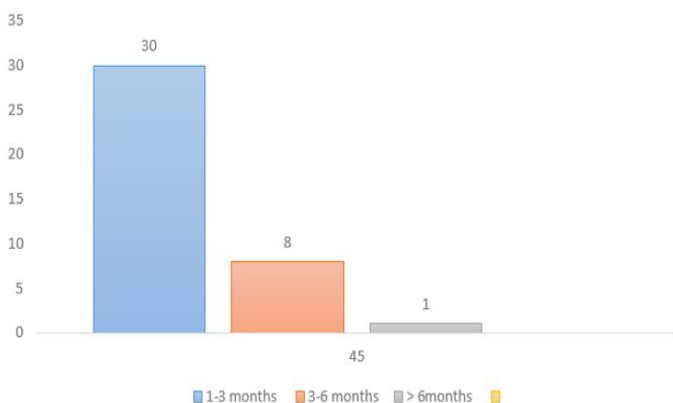


Figure 2. Dose of Fentanyl patch

DISCUSSION

The audit’s key findings highlighted key aspects of the palliative care at the JDWNRH Palliative Home Care Unit with a focus on cancer prevalence and opioid use.

High Cancer Patient Prevalence: 88.8% of participants were cancer patients highlighting the significant role palliative care plays in addressing the needs of people who have been living with advanced and terminal cancer. These findings are consistent across the globe in which palliative care interventions and strategies are predominantly focused on cancer¹. The frequency

also pinpoints how fundamental it is to modify and customise care to meet the unique needs of cancer patients which includes pain management and comprehensive symptom control.

Patterns of Opioid Utilisation: The audits revealed prominent trends and emphasis on opioid usage in the JDWNRH palliative home care unit. The fact that 66.6% of cancer patients preferred using morphine tablets as their first choice, which is also consistent with its proven efficacy in treating cancer-related pain³. It is also important to note that even though it is less common, regular intravenous morphine and fentanyl patches indicate the individualization of treatment as per the patient needs and tolerances^{6,7}. There is also a presence of patients (23.8%) who are not taking any opioids which calls for alternative pain management.

Duration of Opioid Use: More than half of the (53.5%) of patients use morphine for duration of 0 - 1 month, which indicates a significant number of patients might require short-term pain management or it might be in the terminal phase of life and may indicate late encounter with palliative care. Further, extended durations ranging from 1 - 3 months (35.7%) and 3 - 6 months (9.5%) suggest a patient subgroup that needs palliative care and consequently opioid for the symptom management for an extended duration. A small percentage of (1.1%) denotes a specific patient with particular needs.

Addressing Non-Cancer Patients: From the audits, 11.2% of patients receiving palliative care do not have a cancer diagnosis. This indicates the need for a wide range of services and conditions such as life threatening illness including chronic kidney, lung, and heart diseases. These symptom burdens of non-cancer conditions are comparable to those of cancer. Further, this demands for focussed interventions that considers the unique needs of non-cancer patients. It is also supported by the study done by Tara Devi Laabar⁹, which indicates 14% chronic renal disease and 6% chronic respiratory disease among non-cancer conditions. This approach has provided a comprehensive and inclusive provision for people dealing with a wide range of life-threatening circumstances¹⁰.

Symptom Control and Method Diversification: The audit has excluded the detailed examination on the symptom control which calls for further study and care improvement. This has also called for comprehensive symptom management which is holistic palliative care including managing symptoms such as dyspnea. Including symptom management ensures a customised and thorough pain management plan that aligns with the unique needs and preferences of each patient⁸.

Assuring Provider Competency: The audits also shows the significance of palliative care givers to have an in-depth understanding of symptom management as it did not pay enough attention to symptom control. Thus, palliative care providers should be acquainted with treating a wide range of symptoms and pain related to life-threatening diseases apart from prescribing opioids. The training and professional development is required in order to raise the capacity and expertise of palliative care practitioners¹¹.

Challenges to be addressed

In order to enhance and improve palliative care at the JDWNRH Palliative Home Care Unit, the audit highlights the important issues that need to be addressed.

Limited Focus on Symptom Control: There is no focus on the symptom control and therefore, the results underscore the need for a more comprehensive approach to palliative care that caters to a wider variety of symptoms including dyspnea.

Scarcity of Opioid Supply, particularly Fentanyl Patches: From the audit, it is evident that there is a lack of opioids, specifically fentanyl patches. It is essential for patients with morphine-induced constipation, renal or liver impairment, and those unable to swallow oral morphines, all dependent on these patches.

Limited Focus on Training and Capacity Building: The audit underscores a critical issue in addressing the gap in the palliative care's ability to address symptoms other than pain management. The capacity building should include a more multi-disciplinary and wide-ranging tactic to symptom management in line with the changing landscape of palliative care.

Way Forward

Improve Symptom Management Protocols: Develop and implement comprehensive protocols to manage symptoms and ensure that palliative patients receive all-encompassing support.

Assess and Enhance Resource Accessibility: Conduct an assessment to determine the causes of opioid underutilization. Ensure that palliative patients can take advantage of the resources by making it easily accessible and known.

Ongoing Education and Training: Palliative care givers receive adequate professional development on comprehensive symptom management. This will enhance aptitude to manage a variety of symptoms associated with life-threatening illnesses.

CONCLUSIONS

This audit underlines how critical palliative care is to JDWNRH's ability to meet the unique needs of patients with terminal cancer, with an effort on effective pain management and symptom control. Its efficiency in treating pain related to cancer is proven by the prevalence of morphine tablet use (66.6%) and the adapted care that it reflects. Those patients without cancer account for up to 11.2% of the group, representing the need to increase and expand services to include a wider range of life-threatening illnesses. The audit also underscores adapted approaches beyond opioid use and demands for more exhaustive studies on symptom control. The continued professional development is also an important part of palliative care which enhances the ability of professionals to handle a range of symptoms in life-threatening illness.

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