



Original Article

Process of Developing Palliative Care Curriculum for Training Medical Interns in a Tertiary Care Teaching Hospital in Puducherry, India

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ABSTRACT

Objectives: The department of community medicine (DCM) has been training medical interns for palliative care in the hospital and community setting. There was no specific curriculum or course material available for training them. This study aims to develop, implement and evaluate the palliative care curriculum for training medical interns.

Materials and Methods: The present program development and evaluation of palliative care curriculum was done in the DCM, Sri Manakula Vinayagar Medical College and Hospital, Puducherry, India. We followed the Kern's six steps for curriculum development. It was done during July 2016 and May 2017. We framed expected outcomes from literature review and interviews with experts. The curriculum was delivered through small group sessions followed by hands-on exposure to hospital- and community-based palliative care programs guided by a workbook. Medical interns were given feedback on their field assignments on history taking, followed by reflection using structured template incorporated in the workbook. The reaction to the curriculum was collected from various stakeholders.

Results: Medical interns found the curriculum useful for them to acquire basic skills of pain management, communication skills and teamwork. Patients and family felt satisfied with the quality of care provided.

Conclusion: The new palliative care curriculum was well received by all the stakeholders involved. This can be adopted in similar context for training medical interns in palliative care.

Keywords: Palliative care, Curriculum, Medical interns, Workbook, Interprofessional team

INTRODUCTION

Palliative care need is increasing in India due to rising ageing population and non-communicable diseases burden.^[1-3] Although Medical Council of India (MCI) has recognised contextual modifications in the current undergraduate course for including palliative care, medical schools lack dedicated curriculum and lack of trained faculty in palliative care.^[4,5] This leaves students unprepared to acquire competencies for caring patients needing palliative care as a primary care physician.^[6] Our medical college is a 14-year-old institution admitting 150 students per

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year and is affiliated to Pondicherry University. Due to the rising need for palliative care in the community, the medical undergraduate curriculum has been revised by the university to include palliative care training. The aim was to improve the competencies of medical students for providing geriatric healthcare and management of chronic pain in addition to improving communication skills with patients (and family).^[7] The department of community medicine (DCM) in the present study setting has established community-based palliative care model in the field practice areas of the rural and urban health training centres. The evaluation of the program from the patients (and family caregivers) point of view revealed that medical interns lack structured training in palliative care.^[8] The department has been conducting regular training programs for medical students and interns in palliative care. However, we did not have a curriculum specific to our existing resources or a training material for uniform delivery of palliative care education to medical students. As a next step, we developed and evaluated the new palliative care curriculum from the students' perspective.

MATERIALS AND METHODS

Study setting and period

The present exercise of curriculum development was done in the DCM, Sri Manakula Vinayagar Medical College and Hospital, Puducherry, a tertiary care teaching hospital in South India. It was done between the period of July 2016 and May 2017. Apart from teaching medical students, the DCM is involved in providing hospital-based and community-based palliative care services to people with incurable illness in its eight field practice villages for past 3 years. The interprofessional home care team identifies patients who are eligible for palliative care in the villages and provides a holistic care (addressing physical, social, psychological and spiritual problems) for patients and their family. Our home care team consists of a staff nurse, medical social workers, driver, medical interns, postgraduates and palliative care physician.

Study design and participants

Programme development and evaluation design was decided to be followed in this study.^[9,10] We undertook a pilot run of the newly developed palliative care curriculum. The reactions of various stakeholders to the curriculum, namely medical interns (25 students), medical social workers (5 in numbers), patients (15) and their family caregivers (10) and community members (8) using level 1 of Kirkpatrick's model of program evaluation were carried out during the study period.^[9,11,12]

We followed the Kern's six steps for the process of curriculum development for palliative care training program for medical interns.^[13]

Needs assessment for the palliative care training program

The problem identification was based on the three methods, namely review of literature, our evaluation of community-based palliative care services and the requirements at workplace and the analysis of MCI and Pondicherry University curriculum. The undergraduate curriculum proposed by MCI aims that an Indian medical graduate should be competent to provide palliative care as a 'physician of first contact of the community'. However, this along with attitude, ethics and communication skills (AETCOM) in caring patients with chronic incurable illness is not routinely taught or assessed in medical schools.^[5,14] There is also a need for interprofessional education to deliver healthcare as a team member. The existing palliative care program in our institution served as an opportunity for us to evaluate the curriculum.

The palliative care training program for medical interns at the beginning of posting in DCM was incorporated as a regular feature into our routine schedule. The training program for medical students was done in collaboration with the pioneering Institute of Palliative Medicine (IPM), Kerala. It was a 1 day program with interactive sessions and we delivered the content followed at IPM. There was no field exposure and we faced difficulty in content delivery since the palliative care setting in our place was quite different from that in Kerala. The training program was handled by faculty with varied level of patient experiences and there was no assessment system for certification. Feedback obtained from medical interns mentioned the need for a course material. This created the background need for us to develop a context – specific curriculum and course material.

Development of expected outcomes

As envisioned by MCI, the main outcome of the course was to ensure that medical interns should be able to provide palliative care for patients and family empathetically when serving as a physician of first contact in the community.^[5] This outcome was planned to be achieved within the existing educational environment of our institution. We formed an interprofessional team of 10 members consisting of faculty trained in palliative care, anaesthesiologist (and expert in palliative care from IPM, Kozhikode), educational experts, community volunteer and an engineer (project coordinator of Sanjeevan, non-governmental organisation working for palliative care in Pondicherry). Interviews were done with the team to decide on the contents, objectives, learning outcomes, competencies, teaching-learning methods, assessment and feedback for the palliative care course. The content for the curriculum was decided by brainstorming and aligning the curriculum objectives with the expected outcomes given by Regulations on Graduate Medical Education, MCI and

AETCOM module [Table 1].^[5,14] The curriculum content based on consensus building was as follows:

1. Concept and scope of palliative care
2. Chronic pain management
3. Basic nursing care for a bedridden patient
4. Basic communication skills with patients
5. Ability to work as a part of an interprofessional team
6. Community participation.

Educational strategies

The curriculum objectives guided the development of educational strategies. The modes of content delivery planned were through small group sessions, using videos, role play and workbook as a course material. This will be followed by exposure to hospital- and community-based palliative care programs for observation and hands-on experience.^[15]

After attending an orientation program on workbook writing methods by an expert in medical education, the faculty team started identifying the teaching-learning methods that were appropriate to deliver the contents during the 1 day training program. The general guidelines to be followed while drafting the content of the individual chapters were discussed and finalised. Instructions included activity-based learning and field experiences in palliative care to add clarity to the context-specific workbook for training. The workbook had formative assessment in the form of multiple-choice questions at the end of each chapter. At the end of the workbook, we included a structured template for field assignment on history taking, reflection and faculty feedback. The faculty team met periodically to review the progress in drafting the topics and modified based on consensus. Content validity of the workbook was ensured by sharing the workbook with experts in palliative care and medical education and was modified based on their comments. This process was completed in 6 months

during the study period and workbook copies were printed for use.

One representation sample of real-life case scenario used in the workbook is the following:

Mrs X is a 28-year-old mother of four young children, living below poverty line in a remote village. Her husband is a chronic alcoholic. She works for daily wage in a construction site, where she sustained a fall from a height. She was confined to bed due to spinal cord injury. She approached our palliative care clinic with a Stage 4 bed sore.

This case scenario was used to sensitise the students about the role of community and healthcare workers in caring for patients with chronic illness. It also attempts to discuss the possible difficulties faced in community and ways to overcome them.

Implementation

We implemented the newly developed palliative care curriculum and the workbook was used for training one batch of medical interns on a pilot basis. It was a batch of 25 medical interns posted for March and April 2017. The interactive 1 day small group sessions on various topics decided was done on the 1st day of joining DCM. This was followed by hands-on exposure to patients with incurable illness (and their family members) in the hospital and community. During the 2 months posting in DCM, medical interns worked with medical social workers in the hospital palliative care clinic and home care team in the community. Guided by the template given in the workbook, students chose one patient either in the hospital and community. They conduct and wrote a detailed history of the chronic illness including the physical, social, psychological, spiritual problems faced, symptom management, nursing issues and challenges in communication with patient (and family).

Table 1: Expected outcomes of the palliative care program.

Expected outcomes	Competencies of Indian Medical Graduate
Able to identify patients who need palliative care	Demonstrate ability to elicit and record from the patient, and other relevant sources including relatives and caregivers, a history that is contextual to gender, age, vulnerability, social and economic status, patient preferences, beliefs and values
Able to identify the physical, social, psychological and spiritual problems faced by incurable ill patients (and family)	
Able to assess and suggest management for chronic pain	
Able to suggest and provide nursing care for a bedridden patient	Demonstrate ability to prescribe and safely administer appropriate therapies for pain and distress alleviation, rehabilitation and palliation
Able to communicate with the incurable ill patients and family	Demonstrate ability to communicate to patient in a respectful, non-threatening, non-judgmental and empathetic manner Demonstrate ability to communicate care options to patient and family with a terminal illness in a simulated environment
Able to work as a part of the interprofessional team providing palliative care	Work effectively and appropriately with colleagues in an interprofessional health care team respecting diversity of roles, responsibilities and competencies of other professionals

This exercise prompted to identify the various problems faced by a patient with chronic illness, elicit a good history and to communicate empathetically. The students were expected to suggest a plan of care for managing the patient holistically. They also wrote reflections on their interaction and learning from the history. This was followed by feedback to learners by faculty on what was done well and suggestions for improvement. This exercise was intended to increase their awareness about role of healthcare team in improving the quality of life of such patients. The outline of the palliative care training program is shown in Table 2.

Evaluation of the curriculum

We evaluated the new curriculum on Level 1 (Reaction) of Kirkpatrick's model. At the end of 2 months of curriculum implementation, we documented the reaction of the team members, namely feedback from medical interns, group interviews with medical social workers, one-to-one interviews with patients (and their family) and community members.

RESULTS

Evaluation of the curriculum is showed that medical interns had mentioned that the training program sensitised them to approach a patient with incurable illness, to acquire clinical skills (especially chronic pain management and nursing care), to acquire good communication skills (active listening, empathy) and teamwork. They were also able to appreciate the role of family and community in palliative care. Medical social workers expressed the usefulness of regular training programs conducted for them. They found the supportive supervision with timely feedback useful to improve the quality of care provided to patients (and family). They felt satisfied as they received respect and trust from the patients (and family) and community. This community-

based program motivated their social responsibility to promote community participation. The benefits received as mentioned by the patients (family and community) were the holistic care by the interprofessional team, basic medical and nursing care, healthcare for family caregivers and positive attitude of community towards patients (and family). The patients (and family) expressed gratitude to the healthcare team for providing quality care with respect and empathy unlike other healthcare professionals in nearby institutions. They suggested us to provide essential medicines for common non-communicable diseases such as diabetes and hypertension during home care visit [Table 3].

DISCUSSION

A new curriculum on palliative care was developed for training medical interns to suit our available resources and need. The curriculum focused on improving the ability of the student to identify people needing palliative care, assessment and management of chronic pain and communication skills with seriously ill patients. The reaction of the students to the new curriculum after implementation was encouraging. Medical interns reported perceived improvement in approaching a patient with incurable illness, for managing chronic pain and communication skills with patients.

Majority of patients attending our urban and rural health training centres were the elderly with chronic pain, this curriculum was able to equip medical interns with basic competencies to assess and treat chronic pain and to be a good communicator.^[16] The exposure to the hospital- and community-based palliative care setting further helped the interns to relate theoretical concepts imparted during training program to their observation in real-life settings with patients receiving palliative care.^[17] This experiential learning can help to kindle interest and make them sensitive toward seriously ill patients as a primary care physician

Table 2: Palliative care training program.

Objectives of the program: At the end of the posting in DCM, medical interns should be able to demonstrate ability to provide palliative care for patients with incurable illness and the elderly

Domains of learning	Teaching-learning methods	Duration	Assessment and feedback	Program evaluation	Certification
Cognitive	Interactive small group sessions using videos, case discussions	1 day	History taking from patients followed by feedback	Retro-pre feedback	Issued in collaboration with Sanjeevan
Affective	Direct observation of care in hospital and community setting	2 months posting at UHTC/RHTC#	Reflective writing at the end of the 2 month posting followed by feedback	Feedback using open ended questions	
Psychomotor	Involved in providing CBPC* and HBPC*				

Training team: Interprofessional team trained at Institute of Palliative Medicine, Kerala, *CBPC: Community-based palliative care, HBPC: Hospital-based palliative care, #UHTC: Urban health training centre, RHTC: Rural health training centre

Table 3: Reactions of medical interns, medical social workers, patients and community.

Medical interns	Medical social workers	Patients (and their family) and community
<p>Use of training program: The initial 1 day training program sensitised me to approach a patient with incurable illness</p> <p>Acquisition of clinical skills: I was able to provide effective care and support to patients especially pain management and nursing care under supervision</p> <p>Acquisition of communication skills: The exposure gave me an opportunity to communicate and listen to the patient and family empathetically</p> <p>Support of family and community: I was able to appreciate the role of family members and community in caring for chronically ill patients</p> <p>Teamwork: I was able to learn by observing medical social workers and staff nurse when they were providing empathetic care to patients and family</p>	<p>Use of training program: Regular training program on topics for caring for patients on palliative care helped us</p> <p>Supportive supervision: Supportive supervision and timely feedback helped us to provide good quality care</p> <p>Community recognition: We received respect and trust from the patients and community members</p> <p>Social responsibility: We had the responsibility to change the attitude of the community for being supportive to suffering patients and family through our services</p>	<p>Benefits received: We received holistic care and support from the interprofessional team We thank the team for providing us good quality free medical care such as essential medicines and nursing care The family members also received care during home care visit Community members greeted them with respect and spoke politely, and this attitude of the community members was motivating them to serve better</p> <p>Suggestions for improvement: Provide medicines for common non-communicable diseases such as diabetes and hypertension</p>

in their future career.^[18,19] Reflective writing at the end of posting and one-to-one feedback were found to be beneficial to student learning and to the curriculum. Studies have shown that incorporation of palliative care curriculum has demonstrated improvement in perceived knowledge, attitude and skills of medical undergraduates toward geriatric and dying patients.^[20,21]

The strengths of the present program were that the new curriculum was integrated with the existing interns' training program in DCM. The other strengths were good support from management, different teaching-learning methods adopted, a well-functioning palliative care program in the hospital and community run by trained interprofessional team. The limitations were difficulty in providing attention to all the students and feedback on their reflection due to the shortage of trained facilitators. We have been providing palliative care as one of the field activities of DCM with limited resources available in terms of vehicle availability for field visit, essential drugs and consumables for patient care. These factors along with ensuring protected time for field exposure and feedback for all the interns were challenging. The program could be made more sustainable if the medical social workers can be trained to provide feedback to students during home care visits. The assessment of the student competencies in providing palliative care could be improved by conducting objective structured clinical examination (OSCE) at the exit of the program using simulated patients.

The advantage with OSCE is that AETCOM of interns also can be assessed.

CONCLUSION

The present palliative care curriculum facilitated learning of medical interns in the local context. There is an on-going need for revision of the curriculum to address the challenges faced. The palliative care program can be expanded to include major clinical departments and training more faculties can help to ensure continuous student exposure and assessment at our institution level. This curriculum could also motivate nearby medical colleges in the region to develop field exposure program for medical interns in addition to classroom-based palliative care training.

Declaration of patient consent

Patient's consent not required as there are no patients in this study.

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Nil.

Conflicts of interest

There are no conflicts of interest.

REFERENCES

1. World Health Organization. Non-Communicable Diseases Country Profiles 2011. Geneva: World Health Organization; 2019. Available from: http://www.who.int/publications/2011/9789241502283_eng.pdf. [Last accessed on 2019 Nov 12].
2. Elderly in India-Profile and Programmes. Central Statistics Office, Ministry of Statistics and Programme Implementation Government of India; 2016. Available from: http://www.mospi.nic.in/sites/default/files/publication_reports/elderlyinindia_2016.pdf. [Last accessed on 2019 Nov 12].
3. World Health Organization. Global Atlas of Palliative Care at the End of Life. Geneva: World Health Organization; 2014. Available from: http://www.who.int/nmh/global_atlas_of_palliative_care.pdf. [Last accessed on 2020 Feb 10].
4. Bhatnagar S, Patel A. Effectiveness of the certificate course in essentials of palliative care program on the knowledge in palliative care among the participants: A cross-sectional interventional study. *Indian J Palliat Care* 2018;24:86-92.
5. Medical Council of India. Regulations on Graduate Medical Education; 2012. Available from: <http://www.iafmonline.in/data/circular-notifications/revise-gme-2012.pdf>. [Last accessed on 2020 Jul 08].
6. Sadhu S, Salins NS, Kamath A. Palliative care awareness among Indian undergraduate health care students: A needs-assessment study to determine incorporation of palliative care education in undergraduate medical, nursing and allied health education. *Indian J Palliat Care* 2010;16:154-9.
7. Pondicherry University. M.B.B.S Regulations and Syllabus in accordance with Medical Council of India and Regulations on Graduate Medical Education, 1997 (AMENDED UPTO 10th March 2017). Puducherry: Pondicherry University; 2017. Available from: <http://www.pondiuni.edu.in/sites/default/files/downloads/mbbs.pdf>. [Last accessed on 2020 Sep 02].
8. Vinayagamoorthy V, Suguna E, Dongre AR. Evaluation of community-based palliative care services: Perspectives from various stakeholders. *Indian J Palliat Care* 2017;23:425-30.
9. Dent JA, Harden R, Hunt D. A Practical Guide for Medical Teachers. 4th ed. London: Elsevier Health Sciences; 2013. p. 374-5.
10. Ganapathy K, Dongre AR. Process of developing of community based medical education programme curriculum in Puducherry, India. *J Clin Diagnostic Res* 2018;12:1-5.
11. Frye AW, Hemmer PA. Program evaluation models and related theories: AMEE Guide No. 67. *Med Teach* 2012;34:e288-99.
12. Smidt A, Balandin S, Sigafoos J, Reed VA. The Kirkpatrick model: A useful tool for evaluating training outcomes. *J Intellect Dev Disabil* 2009;34:266-74.
13. Kern DE, Thomas P, Howard D. Curriculum Development for Medical Education. A Six-Step Approach. Baltimore, London: The John Hopkins University Press; 1998.
14. Medical Council of India. Attitude, Ethics and Communication Competencies for the Indian Medical Graduate. New Delhi: Medical Council of India; 2018. Available from: https://www.old.mciindia.org/ug-curriculum/aetcom_book.pdf. [Last accessed on 2019 Jun 20].
15. Jeba J, Atreya S, Chakraborty S, Pease N, Thyle A, Ganesh A, *et al.* Joint position statement Indian association of palliative care and academy of family physicians of India-the way forward for developing community-based palliative care program throughout India: Policy, education, and service delivery considerations. *J Family Med Prim Care* 2018;7:291-302.
16. Kirubakaran S, Dongre AR. Chronic musculoskeletal pain among elderly in rural Tamil Nadu: Mixed-method study. *J Family Med Prim Care* 2019;8:77-85.
17. Philip S, Remlabeevi A. Teaching community-based palliative care to medical students. *Med Educ* 2010;44:1136-7.
18. Block SD, Bernier GM, Crawley LM, Farber S, Kuhl D, Nelson W, *et al.* Incorporating palliative care into primary care education. National consensus conference on medical education for care near the end of life. *J Gen Intern Med* 1998;13:768-73.
19. Centeno C, Rodríguez-Núñez A. The contribution of undergraduate palliative care education: Does it influence the clinical patient's care? *Curr Opin Support Palliat Care* 2015;9:375-91.
20. Gibbins J, McCoubrie R, Maher J, Forbes K. Incorporating palliative care into undergraduate curricula: Lessons for curriculum development. *Med Educ* 2009;43:776-83.
21. Velayudhan Y, Ollapally M, Upadhyaya V, Nair S, Aldo M. Introduction of palliative care into undergraduate medical and nursing education in India: A critical evaluation. *Indian J Palliat Care* 2004;10:55-60.

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