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## Palliative care need among inpatients in acute general hospitals in Nepal: a point prevalence survey

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### ABSTRACT

**Introductions:** Developing palliative care services in acute hospitals is important to address the need of patients dying from malignant and non-malignant diseases. This study is carried out to assess the need of palliative care in Patan Hospital to inform the planning process for starting palliative care services.

**Methods:** A cross-sectional, point prevalence survey of in-patient beds occupied in Patan Hospital was carried out using Supportive and Palliative Care Indicators Tool. For patients who met the criteria, symptom burden was noted.

**Results:** Of the 116 patients admitted on the day of surveillance, 30% met the criteria for palliative care need; 60% were aged 60 or above. The most common conditions requiring palliative care need was lung disease (46%) followed by cardio vascular (23%) and neurological diseases (23%). The most common symptoms patients were suffering from were fatigue (60%) followed by shortness of breath (51%), inability to move (35%), abdominal distension (31%), anorexia (31%) and pain (25%).

**Conclusions:** Almost one third of patients admitted to Patan Hospital need palliative care with majority of them being above sixty years. This highlights the need to develop palliative care services in the hospital to address the need of such patients and families to improve the quality of life in the last years of life.

**Keywords:** acute hospital, need assessment, palliative care, SPICT tool

**INTRODUCTIONS**

It is now recognized that the need for palliative care for patients with non-malignant diseases is just as important as for patients with cancer. As most deaths occur in hospitals, there has been a major stride to develop palliative care services in acute hospitals in developed countries.<sup>1</sup> Nepal started palliative care services in 2000 with the establishment of Hospice Nepal.<sup>2</sup> However, there is no comprehensive palliative care service in acute general hospitals so far.

Patan Hospital, teaching hospital of Patan Academy of Health Sciences (PAHS), is committed to developing such services and has already integrated palliative care teaching into its undergraduate medical curriculum.<sup>3</sup> Need assessment study has not been done in hospitals in Nepal; hence, this study was conducted with the aim of assessing: the number of patients, the range of conditions, and the symptom burden that would need to be addressed by the proposed palliative care service.

**METHODS**

This was a cross-sectional, point prevalence survey of in-patient beds occupied in the internal medicine, geriatric, surgery, orthopedic and pediatric departments at Patan Hospital, Patan Academy of Health Sciences, Lalitpur, Nepal. Patients with palliative care needs were identified using the Supportive and Palliative Care Indicators Tool (SPICT).<sup>4</sup> The SPICT

provides clear indicators which can alert the clinicians to initiate a palliative care approach and start dialogues with the patients and families about their preference for different treatment and care options.<sup>5</sup> The survey was conducted over a 24 hour period by two physicians who were not involved in the care of the patients and who worked independently of each other. Both the physicians were trained on the details of SPICT and piloting was done on 18 patients. The differences among the two observers were discussed to reach a consensus.

The beds in the Intensive Care Units, Emergency Department, Psychiatry Department and Obstetrics- Gynaecology Department were excluded. The socio-demographic data and details as required by SPICT which includes general indicators of deteriorating health and clinical indicators of one or more advanced conditions was collected. Further for patients who met the criteria for palliative care need, symptom burden was assessed and grading of three specific symptoms pain, shortness of breath and fatigue was done using Palliative Care Assessment (PACA) tool as described by Ellershaw et. al.<sup>6</sup> (Table 1). These data were recorded in the Microsoft-XL and were analyzed using descriptive statistics. Cohen’s Kappa coefficient was calculated for inter-rater agreement for the symptom scoring.

Permission for the study was obtained from Institutional Review Committee of PAHS. Informed consent was taken from all the patients or from the next to kin when patients did not have capacity.

**Table 1. Palliative Care Assessment (PACA)<sup>6</sup> Symptom score of admitted patients with need of palliative care**

Score	Meaning
0	No symptom
1	Present but not affecting daily life
2	Moderate effect on daily life
3	Life dominated by symptom

**RESULTS**

There were total of 116 patients, 66 patients were male and 50 females, admitted to the five departments, (Figure 1). The mean age of the

patients was 43.07 years, ranging from nine months to 96 years.

Out of the total patients surveyed, 35 (30%) met the SPICT criteria for having palliative care needs. Among them 16 (46%) had chronic

respiratory disease, 8 (23%) cardio-vascular and cerebro-vascular disease; some having more than one advanced conditions, and thus, the total number exceeds 35, (Figure 2). There were two children, one 26 months child with cerebral palsy and the second 15 years child with Down’s syndrome, who met the criteria. There was 100% congruence in determining palliative care need of patients between the two observers. Symptom burden assessments among 35 patients requiring palliative care showed that 21 (60%) suffered from fatigue, 18 (51%) shortness of breath, 13 (37%) inability to move

due to loss of power or disability, 11 (31%) abdominal distension, 11 (31%) anorexia and 8 (25%) pain, (Figure 3).

There was agreement about presence or absence of symptoms between the two observers; however, there was minor disagreement in some of the scoring of the three symptoms of pain, shortness of breath and fatigue, (Table 2). Cohen’s Kappa coefficient calculated for all three symptoms showed high degree of inter-rater agreement (Kappa for pain 0.864; Shortness of breath 0.737 and fatigue 0.792)

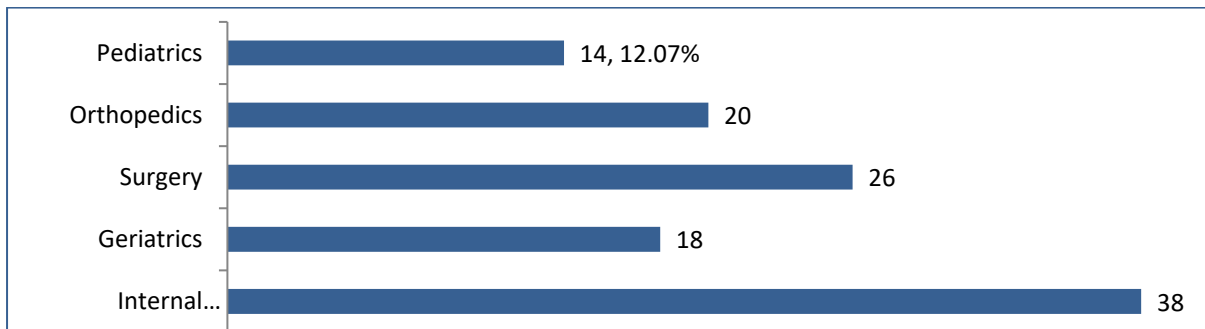


Figure 1. Distribution of admitted patients (n=116) surveyed for palliative care need using SPICT<sup>4</sup> (Supportive and Palliative Care Indicators Tool) at an acute general hospital, Nepal

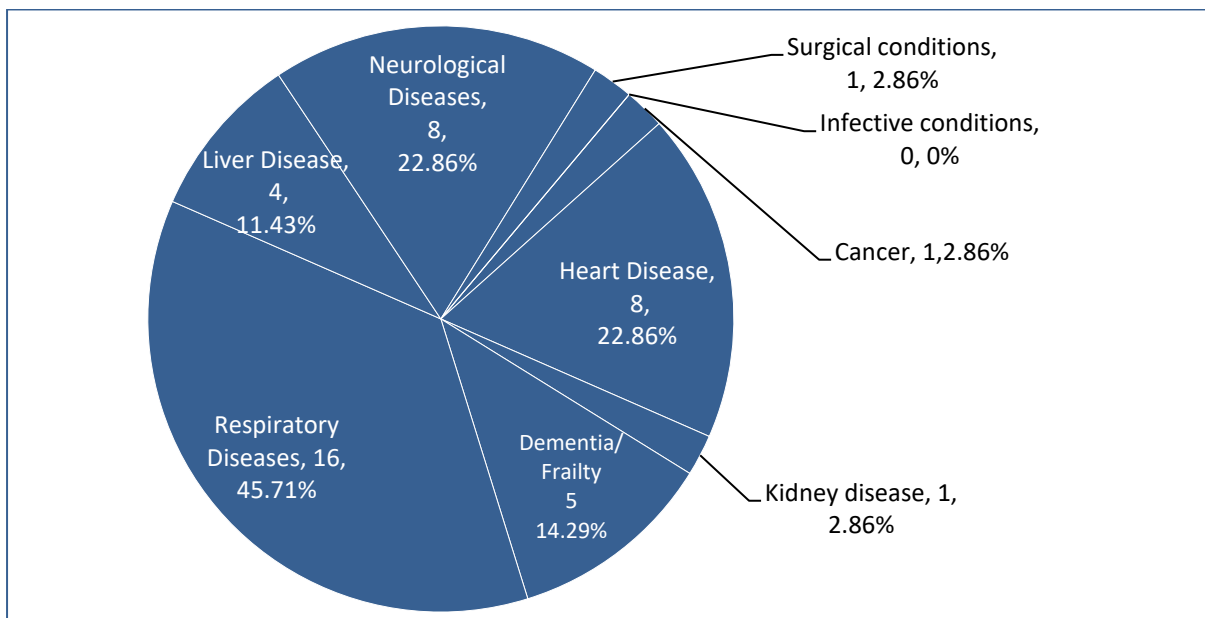


Figure 2. Disease conditions of 35 patients with palliative care need admitted at an acute general hospital

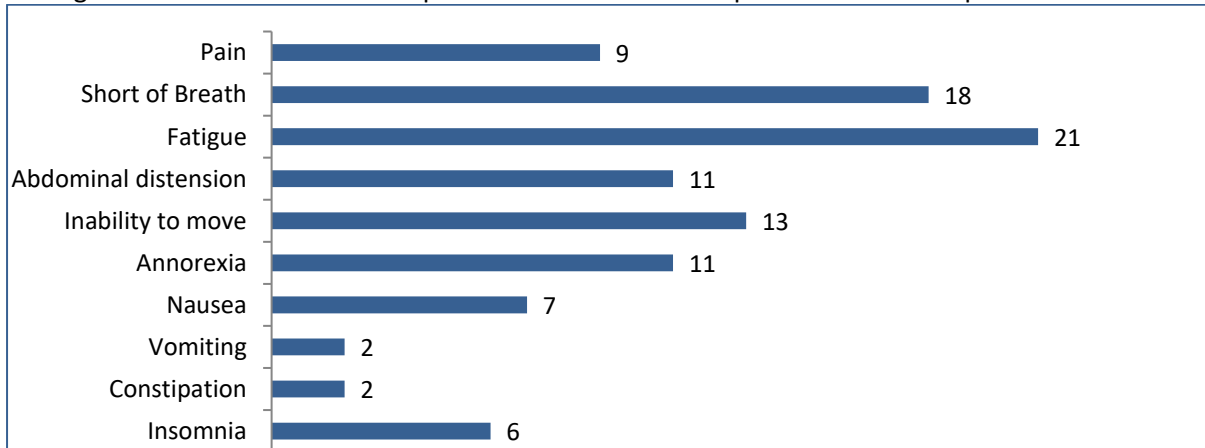
Note: some patients had more than one conditions, total number in above graph is 44 (not 35) and more than 100% (calculated for 35 patients, e.g respiratory disease 16 (45.71% of 35)).

## DISCUSSIONS

This study demonstrates that 30% of inpatients at an acute general hospital require palliative

care as a major component for the long-term management. These data are comparable to a

census done in UK in 2001, which showed 23% of all inpatients in need of palliative care.<sup>7</sup>



**Table 3. Symptom burden of patients with palliative care need surveyed in an acute care general hospital**

**Table 2. Scoring of symptoms by PACA<sup>6</sup> for patients (n=35) who met the criteria for need of palliative care using SPIC<sup>T</sup>**

Symptom	Score 0	1	2	3	Total Patients
Pain	27	4	2	2	35
Shortness of breath	17	2	8	8	35
Fatigue	13	9	11	2	35

Note: Where there was difference among two observers, the higher score was taken.

A cross-sectional survey in Internal medicine service in Norway estimated that 36% of their patients required palliative care<sup>8</sup> while another study conducted in a network of hospitals in Australia estimated that 35% patients in the acute hospital setting needed a palliative care approach.<sup>9</sup>

The most common condition requiring palliative care was lung disease. This reflects the hospital based Non-Communicable Disease (NCD) prevalence study in Nepal which showed Chronic Obstructive Airway Disease (COAD) to be the most common NCD (43%) in general hospital followed by cardiovascular disease (40%).<sup>10</sup> Only 1 (2.86%) out of 35 patients was diagnosed of cancer in our study. Whereas, in a similar study from New Zealand, the most common condition requiring palliative care in a hospital setting was cancer.<sup>11</sup> This is most likely explained by the fact that cancer is the most common cause of death in New Zealand and the hospital in the study provided regional cancer

service. Patan Hospital does not have medical oncology service which could explain the low number of cancer patients in our study.

This study identifies a clear need for development of palliative care services at Patan Hospital, with as many as one third of admitted patients requiring such service. In the past, the focus of palliative care was cancer; it has now been realized that patients with non-malignant disease also require similar care at end of life. The result of this study also shows that non-cancer conditions form the major part of the palliative care need.

This study is limited by the small number of patients in one acute general hospital. A larger study involving several hospitals in urban and rural areas will provide clearer picture for the Government to plan for the development of palliative care services across the country as it implements the National Strategy for Palliative Care. To this end academic institutions such as

PAHS need to take an active and leadership role in developing appropriate evidence-based palliative care services.

## CONCLUSIONS

One third of patients admitted to Patan Hospital had palliative care need with majority of them suffering from non-malignant chronic diseases, most commonly, the lung disease. This is likely to reflect the need in other acute hospitals across the country but needs to be corroborated by other similar studies.

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