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Original article

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Developing competency among interns in palliative care of critically ill patients

Running title: Developing competency for palliative care

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Abstract

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

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

questionnaire in the form of Likert's scale for assessment of students' satisfaction and attitude was done at end of session.

Results: Fifty (50) interns participated in the study. Out of 50, 28 (56%) were male and 22 (44%) were female interns. Mean pre-test score was 8.82 ± 2.13 (range 4–12) out of total 20. Mean post-test score was 14.44 ± 1.72 (range 11–17). The pre and post test results difference was significant ($p < 0.0001$). 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 demand of palliative care which is going to be doubled within next few decades so the need for conducting more such sessions regularly amongst young budding doctors including interns at very early stage to develop competency for palliative care was observed.

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

Introduction

Care of sick has been a constant concern for human throughout history. Presently 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 rise in needy patients and subsequent shortage of health care professional 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 life limiting illness and facing progressive illnesses to improve their quality of life [1, 2].

Education in palliative care has been offered on a voluntary basis and 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 our 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 the alternative choices are not provided to patients [2–4].

This knowledge gap identifies the need of focused and customized curriculum for undergraduate level [5]. In the new competency based medical education (CBME) curriculum by Erstwhile Medical Council of India and National Medical Commission in 2019 in India; has made it mandatory as a competency for Indian medical graduates (IMG), through responsibility shared by anaesthesia department. The interns of present batches have not been taught palliative care competencies; are not competent enough to identify the need of 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 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 Department of Palliative Care under aegis of Anaesthesia Department. 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 analgesic specially concept of using opioids during palliative care of critically ill patients and holistic approach of palliative care.

Assessment tools

- Pre 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 institutional ethical committee (reference: GU/HREC/EC/2021/1837 dated 01/02/2021), this study was conducted among interns of batch 2015–2016 at tertiary care teaching hospital. A set of 20 questions (multiple choice questions) was developed and it was validated through 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 lecture, demonstration among small groups, and live demonstration on patients. Same set of questions were again given after teaching learning methods. Feedback questionnaire (Table 1) for session was also conducted at the end of the session in which each feedback response was rated from 0–4 on Likert's scale (Likert scale: 0, strongly disagree to 4, strongly agree). Pre-test results and post test results were analysed. Data was analyzed using paired 't' test as data was normally distributed. P value less than 0.05 was considered statistically significant.

Results

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

Discussion

Competency-based assessment can help learners to assess their own knowledge and training which is relevant and standardized content for education programs. It also helps in identify education needs and also where the facilitator can improve [6]. With the increase in terminally ill and incurable patients; the concept of palliative care has become increasing important in last decades, to improve the quality of life for person living with any serious

illness and facing life threatening illness. It prevents suffering through early identification, correct assessment and treatment by alleviating pain, psychological and spiritual distress using communication skill and provides care coordination.

The perception and knowledge of palliative care in interns was found to be inadequate in various studies. They have 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 considered it equivalent to pain or rehabilitation medicine and viewed it as active care of dying patients [7–9].

In present study, participating interns were previously not subjected to such type of training for developing competency about palliative care. The percentage gain in knowledge and awareness was noted 63.95% among intern 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 interventional study 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 curriculum useful for interns to acquire basic skill of pain management, communication skill, team work and increased satisfaction in patient and their family by quality of provided care.

All interns (100%) were satisfied with the overall learning about this session. Out of total 50 interns, 78% showed strong agree responses on overall learning about this session while 22% showed agree responses. 98% interns enjoyed the session whereas only 2% have neutral responses. Involvement in such serious problems, at early stage of their practice builds more confidence in them and fulfilling an ethical duty of doctor to relieve suffering and to respect person's dignity. 96% interns showed that this session has stimulated inquisitiveness to learn about palliative care, 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 earlier curriculum, even though management of pain and other symptoms are expectedly important in basic level competencies [11].

Learning palliative medicine, applied pharmacology of pain control and developing positive attitude towards caring of near the end of life is stressful and challenging [12]. Therefore, interns will be more benefitted by learning management of pain and palliative care change in the CBME based curriculum. 96% interns were satisfied with palliative care learning with regard to the quantity of learning experience and also 92% were satisfied with the quality of experience. Only 4% and 8% interns had neutral response about this respectively. Pain and difficulty in breathing; 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 impact of untreated pain, also that opioids are essential for 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, identify patient in need of palliative care, resuscitation requirement and opioid use. If interns would be competent enough for multifaceted role in practicing palliative care then it may reduce financial burden to institute by providing care closer to patient home as well as reducing unnecessary referral to higher centres.

Majority of interns (92%) agreed that this type of sessions should be regularly organized during internship programme while 4% showed neutral responses and 4% showed strongly disagree response for this. Pohl et al. [1] conducted a survey of palliative care concepts among medical students and interns while evaluating old and new curriculum of their medical university and similar to our curriculum palliative care was not included. They noted 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 medical system and various myths and misconception regarding palliative care will be busted by proper counselling by Indian medical graduate. 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 skill and development of empathetic attitude towards the patients will also help in their future interaction with patients. Over all a healthy dialogue between doctor and patient; reduces mental stress among patients, care giver and close family members which will be learned by the interns in very early stage of their

practice will help them in future for healthy/satisfactory doctor–patient relationship. Limitations of this study were small sample size and 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 of the professionals will need basic skills of various management modalities in supportive therapy to full fill the demand of palliative care which is going to be double within the next few decades. The need for conducting more such sessions regularly amongst young budding doctors including interns at very early stage to develop competency for palliative care was also observed.

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Conflict of interests

The authors declare that there is no conflict of interests.

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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 sessions should be regularly organized during internship programme.

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)

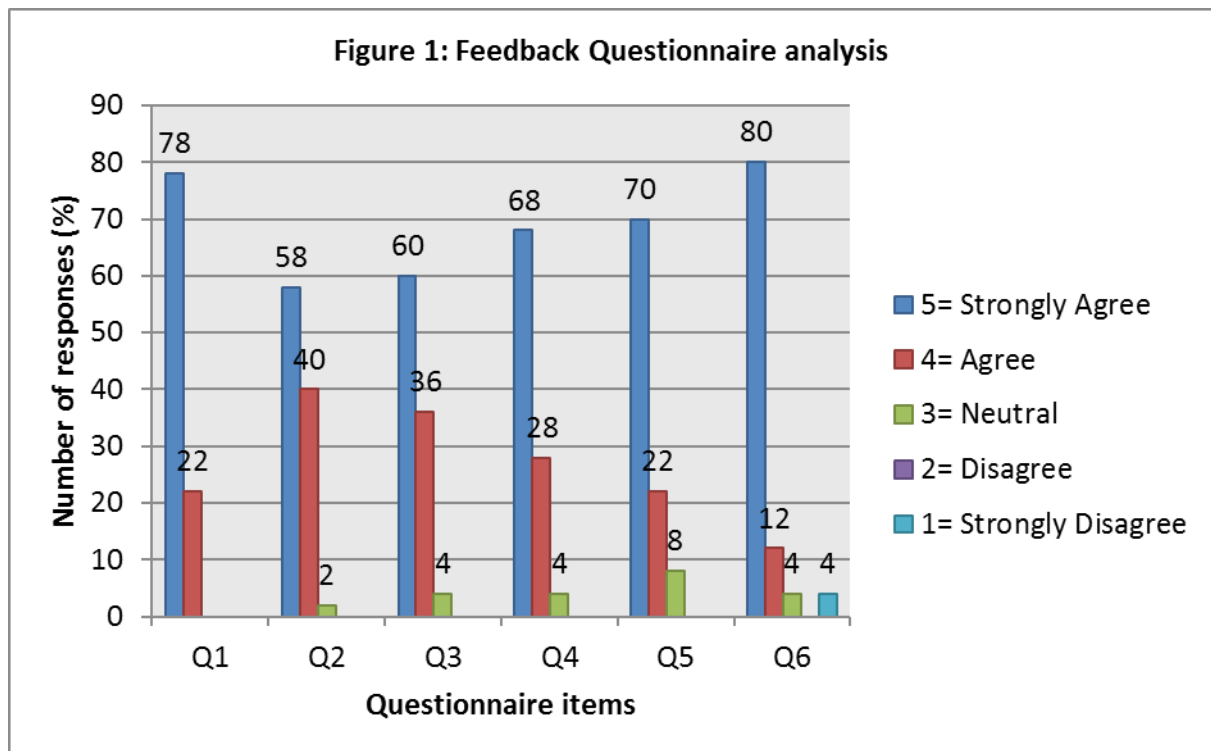


Figure 1. Feedback questionnaire analysis