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## Original Research

### Awareness about Palliative Care among Interns in a Medical College in Punjab

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#### ABSTRACT

**Background:** Palliative care is a relatively new field of medicine. The goal of palliative care is to provide comfort and maintain the highest possible quality of life for as long as life remains. However, there is a paucity of studies on knowledge about palliative care among medical students. The present study was conducted to assess the knowledge about palliative care amongst intern students of a medical college hospital. **Methodology:** A cross-sectional study was conducted among 98 intern students of a Medical College in Malwa region of Punjab. Data was analyzed in the form of percentage and proportions. Z-test of proportions was applied wherever necessary. **Results:** The present study questionnaire was answered by 81 out of 98 intern students yielding a response rate of 82.6%. 87.6% interns correctly defined palliative care. The average knowledge score for all 12 statements was 33.2%. 83.9% thought incorrectly that palliative care can be given only in a hospital set-up. A significant number (67.9%) favoured to prescribe pethidine more than morphine. Others thought that parenteral route (54.3%) is more effective for pain relief. Most (66.6%) respondents agreed that they would prescribe less dose of opioids to avoid tolerance and addiction. **Conclusion:** The study revealed inadequate knowledge about palliative care among medical interns. There is need to introduce palliative care teaching in the medical curriculum so that doctors are able to provide better life support to terminal disease patients

**Keywords:** Knowledge, Intern students, palliative care, opioids.

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#### INTRODUCTION

Palliative care is defined by WHO as ‘an approach that improves the quality of life of patients and their families facing the problems associated with life-limiting illness, through the prevention and relief of suffering by means of early identification and impeccable assessment and treatment of pain and other problems, physical, psychosocial, and spiritual’. (1) Its aim is to provide the highest possible quality of life to the terminally ill and debilitated patients for their remaining period of life by providing relief through management of pain and other symptoms.

Though, historically, Palliative care services have focused on patients with cancer, these services have been needed in other life-limiting non-malignant conditions like congestive heart failure, end-stage renal disease, COPD and dementia.(2)

Every year, worldwide an estimated 40 million people are in need of palliative care, 78% of them live in low and middle-income countries. (1)

Out of these wide range of diseases, majority of adults requiring palliative care suffer from CV Diseases(38.5%), cancer(34%), respiratory diseases(10.3%), AIDS(5.7%) and diabetes(4.6%). (1)

It is estimated that during the year 2012, 10.15 lac new cancer cases occurred in India, giving an incidence rate of 92.4 per lac population. Same year about 6.83 lac died of cancer, a mortality rate of 69.7 per lac population(3)

Punjab is reeling under a high burden of increasing cancer cases. A hospital-based five-year study undertaken in a ‘Charitable Cancer Hospital’ attached to a medical college hospital in the Malwa region of Punjab yielded a total of 1328 cancer cases, out of which females accounted for 809 (60.9%) and males for 519 (39.1%) cases.(4) In this area,

Palliative care and pain relief needs of the dying patients are inadequately addressed due to almost nonexistent palliative health care services.

It has been observed in studies that health care professionals do not adequately address the issues related to end-of-life care due to lack of knowledge and confidence.(5) Clinicians often under treat cancer pain by not prescribing the appropriate doses of opioids due to fear of addiction among their patients.

Many physicians and educators attribute this, at least in part, to limited exposure to palliative care education during medical school.(6)

Seeing the high burden of cancer in this area but no palliative care training was ever being organized for the medical students studying in the medical college hospital located in this area; hence this study was planned and conducted to find out the knowledge about palliative care among the medical interns studying in this medical college hospital.

**MATERIALS AND METHODS**

A cross-sectional descriptive study was conducted amongst a total of 98 intern students of a Medical University located in Malwa region of Punjabin Northern India. It is one of the premier teaching and training institution of Punjab that provides specialist’s tertiary care services to patients largely belonging to lower and middle socio-economic strata of the society with rural background.

A Questionnaire to assess the knowledge about palliative care was developed by reviewing and adapting the existing literature. (7,8) Pilot testing was done in a sub-batch of ten interns. The questionnaire was modified to address the issues identified based on the mutual consensus of the researchers. The questionnaire consisted of both open and close-ended questions regarding various aspects of

palliative care. A total of 14 questions were answered in this questionnaire. The questionnaire covered the following aspects of palliative care: Definition of palliative care, any lectures/training received, spiritual& emotional aspect, opioid use, multi-disciplinary teamwork & support to family.

The study population was selected by convenience sampling method. The participation in this study was on a voluntary basis. All participants were given a briefing about objective of the study and assured confidentiality in collection of data. Informed consent was obtained from each participant and anonymity of the participants was maintained throughout the study. The questionnaire was distributed among these students, and they were asked to fill the questionnaire.

The collected data was entered in MS Excel and analyzed by using Statistical Minitab version-16.0. The statistical tools like percentages and Z test of difference between two sample proportions were employed. Statistical significance was set at *P* <0.01 and 0.05.

**OBSERVATIONS AND RESULTS**

The questionnaire was answered by 81 out of 98 intern students yielding a response rate of 82.6%. It consisted of 28 (35%) males and 53 (65%) female interns.

The questionnaire started with an open-ended question about ‘Defining Palliative Care’. It was correctly defined by 63 (87.6%) interns, though incompletely. 18 students were not able to define the concept of Palliative care management.

On asked if any formal training or lecture series were delivered to them during their medical studies, none of the interns confirmed receiving any training/lectures.

**Table 1: Knowledge of the Interns about Palliative care (N=81)**

S no	Statement	Yes	No
1	Palliative care is meant for last weeks of life	65	✓ 16
2	Palliative care integrates psychological and spiritual aspects of patient care	✓ 33	48
3	Palliative care requires multi-disciplinary approach	✓ 26	55
4	Palliative care can be given in hospital set up only	68	✓ 13
5	Palliative care is only about pain management in terminal cancer patient	51	✓ 30
6	Radiotherapist is an essential member of palliative care team	57	✓ 24
7	Palliative care approach is useful in End-stage Heart failure	✓ 35	46
8	Palliative care offers a support system to help the family cope up with the condition of patient	✓ 11	70
9	Pethidine is preferred when patient requires strong opioid for pain relief	55	✓ 26
10	Parenteral opioid is preferred over oral route for pain relief as it is more effective	44	✓ 37
11	Opioid dose should be lower than required to prevent tolerance and addiction	54	✓ 27
12	Haloperidol can be used to treat opioid-induced nausea and vomiting	✓ 45	36

✓ marked are the correct answers to the above statements

**Table 2: Average knowledge of the interns about Palliative care (N=81), as per correct & incorrect answers**

S. no	Statement	Correct answers(%)	Incorrect answers (%)	z-proportions	p-value
1	Palliative care is meant for last weeks of life	16(19.7)	65(80.2)	9.67	.0001**
2	Palliative care integrates psychological and spiritual aspects of patient care	33(40.7)	48(59.2)	2.4	.016*
3	Palliative care requires multi-disciplinary approach	26(32.1)	55(67.9)	4.88	.0001**
4	Palliative care can be given in hospital set up only	13(16.0)	68(83.9)	11.77	.0001**
5	Palliative care is only about pain management in terminal cancer patient	30(37.0)	51(62.9)	3.42	.001**
6	Radiotherapist is an essential member of palliative care team	24(29.6)	57(70.3)	5.68	.0001**
7	Palliative care approach is useful in End-stage Heart failure	35(43.2)	46(56.7)	1.74	0.081
8	Palliative care offers a support system to help the family cope up with the condition of patient	11(13.6)	70(86.4)	13.53	.0001**
9	Pethidine is preferred when patient requires strong opioid for pain relief	26(32.1)	55(67.9)	4.88	.0001**
10	Parenteral opioid is preferred over oral route for pain relief as it is more effective	37(45.6)	44(54.3)	1.1	0.27
11	Opioid dose should be lower than required to prevent tolerance and addiction	27(33.3)	54(66.6)	4.5	.0001**
12	Haloperidol can be used to treat opioid-induced nausea and vomiting	45(55.5)	36(44.4)	1.42	0.155
<b>Average</b>		33.23	66.77	5.11	.0001**

Figures in parenthesis indicate percentages

\*\*p-value $\leq$ 0.01= highly significant

\*p-value $\leq$ 0.05= significant

The average knowledge score for all 12 statements was 33.23%, whereas 66.77% were incorrect regarding knowledge about palliative medicine. After applying the Z test for difference between two sample proportions, there was a significant difference between knowledge of palliative medicine for all statements with regards to correct and incorrect answers ( $Z=5.11$ ,  $P < 0.01$ ) [Table 2]

## DISCUSSION

The aim of palliative care is to reduce morbidity before mortality among the terminally ill patients. The burden of cancer as well as non-communicable diseases is on the rise all over the world because of adoption of unhealthy lifestyle choices including smoking, physical inactivity, and fatty diets.

'Palliative care is a human right' was the theme for World Hospice and Palliative Care day in year 2008. It stressed upon the importance of terminally ill people dying with dignity and without any distressing symptoms especially pain.(9)

According to the WHO estimates, worldwide, only about 14 % people who need palliative care currently receive it. (1) This need will continue to increase because of increasing non-communicable disease and ageing population. In India, <1% of those who need palliative care

services have access to such services in the country.(10)

In our study, 'Palliative Care' was correctly defined by 63 (87.6%) interns, though incompletely. WHO defines Palliative care as an approach that improves the quality of life of patients and their families facing the problems associated with life-threatening illness, through the prevention and relief of suffering by means of early identification and impeccable assessment and treatment of pain and other problems, physical, psychosocial and spiritual (1). A survey carried out by Butola et al among 210 doctors employed in Border Security Force, found that 75.5% of doctors did not know about the basic concept of palliative care. (11) Similarly, Shaikh *et al.* carried out a multicentric study in Pakistan 94.4% of responders were aware of the meaning of palliative care.(12)

The present study revealed the overall inadequacy (66.7% incorrect) in knowledge among the intern students. Similarly, a study by Sadhu *et al* mentioned clear gaps in palliative care knowledge among undergraduate health care students.(5) Overall poor knowledge with a Mean score of 8.11 out of 17 was observed in a study carried out among medical students in Maharashtra.(13)

A study by Weber *et al.* in Germany also found insufficient knowledge about palliative care among final year medical students as only 33% had scored more than 50% marks.(14)

Fadare *et al* conducted a cross-sectional study in a tertiary-care hospital of Nigeria which showed gaps in the knowledge of health care workers in the area of palliative care. (15)

Ideally, palliative care services should be provided from the time of diagnosis of life-threatening illness, adapting to the increasing needs of cancer patients and their families as the disease progresses into the terminal phase. (16) In our study, 40.7% participants knew that the aim of palliative care is improving quality of life by integrating psychological and spiritual aspects. In a study carried out in a rural medical college, 93.57% undergraduate students correctly stated that palliative care approach promotes not only physical but also psychosocial and spiritual wellbeing.(13)Bhadra *et al.* and Fadare *et al.* observed similar findings in more than 70% doctors. (15,17)

In our study, 43% interns were aware of the fact that palliative care is also required in Heart failure, besides cancer. Similar facts were found in other studies also. (5,8,15,17)

Good palliative care supports death at home with their near and dear ones. 83% of the respondents in our study had no idea about home-based palliative care services. In India where there is always shortage of hospital beds and other resources, home-based palliative services are boon in relieving hospital and caregiver burden. (18) In a study by Bhadra, 53% of doctors agreed that home is the best place to provide terminal care. (17)Home visits are lacking in India due to lack of training and skills. (19)

Studies have shown that doctors and other health care professionals lack knowledge and confidence in their ability to care for the dying patients, are not rewarded for exhibiting concern over psychosocial issues in end-of-life care, and are unwilling to administer adequate dosages of analgesics or sedatives to dying patients or to withhold or withdraw life support. (5) This could be because Palliative care is not a mandatory part of the medical colleges curriculum in India. In our study, none of the interns received any lectures/training in Palliative care during their MBBS study

Another interventional study by Valsangkar *et al.* among interns revealed that there is significant increase in level of knowledge after training workshop.(20) Another evaluation study by Pohl G *et al.* found that the implementation of compulsory palliative care education at the Medical University of Vienna resulted in a significant increase of theoretical knowledge about palliative care aspects in medical students. (21)

## CONCLUSION

The study revealed inadequacy in the knowledge of medical students regarding palliative care. There is a need to integrate/introduce palliative care aspects into basic health care training of medical undergraduate Curriculum in India

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