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Developing competency among interns in palliative care of critically ill patients

Abstract

Background: Palliative care has become increasingly important in the last decades with a rise in needy patients and subsequent shortage of health care professionals serving palliative care, making it a global public health concern.

Patients and methods: Educational interventional study conducted in the Department of Anaesthesiology of a tertiary care teaching institute. Pre- and post-tests by standardized validated multiple choice questions for assessment of knowledge and awareness were conducted before and after the session. Interactive didactic lectures integrated with faculty narrative from the Department of Palliative Care, demonstration among small groups, and live demonstration on patients under the aegis of the Anaesthesia Department were given after the pre-test. A feedback questionnaire in the form of a Likert scale for assessment of students' satisfaction and attitude was done at end of a session.

Results: Fifty (50) interns participated in the study. Out of 50, 28 (56%) were male and 22 (44%) were female interns. The mean pre-test score was 8.82 ± 2.13 (range 4–12) out of a total of 20. The mean post-test score was 14.44 ± 1.72 (range 11–17). The pre- and post-test results difference was significant ($p < 0.0001$). The percentage gain in knowledge and awareness was 63.95%.

Conclusions: Most professionals will need basic skills of various management modalities in supportive therapy in near future to fully fill the demand for palliative care which is going to be doubled within the next few decades so the need for conducting more such sessions regularly amongst young budding doctors including interns at a very early stage to develop competency for palliative care was observed.

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Key words: competency, palliative care, didactic lectures, critically ill

Introduction

Care of the sick has been a constant concern for humans throughout history. Presently the majority of our health services are disease centric; especially designed and directed for treatment with curative intent. The concept of palliative care medicine has become

increasingly important in the last decades with a rise in needy patients and subsequent shortage of health care professionals serving palliative care, making it a global public health concern. Palliative care is explicitly recognized under the human right to health addressing the suffering involves taking care of issues beyond physical symptoms for people living with any

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life-limiting illness and facing progressive illnesses to improve their quality of life [1, 2].

Education in palliative care has been offered voluntarily and has been taken mostly by professionals who were already working in palliative care teams. Medical graduates though involved in patient care, are not competent for palliative care in critically ill patients as it was not taught to all the students and was not mandatory in the curriculum. In absence of proper knowledge and awareness regarding issues pertinent to palliative care, Indian Medical Graduate (IMG) is unable to understand the specific needs of such patients hence alternative choices are not provided to patients [2–4].

This knowledge gap identifies the need for a focused and customized curriculum for the undergraduate level [5]. The new competency-based medical education (CBME) curriculum by the Erstwhile Medical Council of India and the National Medical Commission in 2019 in India has made it mandatory as a competency for Indian medical graduates (IMG), through responsibility shared by the anaesthesia department. The interns of the present batches have not been taught palliative care competencies; are not competent enough to identify the need for palliative care and treat the pain in critically ill patients. Hence teaching the interns creates an opportunity for educators to initiate and integrate the knowledge and concepts of palliative care. This study was planned to develop competency among interns in the palliative care of critically ill patients.

Patients and methods

Study design

Educational interventional study.

Study place

Department of Anaesthesiology of a tertiary care teaching institute.

Study participants

Interns who are medical graduates undergoing compulsory one-year mandatory rotatory internship; sample size: 50.

Teaching learning method

Interactive didactic lectures integrated with faculty narrative from the Department of Palliative Care under the aegis of the Anaesthesia Department. The total training period was one week which included two-hour daily trainings mainly comprised types of critically ill patients who required palliative care, pain management during palliative care, types of analgesics especially the concept of using opioids during palliative care of critically ill patients and holistic approach of palliative care.

Assessment tools

- Pre- and post-test (20 multiple choice questions) by standardized validated multiple-choice questions for assessment of knowledge and awareness.
- Feedback questionnaire, Likert's scale for assessment of students' satisfaction and attitude.

Procedure

After approval from the institutional ethical committee (reference: GU/HREC/EC/2021/1837 dated 01/02/2021), this study was conducted among interns of batch 2015–2016 at a tertiary care teaching hospital. A set of 20 questions (multiple choice questions) was developed and it was validated by experts. This set of questions was distributed among interns to know their prior knowledge. After that, they were taught about palliative care in critically ill patients through interactive lectures, demonstrations among small groups, and live demonstrations on patients. The same set of questions was again given after teaching-learning methods. A feedback questionnaire (Table 1) for the session was also conducted at the

Table 1. Feedback questionnaire items

Sr. no.	Questionnaire items
Q. 1	I was satisfied with the overall learning about this session.
Q. 2	I enjoyed the session.
Q. 3	The session stimulated further my desire to learn about palliative care.
Q. 4	I was satisfied with palliative care learning with regard to the quantity of my learning experience.
Q. 5	I was satisfied with palliative care learning with regard to the quality of my learning experience.
Q. 6	This type of session should be regularly organized during the internship programme.

Sr. no. — serial number; Q — question

end of the session in which each feedback response was rated from 0–4 on a Likert scale (Likert scale: 0, strongly disagree to 4, strongly agree). Pre-test results and post-test results were analysed. Data were analysed using paired t-tests as data was normally distributed. A p-value less than 0.05 was considered statistically significant.

Results

A total of 50 interns participated in the study. Out of 50, 28 (56%) were male and 22 (44%) were female interns. The mean pre-test score was 8.82 ± 2.13 in which the minimum score was 4 and the maximum score was 12 out of a total of 20. The mean post-test score was 14.44 ± 1.72 in which the minimum score was 11 and the maximum score was 17. The pre- and post-test results differences were significant ($p < 0.0001$) Percentage gain in knowledge and awareness was 63.95% (Table 2). Figure 1 shows the feedback questionnaire analysis of all the interns after the session.

Discussion

Competency-based assessment can help learners to assess their knowledge and training which is relevant and standardized content for education programs. It also helps in identifying educational needs and where the facilitator can improve [6]. With the increase in terminally ill and incurable patients; the concept of palliative care has become increasingly important in the last decades, to improve the quality of life for a person living with any serious illness and facing life-threatening illness. It prevents suffering through early identification, correct assessment and treatment by alleviating pain, and psychological and spiritual distress using communication skills and provides care coordination.

The perception and knowledge of palliative care in interns were found to be inadequate in various studies. They have a misconception and poor knowledge regarding constituents of terminal care, symptoms, team formation and their designated roles, communication skills and scope of palliative care, majority of students

Table 2. Mean score of pre- and post-test

Subjects	Pre-test (mean ± SD)	Post-test (mean ± SD)	p-value
Interns (n = 50)	8.82 ± 2.13	14.44 ± 1.72	< 0.0001*
IQR	Range (4 to 12)	Range (11 to 17)	

*Significant (by applying paired t-test); IQR — interquartile range; SD — standard deviation

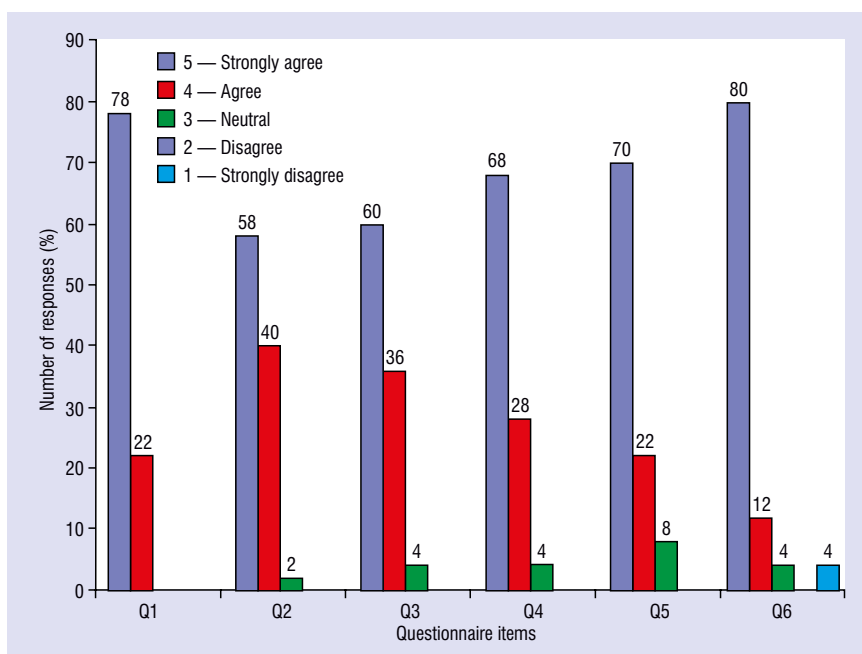


Figure 1. Feedback questionnaire analysis

considered it equivalent to pain or rehabilitation medicine and viewed it as active care of dying patients [7–9].

In the present study, participating interns were previously not subjected to such type of training for developing competency in palliative care. The percentage gain in knowledge and awareness was noted at 63.95% among interns after undergoing this session; this implies most of the students were having low knowledge on this subject and this training helped in improving their knowledge. Nnadi et al. [8] have conducted an interventional study with pre- and post-test evaluation design involving medical interns following a structured educational intervention for knowledge of palliative care. They found significant ($p = 0.009$) improvement in knowledge (very good 20.4% to 38.8%, good 18.4% to 28.6% and decrease in poor knowledge 22.5% to 4.1%) in pre- and post-test respectively [8]. Elayaperumal et al. [10] have developed a community-based palliative care model, they observed a curriculum useful for interns to acquire the basic skill of pain management, communication skills, teamwork and increased satisfaction in patients and their family through the quality of provided care.

All interns (100%) were satisfied with the overall learning about this session. Out of the total of 50 interns, 78% showed strongly agree with responses on overall learning about this session while 22% showed agreed with the responses. 98% of interns enjoyed the session whereas only 2% have neutral responses. Involvement in such serious problems, at an early stage of their practice, builds more confidence in them and fulfilling the ethical duty of a doctor to relieve suffering and to respect a person's dignity. 96% of interns showed that this session stimulated inquisitiveness to learn about palliative care, and only 4% showed neutral responses, which further suggested that developing competency for pain management in palliative care is very much helpful to them in routine as well as future practice. Competencies for palliative care during undergraduate education were not included in the earlier curriculum, even though management of pain and other symptoms are expectedly important in basic level competencies [11].

Learning palliative medicine, applying pharmacology of pain control and developing a positive attitude towards caring near the end of life is stressful and challenging [12]. Therefore, interns will benefit more by learning the management of pain and palliative care change in the CBME-based curriculum. 96% of interns were satisfied with palliative care learning concerning the quantity of learning experience and also 92% were satisfied with the quality of experience. Only 4% and 8% of interns had a neutral response about this respectively. Pain and difficulty in breathing; the

two most frequent and serious issues experienced by patients in need of palliative care will be addressed by the intern if they develop such type of competency for palliative care. It will also help them in developing an understanding of barriers in pain relief, assessment of pain and the impact of untreated pain, and also that opioids are essential for the medical management of pain. Sadhu et al. [9] in their study showed inadequate basic knowledge of palliative care among students, in terms of pain evaluation and management, identifying patients in need of palliative care, resuscitation requirement and opioid use. If interns would be competent enough for a multifaceted role in practising palliative care, then it may reduce the financial burden on the institute by providing care closer to the patient's home as well as reducing unnecessary referrals to higher centres.

The majority of interns (92%) agreed that this type of session should be regularly organized during the internship programme while 4% showed neutral responses and 4% showed strongly disagree responses for this. Pohl et al. [1] conducted a survey of palliative care concepts among medical students and interns while evaluating the old and new curriculum of their medical university and similar to the curriculum palliative care was not included. They noted a significant percentage of students and interns would like to learn about palliative care (72.6% undergraduate students vs. 92.6% interns, ($p < 0.0001$)). If this type of training is given regularly for palliative care then it may increase faith and trust in the medical system and various myths and misconceptions regarding palliative care will be busted by proper counselling by Indian medical graduates. Competent IMG will feel confident in managing emotional, psychological and cognitive responses to symptoms such as pain and delirium and also to intervention and treatment-related issues hence overall increase in the proficiency of medical graduates. The acquisition of communication skills and the development of an empathetic attitude towards the patients will also help in their future interactions with patients. Overall a healthy dialogue between doctor and patient; reduces mental stress among patients, caregivers and close family members which will be learned by the interns in a very early stage of their practice and will help them in future for healthy/satisfactory doctor-patient relationships. Limitations of this study were the small sample size and the non-inclusion of open-ended questions.

Conclusions

This study concluded that this intervention developed competency about knowledge and awareness

about various management modalities amongst interns and in near future, most professionals will need basic skills of various management modalities in supportive therapy to full fill the demand of palliative care which is going to double within the next few decades. The need for conducting more such sessions regularly amongst young budding doctors including interns at a very early stage to develop competency for palliative care was also observed.

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Declaration of conflict of interests

The authors declare that there is no conflict of interest.

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