

## Research

### Multidisciplinary Approach to Palliative Care

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#### Abstract

#### Introduction

Patients are admitted for palliative care when their needs of care cannot be met on an outpatient basis. It is only after they have received specific attention and their concerns are addressed that they are satisfied. An attempt was made to evaluate the needs of patients when they are admitted to a palliative care center and record their level of satisfaction with respect to each need, after providing the required services.

#### Methods

Cancer Patients admitted to the center over a 4 week period were enrolled in the study after recording their informed consent. Their specific needs were recorded and so were details of the services provided. Their satisfaction with respect to each need was recorded after 7 and 14 days. Results were tabulated and analyzed using one tailed parametric variance test.

#### Results

Most patients have multiple needs, and symptom control was the most common need of patients followed by psychological support and pain control. It is found that the satisfaction of patient's increases with the time spent at the center and it is nearly complete in 14 days.

#### Conclusion

Patients under palliative care have multiple needs, each of which needs to be addressed by a multidisciplinary team. Satisfaction of patients rises with time and is almost complete by 14 days. This analysis helps in directing the services on need basis and leading to a better utilization of resources in palliative care centers. Satisfaction of the patients should be recognized as an objective in palliative care.

#### Introduction

Palliative care is slowly becoming a standard of care for patients of cancer and other life limiting diseases. Early initiation of this modality has been demonstrated to improve both the quality and quantity of life [1]. During the active curative phase of treatment,

palliation benefits the patients since anticancer therapy is not without adverse reactions. In the later stages of the disease, the curative option closes for a number of patients, either due to progression of the disease or adverse drug reactions [2]. Palliative care provides holistic approach to the physical, mental, psychological and spiritual problems of the patients and tries to maintain the quality of life.

In the past, management of cancer patients has been erratic and even today, different specialists have divergent views on the best treatment for a particular case. As a result, some patients continue to receive aggressive curative therapy even after its utility has ceased. Non referral of such cases to palliative care causes needless pain and suffering to patients. It is imperative to shift them to palliative care since at this stage systemic anticancer therapy, with curative intent has been shown to increase 30 day mortality in breast and lung cancer [3].

Over the past few decades, the concept of palliative care has gained ground, patients are no longer left alone to die, but supported right up to the end providing care and comfort [4]. Palliative care has now become an important modality to improve the quality of life of patients at all stages of the disease, and the earlier it is used, better is the outcome [5]. Palliative care is mainly symptom management, not directed towards individual symptoms but at the patient as a whole. As per the WHO, "Palliative care is an approach that improves the quality of life of patients and their families facing the problem associated with life-threatening illness, through the

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prevention and relief of suffering by means of early identification and impeccable assessment and treatment of pain and other problems, physical, psychosocial and spiritual [6].”

Despite all evidence most patients are still not referred to palliation, either early or late. These patients have multiple symptoms like pain [7], bleeding [8], wounds [9], breathlessness [10,11], malnutrition [12] etc. and need all round support. Since the needs of patients are multiple, a multidisciplinary team needs to be assembled to treat every patient. Pain is one of the most distressing symptoms of cancer patients and is by far the most common complaint. Cancer pain has multiple pathologies and fails to respond to analgesics alone. Thus though the WHO pain ladder [13], does provide pain relief to almost 85% of patients, it leaves the balance in pain. Beyond the ladder are the interventional techniques, which are very effective [14], but only a few patients have access to them [15]. When available these blocks provide longer lasting relief especially in cancer patients [16,17]. Neuropathic pain can be controlled by agents like gabapentin and amitriptyline [18] that can be used with conventional analgesics.

Over emphasis on pain control has led to the neglect of other symptoms. When pain is controlled, other symptoms take over the job of making the patient miserable. Palliative care is therefore not synonymous with pain control, but goes far beyond it, and at most palliative care centers a multidisciplinary approach is adopted. A multidisciplinary team is one, which consists of a Palliative care Physician, a Pain Specialist, a nurse, a medico-social worker, a clinical psychologist, a dietician and a physiotherapist. Such a team of specialists has been used at our center, for the last few years without a formal evaluation of this approach. As a part of optimizing palliative care services, this study was undertaken to evaluate the role of the multidisciplinary team and its impact on patient's satisfaction.

The aim of this study was to optimize palliative care, and the primary objective was to assess the needs of the patients and evaluate their satisfaction with the services provided. The secondary objectives were to investigate if there are needs beyond those that are catered for at the center and how to fulfill them. A protocol for the study, a format to record the needs and subsequently the satisfaction of patients admitted to the center was developed. The protocol and other relevant documents were submitted to the Centre's Independent Ethics Committee for review and approval.

## Subjects and Methods

The ethics committee granted approval to the study on 16th August 2016, after receiving which, study related activities were initiated. The study design was an open, prospective study, conducted over a period of 6 weeks on all patients admitted to in-patient care at the center. All patients admitted to the center, who were expected to

live for at least one month, were selected for the study. Each patient was followed up for two weeks (i.e. day 15 after entering the study), the method of enrolment and study was as given below:

Patients admitted within the week were included and followed up for a period of 2 weeks. The number of patients enrolled is shown in the table 1 below:

Patient Type	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
New Patients	A	B	C	D		
Old Patients		A	A + B	B + C	C + D	D
Total	A	A+B	A+B+C	B+C+D	C+D	D

**Table 1:** Patients admitted to the centre were included in Week 1 (A), those admitted in Week 1 entered the trial in Week 2 (B) and so on.

On admission, members of the team examined each patient and assessed the needs of every patient. The need was assessed on a simple yes/no basis. Thus the assessment was whether the particular patient had a particular need or didn't have it. The assessment of each need followed a different procedure decided by the domain expert; the responsibility of assessment is shown in Table 1. Treatment/support/care was provided on the basis of presence or absence of the need. Thus pain control was offered to patients in need of pain control, and those in need of physiotherapy were provided with physiotherapy.

The patients were interviewed on day 1, 7 and 15. The aim of the interview was to ask them if their need for treatment/support/care was met or not, and to what extent were they satisfied. Patients were asked to rate their satisfaction on a scale of 0 to 5, with 0 meaning totally unsatisfied and 5 meaning highly satisfied.

S.No	Need	Responsibility
1	Symptom Control	Physician
2	Pain Control	Pain Specialist
3	Psychological problems	Clinical Psychologist
4	Nursing	Staff Nurse
5	Physiotherapy	Consultant Physiotherapist
6	Dietary Requirements	Consultant Dietician

**Table 2:** Needs assessment of patients. Needs were assessed as present or not.

The study was an observational study and there were no study related interventions in the subjects. The subjects' needs in each of the identified areas were noted on entering the study and after seven and fifteen days of the study. Needs were assessed as yes or no, without any attempt to grade the intensity of the need. Palliative support was provided at the center throughout their stay at the center, starting from their admission to the center. The level of satisfaction was noted on a five-point scale (0 to 5, in which 0 was unsatisfied and 5 highly satisfied) in terms on each head of

support they need as shown below:

1. Symptom control
2. Pain control
3. Nursing care
4. Psychological support
5. Dietary support
6. Physiotherapy.

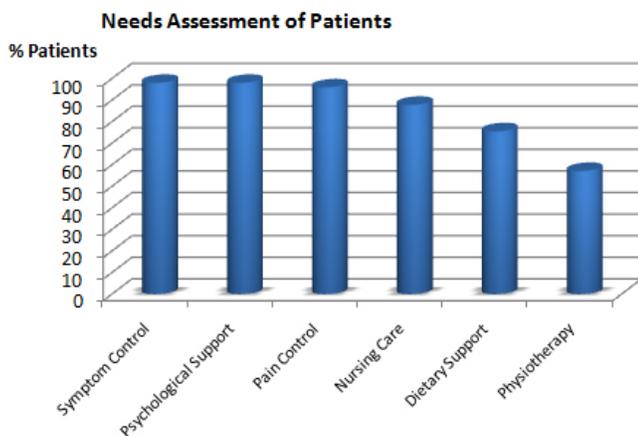
The data obtained were entered in Excel sheets and analysed. Satisfaction level with respect to each need was compared between Day 0 and Day 7, Day 0 and Day 15 and Day 7 and Day 15, using one tailed parametric analysis of variance. [19,20].

### Results

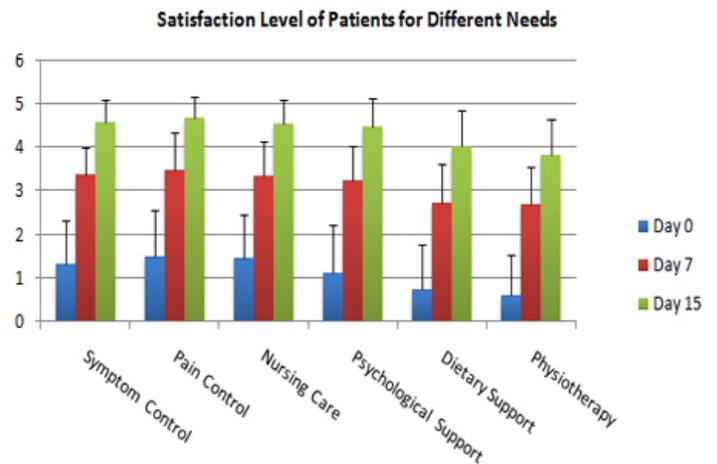
Forty nine patients were recruited for the study within the prescribed study period. Of these 26 were males and 23 were females. There was no difference in the ages of the male and female patients as shown in Table 2.

When the data were separated by sex, there was no difference between the needs of the males or females, nor was there any difference in the satisfaction level by gender, hence data of both genders were processed together.

Of the six needs that were assessed symptom control and psychological support were the most common, reported by 48/49 patients. The needs of all the patients, with their prevalence are shown in Fig. 1, below.



The availability of support before admission to the center was poor and symptom control was accessible by 7 patients, while pain control and nursing care was available to 2 patients, and physiotherapy was available to 1 patient. Support for all these needs was available at the center and this led to a higher satisfaction on day 7 and Day 15 at the center. These results are shown in Figure 2, below.



### Statistics

The satisfaction level of each patient was compared using one-way Analysis of Variance. It was found that the satisfaction on Day 7 and Day 15 was significantly superior to that at Day 0, and the satisfaction at Day 15 was significantly superior to that at day 7 with respect to all needs, with p value lesser than 0.01.

### Discussion

This Centre has been providing palliative care to cancer patients for the last 20 years. In addition to symptom control, interventional pain control, psychological and dietary counseling, nursing care and physiotherapy are also provided. Though these services are being provided to patients, a scientific analysis of the actual value of each has not been done. Based on expert opinions and stray reports group therapy, diversion therapy, meditation and many other activities that give satisfaction and entertainment to the patients are provided. These activities may have therapeutic benefits, but the same has not been scientifically evaluated.

Palliative care services, here and elsewhere are based on assumptions rather than assessment, and this could be the cause of variation in their outcomes. Needs assessment is now recognized as an important function in planning and implementing palliative services the world over [21]. The palliative care outcome scale (POS) is an important tool for measuring outcomes of palliative care [22], it does evaluate the benefit of palliative care but does not help in assessing needs of patients. It was felt that needs of different patients are different; hence the same tool may not suit all [23]. Additionally it was felt essential to evaluate services provided at the center, so that their delivery could be optimized.

Symptom control is an overall management of patients' symptoms, while pain control has become a specialized science on its own. The extreme pain of cancer patients, often refractory to treatment

by even the WHO ladder, demands specialized pain services and for this reason it is evaluated separately from other symptoms. At the center, a qualified pain specialist manages pain, while other clinicians manage all other symptoms. If one goes by the need for these services, psychological support vies with symptom control as the most common need of patients [24], closely followed by pain control. The reason why pain control is pushed to the second position in patients' needs could be because some sort of pain medication is available to patients even before they come to the center.

This study makes it clear that palliative care patients have multiple needs, as noted elsewhere too [25]. When each of their needs is addressed, this should lead to satisfaction and we could measure the patients' satisfaction with respect to each need. To achieve greater satisfaction of patients, multiple needs will have to be addressed and focus on a single or a couple of needs would not do justice to patients. The results clarify that palliation is a multispecialty function best handled by a team of specialists, and raises a question about the practice of palliative care by individual practitioners. However involving them in palliative care networks to increase the reach of palliative services makes sense [26].

As expected patients who are poorly satisfied on admission to the center, become more and more satisfied with increasing stay at the center. Satisfaction level, which was graded as 0 to 5, was higher on Day 7 and significantly higher on Day 15. This suggests that if patients would come earlier to the center they are more likely to be totally satisfied and their needs met more completely if they were to stay longer at the center. Obviously palliation is less useful to those who come to the center at the very last minute.

The satisfaction of patients related to symptom control, pain control, psychological support, nursing was higher than that related to dietary counseling and physiotherapy. Cachexia is common in terminal patients [27], and so is restricted physical function [28]. This does not reflect on the quality of service provided, but the nutritionist and physiotherapist can do little at the stage in which many patients come to the center [29,30]. The results however, suggest that the parameters we measured were indeed important, but they don't tell us whether our panel of needs was complete. Others have found that communication needs are very important for patients of breast cancer [31], yet others have emphasized on the spiritual needs of patients [32], but we did not study this.

On completion of the study, we feel it is essential to study the needs of the patients, the services provided to fulfill them and then the level of satisfaction of patients. This would give us the evidence for addition of newer services or deletion of some services. Appropriate allocation of resources is essential anywhere, since resources can never be unlimited and need to be channeled where needed most.

Studies such as the present one will help in identifying the services to be provided and customized to patients' needs, making palliation more patients centric. Many palliative care centers in the country provide only a couple of services, while their work is appreciable; they need to add services to become truly comprehensive palliative centers.

## Conclusion

Most patients admitted for palliative care have multiple needs, when these are addressed there is satisfaction among the patients. Satisfaction of patients rises with the stay in the center; early referral to palliation can significantly improve quality of life of patients. Needs assessment can be a valuable tool to make different services available, and to rationalize resource allocation. A patient centered approach helps in advance planning for individual patients keeping in mind their specific needs. This is our preliminary work in the area and we believe not much work has been done on this elsewhere. We acknowledge that our study is limited to the six needs that we identified, there could be many more, and we need to extend our study to cover these. Probably an open-ended inquiry into the needs of patients will reveal them. There is also need to study a larger and more heterogeneous group; patients with different pathologies, since not only cancer patients but also others too need palliation.

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