Medical Science

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ABSTRACT

### Introduction:
Palliative care 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. 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.

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. It is a teamwork which includes palliative care, physician, nurses, social workers and physiotherapists.

M.B.B.S. undergraduate students who are about to pass the degree course may be considered as future palliative care physicians-nurses are the most valuable palliative care team members who address the physical, social and spiritual dimensions of care. Physiotherapists are also an important part of palliative care team.

Studies have documented that undergraduate students of M.B.B.S., nursing and physiotherapy schools are inadequately prepared to care for the patients in pain. Several reasons have been identified including inadequacies in education, absence of curriculum content related to pain and symptom management content related to pain and symptom management in chronic diseases and faulty attitudes and beliefs related to symptom and pain management.

A public health strategy, as recommended by World Health Organization, WHO, offers the best approach for translating knowledge and skills into evidence-based, cost effective interventions that can reach everyone in need of palliative care in developing countries. The WHO pioneered a public health strategy (PHS) for integrating palliative care into country's healthcare system. WHO offers best approach for translating knowledge and skills into evidence-based, cost effective interventions that can reach everyone in need of palliative care in developing countries.

So the present was conducted to assess the level of knowledge regarding various aspects of palliative care. To find the impact of education on the association between knowledge and attitude. To find the correlation between knowledge and attitude of nursing and undergraduate and physiotherapy students.

### Materials and 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 contained 30 volunteers. The study's ethical approval from the institutional ethical committee was obtained & all participants were required to provide their Pretest written informed consent print to their participation. Consent 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. The aspects are knowledge about basics of palliative care, pain management, symptom night, communication skills, geriatric & pediatric palliative care, ethics, euthanasia and concept of terminal sedation, divided into questions with 4 options for answers to be answered as Multiple choice questions and answers.

Questionnaire included 20 questions including various domains and is attached separately. The questionnaire is based on the respondent's knowledge and attitude towards the concept of palliative care. The domains of palliative care which are included while formulating the questionnaire are concept of palliative care, history of palliative care, history of Hospice care, pain management, communication skills, symptom management, specialized palliative care, euthanasia, terminal sedation.

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 & posttest answers was entered in Microsoft Excel and analyzed using McNemar's test and Wilcoxon sign rank test. A P Value of < 0.05 was regarded as statistically significant.

### Results:

**Question 1** is about general knowledge of palliative care. Wilcoxon sign rank test is applied with p<0.05 is considered statistically significant. In all the three groups this value is <0.001, after the lecture, there is significant improvement in the knowledge among the three groups.

**Question 2** is about the diseases which require palliative care. All four answers of this question are correct. In group I nursing students answered 100% for cancer as answer. Five of the students only answered COPD before the lecture which later increased to 28 students. (p<0.001) Similarly after the lecture, knowledge about motor neuron disease and acute myocardial infarct also showed increase which is statistically significant. (p<0.001) McNemar's test is used with p<0.05. The improvement in the knowledge is seen in group II and III after the lecture about COPD, motor neuron disease (MND) and acute myocardial infarction (AMI). (p<0.001)

**Question 3** was about who provides the palliative care. All the four
answers were correct. The three groups were aware about palliative care physician but not about social worker and caregiver and physiotherapist's role as a member of the team. After the lecture, there is improvement in the knowledge in nursing and undergraduate students. (p=0.001, p=0.003)

Question 4 was about patients who are eligible for hospice care like terminally ill patients with life expectancy of less than six months and certified by two physicians. In all the three groups, this knowledge was found to be poor in pretest analysis. But after the lecture, there is improvement in this domain of knowledge which was proved in post test analysis which was statistically significant. (p<0.001, p=0.02)

Question 5 was about therapies provided at hospice. Surprisingly, after the lecture, there is almost 100% improvement in the knowledge of all the three groups which was statistically highly significant. (p=0.01).

Question 6,7,8 assesses the knowledge about communication skills. The students of all can the three groups were unaware about the stress, communication can be about discussing 'end of life' issues in palliative care set up. After the lecture, many of the students realized that communication can be very stressful which was the correct answer and it turned out to be statistically significant in all the three groups. (p=0.05) The value was highly statistically significant in group II.

Question 9 about types of communication. Majority of students in group I and II were aware even before the lecture about it which was a good sign. But after the lecture, there was improvement in answering this question in the post test in group II which was statistically significant. (p<0.001).

Question 10,11 tests the knowledge about role of nurses and physiotherapists in palliative care which is the basis of this research. Undergraduate students were aware about role of physiotherapist for optimizing patient's functioning ability even before the lecture. Nursing students from group I were unaware about physiotherapist's role in pain relief which was statistically insignificant. Hence this part needs to be stressed more to improve their knowledge. Question 12 assesses the meaning of hospice.

Question 13,14 assesses the knowledge about symptom management. All the four drugs can be used in the management of hiccups. Physiotherapy students were less aware about these drugs except pantoprazole. Question 15 asks the timing of palliative care. All the three groups were aware about the sites like homes, hospitals and nursing homes being sites of delivery of palliative care before the lecture. Nursing and physiotherapy students were very little aware about "prison" as the site of palliative care. Hence after the lecture, the correct answer turned out to be statistically significant. (p<0.001)

Undergraduate students from group II were more aware about prison as the site of delivery of palliative care.

Question 15 tries to find out the exact timing of palliative care. Nursing and physiotherapy group students had shown statistically significant increase in the correct answer after the lecture.18 undergraduate students from group II were aware about the correct answer. Hence after the lecture, almost all answered correctly in group II and III. It was statistically significant. (p=0.001) (p=0.046).

Question 16 and 17 try to test the knowledge about euthanasia and terminal sedation. Hence their answers were correct after the lecture which showed improvement in the knowledge which was statistically significant. (p=0.0001)

Question 16 tries to assess the meaning of term Euthanasia. Students from all the three groups were found to have very little knowledge about euthanasia. There is improvement in their knowledge about concept of Euthanasia and hence resulted in correct answers which was statistically significant. (p=0.003, p=0.001)

Question 17 assesses the concept of Terminal Sedation and its use in palliative care. The students from all the three groups were unaware of the concept before the lecture. After the lecture, there is improvement in the knowledge.

Question 18 is about knowledge of components of medical ethics in palliative care. Nursing students were aware about autonomy as the main component of medical ethics. Undergraduate students were aware about Beneficence and justice as the main components of medical ethics. There is improvement in the knowledge of physiotherapy students about nonmalice and justice as components of medical ethics. It is statistically significant (p<0.001) (p=0.021)

Question 19 and 20 assess the components which form the basis of palliative care. All the three groups showed improvement in their knowledge after the lecture regarding various domains of palliative care at the end of life.

Discussion:
WHO has defined palliative care ass an approach that improves the quality of life of patients and their families facing the problem associated with life threatening illness through the prevention and relief of suffering by means of early illness identification and impeccable assessment and treatment of pain and other symptoms, physical, psychosocial, spiritual. 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.

The demographic data included age in years, sex, address, religion, type of family of the students. Table D shows Group I 12 male and 18 female students. Group II shows 15 students each in male and female category. Group III shows 5 males to 25 female physiotherapy students.

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.

Palliative care team consists of palliative care physician, nurse, social worker & physiotherapist. Role of physiotherapists and nurses is as important as palliative care physician for better outcome of palliative care. 8,9 Palliative Medicine has become a medical specialty in UK & other European Countries in 1987 but it is still underdeveloped in a developing country like India.

Understanding the existing level of palliative care knowledge and attitudes toward end of life care would be an important benchmark for analysis of future educational effort. 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 skills as core clinical competencies. These attitudes coalesce into practice patterns that tend to devalue the provision of palliative care are the end of life.

The current health care curricula have inadequate inclusion of palliative care content, skills & service delivery models in courses, teaching & minimal inclusion of end of life intent in healthcare textbooks UG students seldom exposure a dying patient. Patients and families carry the burden of suffering from inadequate end of life care. Pain remains unrelied and care provided falls short of patient and family expectations. MBBS doctors and nurses need to be able to deal end of life care in a professional way. The source of information is through a close friend or relative who might have received palliative care or via their work in a health care setting and through newspapers and magazines.

There are many studies done in the past to assess the knowledge and impact of educational sessions on improvement in knowledge which can result in positive attitude towards palliative care among nurses, students and MBBS doctors, dental students and physiotherapy students. There is a need to have research on this topic. This study can be considered as one of the first pilot study in any of the government medical colleges in Maharashtra teaching hospitals.

Our results are comparable to the results obtained by above studies. Though it covers most of the domains in palliative care however it does not assess the knowledge about resuscitation and decision making in end of life settings. PCKT scale also includes knowledge about psychiatric problems & gastro-intestinal problems, which were not included in our study.

There is lack of standardized training in dealing terminally ill patients appropriateness of resuscitation in advanced metastatic malignancy –
Guidelines about end of life and resuscitation philosophy of palliative care, components of good death, End of life care and palliative care education in medical school curricula all over the country. Educational Sessions of Group I and II will definitely lead to improvement in their knowledge for referral to a specialist care which will help in better prognosis of the dying patient.

This is beneficial for further growth of palliative care as a specialty in a developing country like India. 10-12 Focused Training of the doctors and nurses and physiotherapists about various domains of palliative care will help delivery of palliative care to those who need it. Having knowledge about palliative care assessment and management can help nurses and the doctors overcome many of the barriers and physiotherapists to successful pain control and provision of palliative care, thus appropriate and realistic implementation of palliative care evaluation plans can be developed. Future studies can focus on different ways of knowing the methods of knowledge construction, the inter relationship with practice and research and the influence of evidence based and cultural competence in evidence based palliative care. The study helps to understand various aspects of palliative care knowledge among Undergraduate, MBBS, nursing and physiotherapy students and need to fill the gap in their knowledge by incorporating palliative care education in their curricula.

The second part of the study will focus on awareness about psychiatric aspects of palliative care, NDPS act,pain management, resuscitation guidelines and specialised palliative care.

REFERENCES: