

Assessment of Palliative Care Awareness among Undergraduate Healthcare Students

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ABSTRACT

Introduction: Palliative care knowledge is being given meager importance in the curriculum of medical and other allied medical sciences. It is vital that all health care practitioners including medical, pharmacy, physiotherapy and nursing are aware and apply the best principles of palliative care.

Aim: To assess the awareness of palliative care among undergraduate students of medical, nursing, pharmacy and physiotherapy.

Materials and Methods: The study population included total of 200 students. Among 200 students, 50 were from each of the colleges of medicine, nursing, pharmacy and physiotherapy. After obtaining informed consent, questionnaire was given. The questionnaire contained the sociodemographic profile and 35 statements under nine groups, for which the respondents were expected to answer one out of the three options (Yes,

No, Don't know). The groups of statements deal with palliative care definition, its philosophy, communication issues, non-pain symptoms, medications use and context of application of palliative care.

Results: It was found that less than 20% of nursing students were unaware of palliative care. Among the undergraduates of college of pharmacy, more than 50% had no knowledge of palliative care. More than 80% of physiotherapy, nursing and medical students agree that death should occur without any pain or symptoms. The need of palliative care was well understood by more than 70% of students of physiotherapy, pharmacy, nursing and medical colleges.

Conclusion: Basic knowledge about palliative care was inadequate among the undergraduate students related to healthcare.

Keywords: Knowledge, Questionnaire-based study, Undergraduate medical education

INTRODUCTION

The number of patients with cancer and other life-limiting diseases continue to increase. The last decades have seen a rapid growth in the concern for the severely ill and dying patients. Palliative care is a methodology that improves the quality of life of patients and solves the problems associated with life-threatening illness, faced by the patients and their families. The prevention and relief of suffering can be achieved through early diagnosis, assessment and treatment not restricting to physical pain and other problems but also in other aspects like psychological, social, etc., [1]. Palliative care is not restricted to cancer or terminally ill patients alone. Palliative care also includes diseases that last for many years and other life-threatening conditions. Health professionals function largely within a culture that focuses on cure, and many avoid the patient who is dying in spite of a significant population suffering from end-of-life illnesses.

The significance of palliative care in the undergraduate syllabus of health professionals has been well recognized in the western world. Following this, it was introduced in the St John's National Academy of Health Sciences [2]. Most countries have led to the establishment of palliative care services in a variety of settings with varied staff composition and different quality standards. Palliative care education at medical schools has also increased within the last years [3]. However, undergraduate education in palliative care shows wide variation and there is no standardized core curriculum. There is considerable gap in the knowledge of palliative care among undergraduate students in our country according to Sadhu S et al., [4].

Palliative care is a multidisciplinary approach. A palliative care team may consist of a general physician, specialist, nurses, local pharmacist, medical practice social worker, physiotherapist and many others. In order to provide effective care, the members of the team need to have a common ideal and understanding of the role

and contribution each of them have to make in order to achieve successful outcomes.

This study aims to assess the level of adequacy in various aspects of palliative care among undergraduate students of medicine, nursing, pharmacy and physiotherapy. This study may thus pave a way to include palliative care in the syllabus of undergraduate health care students.

MATERIALS AND METHODS

This cross-sectional questionnaire based study was conducted between November 2016 and March 2017. After obtaining approval from the Institutional Human Ethical Committee, questionnaires were given to final and pre-final year students of medicine, nursing, physiotherapy and pharmacy studying in a tertiary care teaching hospital in Southern India. A written informed consent form was given and those who were willing to participate in the study were included in the study and those not willing to participate were excluded. A total of, 200 students, 50 students each from college of nursing, physiotherapy, pharmacy and medicine gave consent to participate in the study.

Sample size calculation was done according to the formula $4pq/d^2$. (p-prevalence of awareness of palliative care from previous studies; q-100 minus prevalence percentage; d-precision which can range from 10%-20%). The prevalence of awareness of palliative care from previous studies was around 60%. The precision was kept around 15% and the calculation provided a sample size of 145.4. We included a few more participants to improve the strength of the study. The questionnaire contained the sociodemographic profile and 35 statements under nine groups for which the respondents were expected to answer one of three options (Yes, No, Don't know). The groups of statements deal with palliative care definition, its philosophy, communication issues, non-pain

symptoms, medications use and context of application of palliative care. A pilot study conducted among a few students before the beginning of the study and the data was used for validation of the questionnaire. According to discussion with our statistician, the internal consistency was good and the Cronbach's alpha value was found to be 0.867.

STATISTICAL ANALYSIS

Statistical analysis was done using SPSS version 19.0 and the results were expressed in frequencies and percentages.

RESULTS

A total of 200 students (50 students each from college of nursing, physiotherapy, pharmacy and medicine were included in the study) comprising 112 (56%) final years and 88 (44%) pre-final years were included in the study. Of the entire study population of 200, 155 (77.5%) were females while 45 (22.5%) were males.

As the concepts of nursing deals with patient care, more than 80% had rightly stated the prime definition of palliative care. Two-fifth of the physiotherapy students were not aware that palliative care is active care of dying, less than one fourth of pharmacy students only knew about it while 60% of the medical students agreed the same. More than 75% of the physiotherapy and 68% of medical students assumed that palliative care was about pain only which was not true. Among the undergraduates of college of pharmacy, more than 50% had no knowledge of palliative care [Table/Fig-1].

It was appreciable that only less than 20% of nursing students had no idea about the philosophy of palliative care. About 40% of the physiotherapy students and 66% of nursing students agreed that dying was a normal process. About 54% of nursing students were aware and half of physiotherapy students were not aware that palliative care was not to hasten death but three fifth of medical students were clear about it. About 62% physiotherapy students and nursing students wrongly assumed that palliative care prolongs life. Less than two-fifth of pharmacy students had aptly understood the philosophy of palliative care while nearly 50% had no knowledge about it [Table/Fig-2].

Nursing students who were unaware of the need of palliative care constitute about less than 20%. Nearly 78% of physiotherapy students, 88% of nursing students and 80% of medical students correctly agreed the need in patients suffering from metastatic cancer with pain. More than half of the medical students as well as half of pharmacy students falsely agreed that all dying patients require palliative care. Nearly half of pharmacy students had no knowledge on those who were in need of palliative care [Table/Fig-3].

The symptoms experienced by patients undergoing palliative care other than pain were well known to 58%-74% of the physiotherapy students except delirium for which 38% of them had no idea about it. Delirium and vomiting as non-pain symptoms were rightly known to more than 70% and 56% of medical students respectively. Among the nursing students, occurrence of delirium and vomiting

was known to 58%-74% while constipation and breathlessness was known to 54%-72% of students. Not even 50% of pharmacy students identified the non-pain symptoms of palliative care while more than half of them never understood about these symptoms [Table/Fig-4].

About 80% of physiotherapy, nursing and medical students agreed that the prognosis should be conveyed clearly and the patient's choices or wishes should be considered which respects the patient's autonomy. The consequence of lacking trust due to poor communication was known to half of physiotherapy students but less than 20% of pharmacy students. About 86% of nursing students are conscious about clear explanation and about 90% agree that the patient's wishes and interests regarding the course of treatment should be given consideration. Nearly half of the pharmacy college students had no clue about the communication of prognosis while in medical college, only less than 30% of them were unaware and less than 40% had wrong ideas [Table/Fig-5].

It is significant that only less than 10% of nursing students had no knowledge about communication and team members involved in palliative care. About 92% of physiotherapy students were aware that medical social workers, nurses and occupational therapists form the team of palliative care while only less than 20% were not aware. In the nursing college, everyone had included nurses into the team and 90% included medical social workers. More than 60% of medical students had included all the four professionals into the team. In case of pharmacy college, more than 50% aptly included medical social workers and nurses in the team. Half of the physiotherapy students, 66% of nursing students and 42% of pharmacy students included radiotherapists into the team which is false but medical students had seldom included [Table/Fig-6].

Regarding the knowledge of death, being pain-free and symptom-free component of death was right according to 82% of physiotherapy, 86% of nursing and 88% of medical students. Nearly half of nursing students and about 40% of physiotherapy and medical students agreed that one should be prepared mentally, physically, socially and medically to die but more than 50% of pharmacy students had no knowledge about it [Table/Fig-7].

Approximately, 80% of physiotherapy and nursing students had a false opinion that morphine relieves all kinds of pain while nearly half of them agreed that morphine improves the quality of life. Less than 30% of nursing, medical and pharmacy students only agreed that morphine relieves breathlessness in heart failure patients. Only less than two-fifth of pharmacy students knew about the medical uses and side effects of morphine [Table/Fig-8].

Awareness about the side effects of morphine was higher in nursing students among whom less than 10% were unaware. Drowsiness, as one of the side effects of morphine was known to about 80% of physiotherapy students and nearly half of nursing and medical students. Comparatively less number of pharmacy students was aware and correct. Nearly half of the pharmacy students were

Palliative care is	Correct (%)				Wrong (%)				Don't know (%)			
	P	N	M	PH	P	N	M	PH	P	N	M	PH
1. Pain medicine (Ans: NO)	2 (4)	4 (8)	12 (24)	8 (16)	42 (84)	46 (92)	34 (68)	18 (36)	6 (12)	0 (0)	4 (8)	19 (38)
2. Geriatric medicine (Ans: NO)	9 (18)	18 (36)	25 (50)	12 (24)	31 (62)	30 (60)	16 (32)	5 (10)	10 (20)	2 (4)	9 (18)	33 (66)
3. Rehabilitation medicine (Ans: NO)	4 (8)	32 (64)	17 (34)	3 (6)	41 (82)	2 (4)	23 (46)	17 (34)	5 (10)	16 (32)	10 (20)	30 (60)
4. Active care of the dying (Ans: YES)	20 (40)	41 (82)	30 (60)	11 (22)	10 (20)	7 (14)	6 (12)	7 (14)	20 (40)	2 (4)	14 (28)	32 (64)

[Table/Fig-1]: Palliative care is- Pain medicine/Geriatric medicine/Rehabilitation medicine/Active care of the dying.

Figures in paranthesis are in percentage.

[P:PSG College of Physiotherapy, N:PSG College of Nursing, M: PSG Institute of Medical Sciences and Research, PH: PSG College of Pharmacy]

Philosophy of palliative care	Correct (%)				Wrong (%)				Don't know (%)			
	P	N	M	PH	P	N	M	PH	P	N	M	PH
1. Affirms life (Ans: YES)	19 (38)	23 (46)	17 (34)	17 (34)	7 (14)	17 (34)	18 (36)	10 (20)	24 (48)	10 (20)	15 (30)	23 (46)
2. Recognises dying as a normal process (Ans: YES)	20 (40)	33 (66)	16 (32)	14 (28)	13 (26)	16 (32)	17 (34)	12 (24)	17 (34)	1 (2)	17 (34)	24 (48)
3. Hastens death (Ans: NO)	13 (26)	27 (54)	31 (62)	15 (30)	12 (24)	19 (38)	4 (8)	5 (10)	25 (50)	4 (8)	15 (30)	30 (60)
4. Prolongs life (Ans: NO)	9 (18)	19 (38)	20 (40)	9 (18)	31 (62)	31 (62)	21 (42)	20 (40)	10 (20)	0 (0)	9 (18)	21 (42)

[Table/Fig-2]: Philosophy of palliative care- Affirms life/Recognises dying as a normal process/Hastens death/Prolongs life.

Figures in paranthesis are in percentage.

[P: PSG College of Physiotherapy, N: PSG College of Nursing, M: PSG Institute of Medical Sciences and Research, PH: PSG College of Pharmacy]

Palliative care is needed for	Correct (%)				Wrong (%)				Don't know (%)			
	P	N	M	PH	P	N	M	PH	P	N	M	PH
1. All dying patients (Ans: NO)	10 (20)	20 (40)	16 (32)	7 (14)	31 (62)	28 (56)	27 (54)	25 (50)	9 (18)	2 (4)	7 (14)	18 (36)
2. Metastatic cancer with uncontrolled pain (Ans: YES)	39 (78)	44 (88)	40 (80)	16 (32)	3 (6)	2 (4)	3 (6)	11 (22)	8 (16)	1 (2)	7 (14)	23 (46)
3. End stage heart failure (Ans: YES)	30 (60)	26 (52)	26 (52)	18 (36)	10 (20)	22 (44)	12 (24)	9 (18)	10 (20)	2 (4)	12 (24)	23 (46)
4. Debilitating illness like rheumatoid arthritis (Ans: NO)	8 (16)	24 (48)	16 (32)	8 (16)	28 (56)	19 (38)	19 (38)	17 (34)	14 (28)	7 (14)	15 (30)	25 (50)

[Table/Fig-3]: Palliative care is needed for- All dying patients/Metastatic cancer with uncontrolled pain/End stage heart failure/Debilitating illness like rheumatoid arthritis.

Figures in paranthesis are in percentage.

[P: PSG College of Physiotherapy, N: PSG College of Nursing, M: PSG Institute of Medical Sciences and Research, PH: PSG College of Pharmacy]

Common non-pain symptoms encountered in palliative care	Correct (%)				Wrong (%)				Don't know (%)			
	P	N	M	PH	P	N	M	PH	P	N	M	PH
1. Delirium (Ans: YES)	19 (38)	29 (58)	35 (70)	11 (22)	6 (12)	12 (24)	8 (16)	10 (20)	25 (50)	9 (18)	7 (14)	29 (58)
2. Vomiting (Ans: YES)	29 (58)	37 (74)	28 (56)	15 (30)	13 (26)	13 (26)	13 (26)	10 (20)	8 (16)	0 (0)	9 (18)	25 (50)
3. Constipation (Ans: YES)	31 (62)	27 (54)	12 (24)	11 (22)	7 (14)	20 (40)	20 (40)	11 (22)	12 (24)	3 (6)	18 (36)	28 (56)
4. Breathlessness (Ans: YES)	37 (74)	36 (72)	21 (42)	20 (40)	6 (12)	11 (22)	11 (22)	9 (18)	7 (14)	3 (6)	18 (36)	21 (42)

[Table/Fig-4]: Common non-pain symptoms encountered in palliative care- Delirium/Vomiting/Constipation/Breathlessness.

Figures in paranthesis are in percentage.

[P: PSG College of Physiotherapy, N: PSG College of Nursing, M: PSG Institute of Medical Sciences and Research, PH: PSG College of Pharmacy]

Communicating prognosis in palliative care	Correct (%)				Wrong (%)				Don't know (%)			
	P	N	M	PH	P	N	M	PH	P	N	M	PH
1. Prognosis should always be clearly announced (Ans: YES)	37 (74)	43 (86)	37 (74)	23 (46)	5 (10)	5 (10)	12 (24)	3 (6)	32 (64)	2 (4)	1 (2)	24 (48)
2. Prognosis should only be informed to family members (Ans: NO)	10 (20)	12 (24)	21 (42)	13 (26)	31 (62)	35 (70)	20 (40)	16 (32)	9 (18)	2 (4)	9 (18)	21 (42)
3. Not communicating prognosis could lead to lack of trust (Ans: YES)	27 (54)	31 (62)	19 (38)	7 (14)	11 (22)	15 (30)	17 (34)	11 (22)	12 (24)	4 (8)	14 (28)	32 (64)
4. Patients wishes and choices should be clearly communicated (Ans: YES)	40 (80)	45 (90)	38 (76)	23 (46)	3 (6)	5 (10)	7 (14)	5 (10)	7 (14)	0 (0)	4 (8)	22 (44)

[Table/Fig-5]: Communicating prognosis in palliative care- Prognosis should always be clearly announced/Prognosis should only be informed to family members/Not communicating prognosis could lead to lack of trust/Patients wishes and choices should be clearly communicated.

Figures in paranthesis are in percentage.

[P: PSG College of Physiotherapy, N: PSG College of Nursing, M: PSG Institute of Medical Sciences and Research, PH: PSG College of Pharmacy]

Palliative care multidisciplinary team consists of	Correct (%)				Wrong (%)				Don't know (%)			
	P	N	M	PH	P	N	M	PH	P	N	M	PH
1. Medical social worker (Ans: YES)	46 (92)	45 (90)	34 (68)	28 (56)	0 (0)	4 (8)	6 (12)	3 (6)	4 (8)	1 (2)	10 (20)	19 (38)
2. Nurse (Ans: YES)	49 (98)	50 (100)	41 (82)	29 (58)	1 (2)	0 (0)	5 (10)	6 (12)	0 (0)	0 (0)	4 (8)	15 (30)
3. Radiotherapist (Ans: NO)	14 (28)	15 (30)	12 (24)	10 (20)	26 (52)	33 (66)	31 (62)	21 (42)	10 (20)	2 (4)	7 (14)	19 (38)
4. Occupational therapist (Ans: YES)	42 (84)	35 (70)	30 (60)	22 (44)	5 (10)	13 (26)	8 (16)	4 (8)	3 (6)	2 (4)	12 (24)	14 (28)

[Table/Fig-6]: Palliative care multidisciplinary team consists of- Medical social worker/Nurse/Radiotherapist/Occupational therapist.

Figures in paranthesis are in percentage.

[P: PSG College of Physiotherapy, N: PSG College of Nursing, M: PSG Institute of Medical Sciences and Research, PH: PSG College of Pharmacy]

Components of good death	Correct (%)				Wrong (%)				Don't know (%)			
	P	N	M	PH	P	N	M	PH	P	N	M	PH
1. Pain and symptom management (Ans: YES)	41 (82)	43 (86)	44 (88)	30 (60)	4 (8)	5 (10)	1 (2)	7 (14)	5 (10)	2 (4)	5 (10)	13 (26)
2. Clear decision making (Ans: YES)	33 (66)	31 (62)	24 (48)	25 (50)	5 (10)	10 (20)	15 (30)	7 (14)	12 (24)	9 (18)	11 (22)	18 (36)
3. Preparation of death (Ans: YES)	16 (32)	27 (54)	20 (40)	9 (18)	17 (34)	15 (30)	17 (34)	14 (28)	17 (34)	8 (16)	13 (26)	27 (54)

[Table/Fig-7]: Components of good death- Pain and symptom management/Clear decision making/Preparation of death.

Figures in paranthesis are in percentage.

[P: PSG College of Physiotherapy, N: PSG College of Nursing, M: PSG Institute of Medical Sciences and Research, PH: PSG College of Pharmacy]

Morphine	Correct (%)				Wrong (%)				Don't know (%)			
	P	N	M	PH	P	N	M	PH	P	N	M	PH
1. Causes death in dying patients (Ans: NO)	22 (44)	33 (66)	23 (46)	18 (36)	7 (14)	7 (14)	13 (26)	7 (14)	21 (42)	10 (20)	14 (28)	25 (50)
2. Improves quality of life (Ans: YES)	22 (44)	27 (54)	16 (32)	18 (36)	14 (28)	20 (40)	23 (46)	14 (28)	14 (28)	3 (6)	11 (22)	18 (36)
3. Relieves all kinds of pain (Ans: NO)	5 (10)	6 (12)	9 (18)	13 (26)	41 (82)	43 (86)	31 (62)	24 (48)	4 (8)	1 (2)	10 (20)	13 (26)
4. Relieves breathlessness in heart failure (Ans: YES)	21 (42)	14 (28)	11 (22)	11 (22)	13 (26)	29 (58)	19 (38)	15 (30)	13 (26)	7 (14)	20 (40)	24 (48)

[Table/Fig-8]: Morphine- Causes death in dying patients/Improves quality of life/Relieves all kinds of pain/Relieves breathlessness in heart failure.

Figures in paranthesis are in percentage.

[P: PSG College of Physiotherapy, N: PSG College of Nursing, M: PSG Institute of Medical Sciences and Research, PH: PSG College of Pharmacy]

Common side effects of morphine in palliative care setting	Correct (%)				Wrong (%)				Don't know (%)			
	P	N	M	PH	P	N	M	PH	P	N	M	PH
1. Nausea and vomiting (Ans: YES)	30 (60)	31 (62)	31 (62)	19 (38)	10 (20)	16 (32)	10 (20)	10 (20)	10 (20)	3 (6)	9 (18)	21 (42)
2. Constipation (Ans: YES)	20 (40)	27 (54)	18 (36)	9 (18)	9 (18)	22 (44)	16 (32)	15 (30)	21 (42)	1 (2)	16 (32)	26 (52)
3. Drowsiness (Ans: YES)	40 (80)	33 (66)	28 (56)	19 (38)	3 (6)	16 (32)	10 (20)	10 (20)	7 (14)	1 (2)	12 (24)	21 (42)
4. Addiction (Ans: NO)	8 (16)	6 (12)	9 (18)	8 (16)	21 (42)	23 (46)	26 (52)	23 (46)	21 (42)	6 (12)	30 (60)	19 (38)

[Table/Fig-9]: Common side effects of morphine in palliative care setting- Nausea and vomiting/ Constipation/ Drowsiness/ Addiction.

Figures in paranthesis are in percentage.

[P: PSG College of Physiotherapy, N: PSG College of Nursing, M: PSG Institute of Medical Sciences and Research, PH: PSG College of Pharmacy]

work about morphine causing addiction [Table/Fig-9].

DISCUSSION

The team of palliative care includes doctors, nurses, pharmacists and physiotherapists with assigned roles. The awareness of their individual roles in the team has to be inculcated into them since their undergraduate days in order to achieve effective outcome. So we included the students from medicine, nursing, pharmacy and physiotherapy colleges of our institution. The students were from the pre-final and final years as they are the people emerging and getting ready to practice. They should have basic knowledge on these issues in order to understand their roles played in a palliative care setting.

The results of the study clearly show gaps in palliative care knowledge among undergraduate health care students. Most of the students believe that all dying patients need palliative care and its role in managing non-pain symptoms is inadequately realized. Palliative care is often synonymously compared and considered as pain medicine, geriatric medicine and rehabilitative medicine. The knowledge about morphine's role in palliative medicine and its effects on various systems of the body is poorly recognized. Most of the pharmacy college students had the idea that morphine administration can lead to addiction in palliative care setting. Majority of the students identified pain as a symptom of palliative care but other non-pain symptoms in a palliative care setting were not well identified. The team members of palliative care were not recognized by the students. The study also shows that the students are not prepared to face issues related to end-of-life care and death. These findings were similar to the study by Sadhu S et

al., in which around 76.4% had the idea that morphine is used only for pain symptoms [4].

Awareness about the side effects of morphine was higher in nursing students among whom less than 10% were unaware. This finding was similar to the study by Bogam RB et al., in which 14.67% opted constipation and 2.75% preferred drowsiness as common morphine side effects [5].

The study revealed a better outcome among nursing students when compared with other healthcare students in the study. This was because the nursing curriculum had a module on palliative care and they were given training on effective communication and care to palliative care patients. A study by Kassa H et al., showed that nearly 76% of the nurses had favourable attitude towards palliative care [6]. This knowledge of nursing students towards palliative care may be associated with frequent contact of the nursing students with sick patients and also training programs for them to deal with ill-patients.

The students of pharmacy college were less aware of their role in palliative care. The students should be given adequate sessions and training programs on palliative care, its role in various diseases, drugs used for palliative care setup and its adverse effects. All these educative sessions should take place in an effective manner so that it benefits the student community. This inadequacy was because life saving education was not being included in the pharmacy curriculum. The pharmacist prepares medicines, but does not administer medicines to treat the patient. However, there are other roles played by the pharmacists in palliative care as described by the American Society of Health-System Pharmacists [7].

Physiotherapy students should be also given adequate knowledge

on their roles. Physical therapists play an integrated role in multidisciplinary palliative care team from symptom control to improving quality of life in patients with terminal illnesses as reported by Kumar SP and Jim A [8]. Veqar Z has described the details of importance of the role of physiotherapy in palliative care and also written about the perspectives of including palliative care in their curriculum [2].

Weber M et al., found insufficient knowledge about palliative care among final year medical students which was consistent with the findings in our study [9]. However, interventional studies have shown that training workshops have led to an increase in knowledge about palliative care among interns [10]. A study has shown classroom and workshop training in palliative care allows medical students to meet specified behavioural objectives, and teach to the students the awareness of adequate training in areas of pain management, palliative and end-of-life care at the time of graduation from medical college [11].

The team members of palliative care included nurse, occupational therapist and medical social worker and do not include radiotherapist. This was rightly identified by 90% of physiotherapy and 100% of nursing students. However, the exclusion of radiotherapist was not known to few students (28%). This was contradictory to the finding by Bogam RB et al., in which only 19.26% correctly identified the team members [5].

The findings of our study were very similar to the one by Sadhu S et al., in which there were extensive deficiencies in the understanding of palliative care among undergraduate health care students [4]. However, the study included very few (n=18) nursing students. This study has an equal representation of all the undergraduate health care students.

Thus, this study establishes the need for including the palliative care in the curriculum of doctors, nurses, pharmacists and physiotherapists.

A study by Divyalasya TVS et al., had also demonstrated the importance to strengthen the need to include palliative care in medical curriculum [12]. Educative sessions were found to improve the knowledge in undergraduate healthcare students in their study.

LIMITATION

The major limitations of the study include those associated with questionnaire-based studies. They include bias of the respondents toward certain issues, inaccurate responses and incidence of skipped questions.

CONCLUSION

This study depicts the deficiencies in understanding resuscitation in palliative care setting, palliative care and its philosophy, pain and non-pain symptom assessment and management, communication, interdisciplinary care for patients. Thus, it shows that inclusion of this knowledge into the curriculum by workshops or training sessions have been found to improve the knowledge of the undergraduate students in healthcare setting.

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