

Original Research Article

AWARENESS OF PALLIATIVE CARE AMONG INDIAN MEDICAL GRADUATES IN A TERTIARY MEDICAL CARE CENTRE OF WESTERN MAHARASHTRA

Khushi Tank¹, Aastha Pathak²

¹Intern, MIMER Medical College, Talegaon Dabhade, Pune, Maharashtra, India

²Professor, Department of Community Medicine, MIMER Medical College, Talegaon Dabhade, Pune, Maharashtra, India

Received : 17/07/2026
Received in revised form : 13/08/2026
Accepted : 29/08/2026

Corresponding Author:

Dr. Aastha Pathak,
Professor, Department of Community
Medicine, MIMER Medical College,
Talegaon Dabhade, Pune, Maharashtra,
India.
Email: dr.aastha@mitmimer.com

DOI: 10.70034/ijmedph.2026.3.699

Source of Support: Nil,
Conflict of Interest: None declared

Int J Med Pub Health
2026; 16 (3); 4536-4540

ABSTRACT

Background: In two decades, India's aging population and rising non-communicable diseases have increased demand for palliative care. Since 1980s, hospice and palliative care have expanded through various organizations but it is restricted to larger cities. Due to large aging population, poverty and lack of access to health care, community based care is much needed.⁽³⁾ Despite WHO recommendations to integrate Palliative care in Basic medical training, ^(4,5,6) it is almost non-existent in MBBS curriculum. Hence, most healthcare professionals lack knowledge and confidence to deliver palliative care. ⁽⁸⁾ This study aims to understand awareness of palliative care among IMGs. Aims and objective is to assess knowledge about palliative care among IMGs of a Tertiary Medical Centre in Western Maharashtra.

Materials and Methods: A Cross- sectional study was carried out among 121 IMGs. Data was analysed using percentages, proportions and Chi square test.

Results: Mean age 23 years; 52% females, 79% urban, 81% nuclear families. > 85% students had good knowledge about palliative care. 95% agreed caregiver care is important. 50% believed that Fortwin + Phenargan is best for pain relief. 63.6% believed Morphine causes addiction. 76.9% felt resuscitation is necessary. 77.9% students supported joint patient / family in DNR decision. 59% believed nurses should be involved in patient care. 47.1% knew about bereavement care.

Conclusion: Most graduates had baseline awareness of palliative care, but specific knowledge was highly variable. There is need for structured, competency-based palliative care training for undergraduates to equip future physicians to manage terminally ill patients and end-of-life care.

Keywords: Palliative care, pain, IMG.

INTRODUCTION

The World Health Organization (WHO) describes 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]

India is a developing country, but over the past 20 years, increase in aging population and diseases like cancer and other non-communicable diseases are becoming more common. The need for palliative care has therefore immensely increased.^[2]

Palliative care started only in the 1980s. Since then, hospice and palliative care have developed through efforts of various NGOs and other organizations. Even today, Palliative care is given mostly in the larger cities and regional cancer centres and in the state of Kerala.^[2] In India, because of the large aging population, poverty and lack of access to care, there is also a need for Community based palliative care. Hence Palliative care in India still has a long way to go.^[3]

All over the world, Palliative and end of life care is recognized as an important and integral component of medical education.^[4] WHO has proposed to integrate Palliative care in Basic medical courses.^[5,6] Also the NMC has modified Undergraduate

curriculum to include Palliative care.^[7] Despite these efforts, training in Palliative care is almost non-existent in MBBS curriculum. Various studies have shown that most healthcare professionals lack knowledge and confidence in caring for patients needing palliative care.^[8]

This study aims to understand awareness of palliative care among MBBS students and provide them with a more focused training in palliative care, if needed to improve their knowledge and skills in a medical college in Western Maharashtra.

Aims and objective: To assess the knowledge about palliative care among Indian Medical Graduates of a Tertiary Medical Centre in Western Maharashtra.

MATERIALS AND METHODS

Study Type: Cross- sectional study

Sampling Technique: Purposive sampling

Data collection: The data was collected with the help of a pre-validated pre-structured questionnaire developed by the Indian Association of Palliative care.

The Indian medical graduates were asked to fill out the questionnaire after their consent was taken. Only those participants who were willing to participate were included in the study.

Data thus obtained was analysed through appropriate statistical methods.

Study Set UP:

1. A pre-validated, pre-structured questionnaire developed by the Indian Association of Palliative care was used for the study.
2. The participants were informed about the study and a written informed consent was taken from all the subjects before taking the survey.
3. The participants were given sufficient time to fill the questionnaire.

RESULTS

Table 1: Demographic details of study participants

Age	Percentage
22-24	76%
>24	12%
Did not disclose	12%
Gender	
Females	52%
Males	47%
Place of residence	
Urban	79.3%
Rural	20.7%
Monthly income	
Upto 50,000/-	35.6%
50,000-1,00,000/-	38.8%
Above 1,00,000/-	25.6%
Type of family	
Nuclear	81%
Joint	17.4%
Extended	1.6%

A total of 121 participants participated in the study. Out of these, majority of the participants i.e 41.3% were 23 years old and 28.1% were 24 years old. 52% were females and 47% were males and some preferred not to answer. 79.3% of the participants belonged to urban areas and 20.7% were from rural areas.

When asked about the educational qualifications of the parents (head of the family), majority had parents who were graduates (48.8%); 19% were

postgraduates and 14% were professionals. 60% of the study participants had a monthly income between 25 thousand rupees and 1 lakh rupees.

Most of the participants belonged to the nuclear family type. (81%). 71.9% of subjects had 4-6 members in family. 16.5% had 1-3 members and 1.7% had more than 13 members in their family.

1. General Awareness and Attitudes: 95.9% participants believed that caregivers are as important as patients. Only 1.6% disagreed.

Table 2: Awareness about Palliative care in different patient groups

Patient group	Participants' agreement (%)
Advanced cancer patients	95%
All chronically ill patients	93.4%
HIV/AIDS patients	82%
Chronic non- malignant conditions(e.g End stage heart failure)	88.5%

The above table shows that majority of the participants had good awareness about palliative care. 95% participants agreed that palliative care is essential in advanced cancer patients. 93.4% answered that palliative care is necessary in all

chronically ill patients. 82.0% agreed that palliative care is important for HIV /AIDS patients while 8.2% disagreed. 88.5% agreed that palliative care is mandatory for chronic non-malignant conditions like end stage heart failure while 7.4% disagreed.

79.5% confirmed palliative care should begin at the time of diagnosis of a life threatening illness. 13.9% responded that it should not be given at diagnosis while 6.6% were unsure.

95.9% i.e. vast majority agree that caregiver care is as important as patient care.

Thus, most of the participants recognise the relevance of palliative care not only for cancer but also for HIV/AIDS, chronic heart failure, and other non-malignant diseases.

2. Pain Management Knowledge: 82.0% participants agreed that pain is indeed a vital symptom, while 9.0% either disagreed or didn't know. This suggests a strong agreement that pain is a vital symptom. 84.3% believed that the severity of pain determines the method of treatment while 7.4% disagreed and 8.3% were unsure. 50.0% participants falsely believed Fortwin+Phenargan is most effective drug combination for Cancer pain. 40.2% participants were unsure, and only 9.9% answered correctly. 84.4% participants believed the use of placebos in managing pain is appropriate in some cases. 5.7% disagreed while 9.9% didn't know. Misunderstandings persist regarding the use of placebos in managing pain and other symptoms in terminal patients.

59.5% participants wrongly believed Morphine users don't need NSAIDs like Diclofenac or Paracetamol. 14.9% answered correctly that they do need NSAIDs in addition to morphine while 25.6% were unsure suggesting a mixed pattern of responses on whether Morphine users need NSAIDs. indicating a need for education about the topic in medical community.

63.6% participants believed Morphine causes addiction in terminally ill patients. 28.9% believed morphine causes death in terminally ill patients while 51.2% believed that morphine does not cause death in all dying patients. 38.8% agreed that Morphine always causes the side effects of nausea/vomiting while 35.5% disagreed and 25.6% were unsure about the side effects of Morphine in terminally ill patient care.

3. Terminal Care and Ethical Beliefs: 71.9% believed that intubation should be done in advanced lung metastasis patient if the patient is having breathlessness, 16.5% disagreed on that.

86% were aware of problems and practical care of patients with colostomy done as a mode of palliative care. 7.4% were not aware and 11.6% were unsure.

82.6% agreed oxygen supplementation may help with last difficult breaths and should be given to the patient while 9.1% disagreed. Many correctly recognise that oxygen may help in last breaths and that intubation is not always necessary in lung metastasis.

90.9% participants were in favour of communicating the prognosis clearly to the patient.

69.4% participants favoured telling the prognosis only to the family- indicating a possible contradiction in beliefs.

Resuscitation in advanced cancer patients: 76.9% participants agreed that resuscitation must always be performed if a patient is crashing irrespective of advanced metastatic cancer disease while 7.4% disagreed and believed resuscitation is not to be performed in advanced diseases.

Misunderstandings persist regarding mandatory resuscitation in terminal cancer patients.

77.9% participants supported including both the patient and the family in Do Not Attempt Resuscitation (DNAR/DNR) decision making. 12.3% were opposed to that.

Most believed that the prognosis should be openly shared with the patient. Strong support to the fact that DNAR decisions should be made cumulatively by patient and relatives.

4. Role of Nurses: 59.5% participants believed that nurses should only handle physical care and the psychological issues must be dealt by psychiatrist or other professionals. 31.4% disagreed on that and agreed on involving nurses in dealing with psychological issues of terminally ill patients.

57% participants believed that nurses should stick only to physical care and the social issues must be dealt by social worker or other professionals. 33.9% disagreed and believed in involving nurses in dealing the social issues of the patients.

Many also understand that nurses also play a part in psychological and social issues of patients undergoing treatment for terminally advanced conditions.

5. Bereavement Care: 50.4% participants knew what bereavement meant while 49.6% did not know what bereavement meant.

47.1% participants were aware of the concept of bereavement care and its importance in palliative care for terminally ill patients while 52.9% were not aware of bereavement care concept.

This indicates a moderate level of understanding about the concepts of bereavement and bereavement care in terminally ill patients, highlighting the need for more education and sensitisation of the concept.

DISCUSSION

In our study the mean age was 23 years and 52% were females. This was similar to the study by Naresh Kumar et al in which the mean age was 21.10 ± 0.94 years and 55.8% were females. Majority (97.3%) had awareness about palliative care.^[9]

In our study most of the participants, demonstrated good knowledge regarding palliative care. 95.9% participants were aware that Palliative care is essential for diseases like Cancer, 94.3 % said it is for Chronic diseases and 82% answered HIV; which is in contrast to the study by Naresh Kumar et al in which Cancer (88.6%), AIDS (28.6%), Spinal trauma (11.6%), XDRTB (5.6%) and Coma (4.5%) were mentioned as diseases that need palliative care.^[9]

There does not appear to be a significant association between gender of participants and knowledge regarding palliative care. Both male and female participants demonstrated similarly high levels of knowledge across all items. There was no significant relation seen between income groups and place of residence with awareness of palliative care. In our study, 79.5% participants correctly identified the appropriate timing for initiating palliative care which is more than the study by V. Pandey et al in which 60.0% of participants answered correctly,^[10] and also more than that in the study by N Kumar et al,^[9] in which 85% did not know the correct time for initiating palliative care;

95.9% i.e. vast majority agree that caregiver care is as important as patient care which is similar to the response given by participants in the study by V. Pandey et al,^[10] in which 95.3 % participants answered that care giver care is as important as patient care.

A Chi-square test of independence was performed to examine the association between gender of participants and the belief that palliative care should start at the time of diagnosis of a life-threatening illness. There was no statistically significant association between sex of participants and participants' responses, $\chi^2(2, N = 110) = 1.73, p = 0.42$

In our study 50% of the participants believed that Fortwin and Phenargan is the best combination for Cancer pain relief which is in contrast to the study by Naresh Kumar et al in which 90 % believed that Morphine is best for Cancer pain relief.^[9]

In this study, 63.6% believed Morphine causes addiction in terminally ill patient; which is similar to the study by Manuja et al. in which, 66.6% interns had felt that morphine produces addiction and tolerance,^[11] and also in the study by Sadhu S et al.^[8] In this study, 38.8% participants replied that Morphine causes the side effects of nausea/vomiting while 35.5% disagreed and 25.6% were unsure about the side effects of Morphine in terminally ill patient care which is different from the answers given by participants in the study by Kulkarni VR et al,^[12] in which 83.33% participants answered that constipation and respiratory distress were the main side effects of morphine.

86% were aware of problems and practical care of patients with colostomy done as a mode of palliative care which is similar to the findings in the study by V. Pandey et al in which 90.8% interns knew about care and challenges related to colostomy patients.^[10]

In our study, 76.9% participants agreed that resuscitation must always be performed if a patient is crashing irrespective of advanced metastatic cancer disease while 7.4% disagreed and believed resuscitation is not to be performed in advanced diseases which slightly more than the study by Sadhu S et al in which 61% participants agreed that resuscitation should be performed in advanced cancer disease,^[8] but it is in contrast with the study by R Citil et al in which only 34. 8% participants

felt that CPR should be performed in end stage cancer patients and 9% believed that it should not be performed.^[13]

77.9% participants supported including both the patient and the family in Do Not Attempt Resuscitation (DNAR/DNR) decision making which is more than in the study by Sakshi Sadhu et al,^[8] in which only 60.8% participants felt that both patient and the family should be involved in the decision of Do not resuscitate. (DNR)

90.9% participants favoured communicating the prognosis clearly to the patient which is more than that in the study by Sujatha R et al in which 80% of medical participants felt that prognosis should be clearly told to the patient.^[14]

In the study by Sakshi Sadhu et al 60.7% participants feel that disease prognosis should only be communicated to the family,^[8] which is similar to that in this study in which 69.4% favoured telling the prognosis only to the family which shows a contradiction in beliefs.

When relation between gender of participants and communication to family was observed, it was found that it is not statistically significant. (χ^2 (Chi-square) = 0.16 ;(df) = 2 p-value ≈ 0.92 Since $p = 0.92 > 0.05$)

In a study by N. Kumar et al,^[9] 87.5% participants believed that family members should be involved in patient care but in our study 59% interns believed that nurses should handle the physical aspect of the care. This is similar to the result in a study by V. Pandey et al,^[10] in which 76.8% interns answered that nurses should look after the physical aspect of the disease.

In the present study, 47.1% participants were aware of the concept of bereavement care and its importance in palliative care for terminally ill patients, this is similar to the results in the study by N. Kumar et al in which 33% participants were aware of bereavement care,^[9] but is less than the results found in the study by V. Pandey et al in which 70.0% were aware of the concept of bereavement.^[10]

When Chi-square test, was applied it was found that there is no statistically significant association between gender of participants and bereavement care knowledge/response. ($\chi^2 = 0.03$ p ≈ 0.87) This indicates that responses about bereavement care did not differ significantly between males and females.

CONCLUSION

Most participants had a baseline awareness of palliative care, but their specific knowledge was highly variable. Deficiencies were evident in pain management drugs and their adverse effects. Gaps were also seen in family communication, resuscitation guidelines, the role of the nursing team and bereavement care. This highlights the need for structured, competency-based palliative care training within undergraduate medical education.

Including Palliative care training is essential to equip future physicians to manage terminally ill patients and provide effective end-of-life care.

REFERENCES

1. WHO -<http://www.who.int/cancer/palliative/definition/en>
2. Khosla D, Patel FD, Sharma SC. Palliative care in India: Current progress and future needs. *Indian J Palliat Care*. 2012;18(3):149-54.
3. Guidelines for home based palliative care. IAPC and Cansupport. New Delhi. Developed under GOI and WHO collaborative programme.
4. S. Mason, P. Paal, F. Elsner, et al. Palliative care for all: an international health education challenge *Palliat Support Care*, 18 (6) (2020 Dec), pp. 760-762
5. Worldwide Hospice Palliative Care Alliance. *Global Atlas of Palliative Care Geneva*; (second ed.) (2020);
6. S. Bhatnagar, A. Patel ; 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*, 24 (1) (2018 Jan)
7. S. Elayaperumal, V. Venugopal, A.R. Dongre, S. Kumar; Process of developing palliative care curriculum for training medical interns in a tertiary care teaching hospital in Puducherry, India *Indian J Palliat Care*, 27 (2) (2021), pp. 269-274.
8. Sakshi Sadhu, Naveen Sulakshan Salins,1 and Asha Kamath; 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; *IJPC* 2010 Sep-Dec; 16(3): 154–159.
9. Kumar PN, Srinivasan S, Latha A. Knowledge and perceptions in palliative care among undergraduate medical students in Puducherry, South India. *Clinical Epidemiology and Global Health*. 2022;17:101138. doi:10.1016/j.cegh.2022.101138.
10. Pandey V, Kumar S, Arya K, Mitra B. Knowledge and attitude towards palliative care among medical interns in a tertiary care centre in Central India. *Cureus*. 2026 Mar 9;18(3):e104896. doi:10.7759/cureus.104896.
11. Aggarwal R, Manuja S, Ansari SF. Awareness about palliative care among interns in a medical college in Punjab. *J Adv Med Dent Sci Res*. 2019;7(6):1-5.
12. Kulkarni VR, Kulkarni RV. Awareness of palliative care medicine among medical and healthcare students. *Int J Adv Med* 2017;4:981-4.
13. Çitil R, Okan İ, Önder Y, Çeltek NY, Süren M, Bulut YE, et al. Evaluation of the awareness of medical students on palliative care. *Bezmialem Science*. 2018;6:100-107. doi:10.14235/bs.2018.1582
14. Sujatha R, Jayagowri K. Assessment of palliative care awareness among undergraduate healthcare students. *J Clin Diagn Res*. 2017 Sep;11(9):JC06-JC10.