## **Original Research Article**

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# Awareness of palliative care medicine among medical and health care students

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#### ABSTRACT

**Background:** A study was conducted in B. J. Medical College and Sassoon General Hospitals SGH, a tertiary government hospital among III-year Undergraduate UG, Nursing and Physiotherapy students, thirty each regarding awareness of palliative care.

**Methods:** A questionnaire incorporating various drugs and its side effects used in palliative care was circulated to test their knowledge.

**Results:** A lecture about various aspects of palliative care was taken for them after which the same questionnaire was circulated which showed improvement in their knowledge.

**Conclusions:** It was indicated that students perceived good awareness and perception level about awareness of medicine used in palliative care.

**Keywords:** Awareness, Health care students, Palliative care medicine

## INTRODUCTION

World Health Organization defines palliative care as the active total care of the patient whose disease is not responsive to curative treatment and the treatment should focus on improvement of quality of life instead of straining curative treatment approach. The goal of palliative treatment is achievement of the best possible quality of life for the patients and their families. Palliative care is an imperative need worldwide for people with cancer, human immunodeficiency syndrome (HIV) and other such advance life-threatening illness.

Palliative medicine is one of the developing medical specialties. Current healthcare education focuses entirely on cure and care is almost compromised or non-existent in end-of-life settings. An effective palliative care service delivery requires an informed health sector, with health care providers in all areas, aware and committed to the benefits that palliative care offers to people who are dying. A successful delivery of palliative healthcare depends on the healthcare professional's knowledge, attitudes, beliefs and experiences.<sup>3</sup> It is a teamwork which includes palliative care, physician, nurses, social workers and physiotherapists.

Studies have shown that doctors and other health care professionals lack knowledge and hence confidence in their ability to care for the dying patients and are unwilling to administer adequate dosages of analgesics or sedatives to dying patients or to withhold or withdraw life support. 1,2

So, the present was conducted to assess the level of knowledge regarding palliative medicine. among medical, nursing and physiotherapy undergraduate students in a tertiary care hospital. And to correlate this knowledge and attitude among medical, nursing and physiotherapy undergraduate students in a tertiary care hospital.<sup>2,3</sup>

### **METHODS**

The study was conducted among students divided into 3 groups of 30 each of third year Nursing, Undergraduate M.B.B.S. and physiotherapy students of Sassoon General Hospitals, Pune, Maharashtra, India. The duration of the study was six months. Each group contain 30 volunteers. The study's ethical approval from the institutional ethical committee was obtained and all participants were required to provide their pretest written informed consent print to their participation - consented participants were then given the survey questionnaire. Unwillingness of student and absent students were excluded from the study.

The study utilized a self-report questionnaire based on PCKT.<sup>3-6</sup> The aspects are knowledge about medicine related to palliative care and their side effects, divided into questions with four options for answers to be answered as multiple-choice questions.

The received questionnaires were then screened for their suitability of responses to get the final number of included participants questionnaires. Comparisons were done using McNemar's test and Wilcoxon Sign rank test and results were obtained. Data of pretest and post-test answers was entered in Microsoft Excel and analyzed using McNemar's test and Wilcoxon sign rank test. P Value of < 0.05 was regarded as statistically significant.

## **RESULTS**

Question one tests the idea about duration of action of morphine. Six nursing students had answered correctly in pre-test analysis which increased to 18 students with p value 0.581 which was statistically insignificant. This showed that the nursing students were still confused about the duration of morphine. This point needs to be stressed as they are the ones who will be administering morphine in wards. Undergraduate and physiotherapy students had shown significant increase in marking the correct answer in post-test analysis which was statistically significant. p = 0.003, p = 0.002 respectively.

Question two showed that the students from group I and II were unaware about NMDA receptor antagonist ketamine. After the lecture, they marked correct answer which was statistically significant in group III. p=0.001. Undergraduate MBBS students were aware about the role of ketamine as NMDA receptor antagonist which was a good sign.

Question three tests the knowledge about side effects of morphine. Nursing students were aware about nausea and vomiting as side effects even prior to the lecture which was a good sign. Similarly, undergraduate students were aware about constipation and respiratory depression as side effects prior to the lecture. All the three groups were not aware about all the side effects of morphine. After the lecture, there was definite improvement in the answers of all the students of all three groups which was statistically significant (p < 0.001).

Table 1: Side effects of morphine.

Q 3	Group	Pre	Post	P value
Nausea vomiting	Nursing	21	28	0.039*
	UG	12	29	-
	Physio	14	29	<0.001*
Abdominal pain	Nursing	4	27	<0.001*
	UG	8	28	<0.001*
	Physiotherapy	5	27	<0.001*
constipation	Nursing	7	28	<0.001*
	UG	25	29	<0.001*
	Physiotherapy	3	29	<0.001*
Respiratory depression	Nursing	15	29	-
	UG	26	16	0.006*
	Physiotherapy	16	30	-

Question four assesses the role of Gabapentin in the treatment of neuropathic pain. Surprisingly 22 physiotherapy students of group III answered correctly even before the lecture, the lecture had benefitted and helped the students of group I and II in answering this question which was statistically significant in group I (p = 0.007).

Question five assesses the knowledge about pharmacological treatment modality of neuropathic pain. Out of the three groups, undergraduate students were more aware about morphine being not part of the treatment modality of neuropathic pain even before the lecture. Only six nursing students were aware about the correct answer before the lecture. After the lecture, the number of nursing students increased to 23 and it turned out to be statistically significant (p = 0.006). Awareness of physiotherapy students also increased after the lecture but it was not statistically significant.

Question six tries to test the knowledge about symptom management in all the three groups. All the four drugs can be used in the management of hiccups. Physiotherapy students were less aware about these drugs except pantoprazole. Hence their answers were correcting after the lecture which showed improvement in the knowledge which was statistically significant (p <0001).

Question seven is about drugs used for treatment of hypercalcemia. Nursing students were more aware about the drugs even before the lecture which was a surprising result. It was statistically in significant after the lecture. Undergraduate students were aware about mithramycin and pamidromate but were found to be unaware about saline and corticosteroids as part of treatment. Hence after the lecture, there was improvement in their knowledge which was statistically significant (p < 0.001, p < 0.001). Physiotherapy students were unaware about mithramycin, pamidronate but were aware about saline and steroids. Hence after the lecture, there was improvement in their knowledge which was statistically significant (p = 0.002) (p = 0.004).

#### **DISCUSSION**

Palliative care involves an integrated multidisciplinary collaborative teamwork of patients, families, health professionals and general public towards a continuum of care emphasizing on physical, mental, social, spiritual and emotional aspects of care for life limiting or life-threatening conditions. Education and training in palliative care influences not only the level of care provided but also the level of team participation of health care professionals.<sup>5</sup> Palliative team consists of palliative care physician, nurse, social worker and physiotherapist. Role of physiotherapists and nurses is as important as palliative care physician for better outcome of palliative care.<sup>7-10</sup>

Palliative medicine has become a medical specialty in UK and other European Countries in 1987 but it is still underdeveloped in a developing country like India.

Medical students and other health care students across the globe are still uncomfortable facing death palliative care, despite its growing scientific base, is often perceived as important. Many trainees do not view palliative care medicine as core clinical competencies. These attitudes coalesce into practice pattern that tend to devalue the provision of palliative care are the end of life.

Our study is mainly based on such prior studies conducted. 8-15 This study can be considered as one of the first pilot study in any of the government medical colleges in Maharashtra teaching hospitals. Study results are comparable to the results obtained by above studies. The questionnaire did not include awareness about advance directives and knowledge about NDPS Act and its amendment, which we thought are points to be kept in mind for future or second step study on a larger scale if we plan to do for knowledge evaluation in these groups. This should be kept in mind when we will try to conduct a bigger study including other Medical Colleges in Maharashtra in near future.

This study at a Tertiary Government. hospital and one of the renowned Medical Colleges of Maharashtra demonstrates that overall knowledge about palliative care was poor among three groups, though third year nursing students had a greater knowledge about various domains of palliative care than other two groups. Most of the students need knowledge about pain management which is the main part of supportive palliative care which if learned by these specialties can lead to better pain management of the chronically ill dying patients. There is a need to integrate concept of palliative care in all the specialties and national medical, nursing and allied health council should structure and implement palliative care education into basic health care training. Education through lectures and incorporation of palliative medicine as a part of nursing, undergraduate and physiotherapy curriculum will definitely improve knowledge and attitude of nurses, MBBS doctors and physiotherapists, towards care of dying patients of chronic cancer and noncancer patients.

It does not assess the knowledge about resuscitation and decision making in end of life settings. Understanding the existing level of palliative care medicine knowledge and attitudes toward end of life care would be an important benchmark for analysis of future educational effort.

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institutional ethics committee

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