

## Are our Indian medical graduates equipped and informed to handle end of life dilemmas?

T S Gugapriya<sup>1</sup>, N Vinay Kumar<sup>2\*</sup>

<sup>1</sup>Professor, <sup>2</sup>Associate Professor, Dept. of Anatomy, <sup>1</sup>All India Institute of Medical Sciences, Nagpur, Maharashtra, <sup>2</sup>Government Medical College, Palakkad, Kerala, India

**\*Corresponding Author: N Vinay Kumar**

Email: [vinaydr1981@gmail.com](mailto:vinaydr1981@gmail.com)

### Abstract

**Introduction:** Euthanasia stands as the much debated, controversial and legally questionable end of life dilemma encountered by health care professionals globally. In India, currently active euthanasia has been debated for granting legal sanction. Yet, the health care professionals especially the medical graduates were not exposed to these ethical end of life dilemmas in their formative years. This scenario calls for an analysis into their understanding of this issue, how they want to handle such dilemmas and whether they had adequate exposure and training to handle such end of life dilemmas in their curriculum.

**Methodology:** A questionnaire with three segments of 9, 5 and 6 questions each was administered to 100 medical graduates who were enrolled voluntarily for this study. The collected data were analysed by descriptive statistics.

**Results:** Only 53% showed awareness about euthanasia. Among them only 17% among were aware of physician assisted death. The third year graduates had finite idea about this concept among all years studied. The study found that the medical graduates wanted legalisation of euthanasia. Only 37% opined that if legalised they might administer if needed on their patients. Personal belief was cited as the primary reason for hesitancy to administer euthanasia. Less than 50% only were aware of right of the patient to decide to have euthanasia. Majority reported that the duration allotted for formal teaching of these were minimal and restricted to only second professional year.

**Conclusion:** End of life ethical dilemmas do exist and this study pointed the clear gap in understanding, implementation of medical graduates about these concepts. The study stresses the need for exposing the medical graduates to these bioethical concepts in their curriculum in a more active way.

**Keywords:** Euthanasia, Physician assisted death.

### Introduction

Euthanasia, an ethical end of life dilemma and a controversial concept in every sphere of human life was considered as a forbidden act for medical profession in the original Hippocratic Oath.<sup>1,2</sup> It has its origin from Greek word “euthanatos” meaning good death. Euthanasia is associated with the concept of intentionally liberating human life from useless, prolonged suffering and pain.<sup>3-5</sup> Even though this word was in vogue since ancient times, it came to be medically used only during 17<sup>th</sup> century by Francis Bacon to refer to the physician assisted process of death to alleviate suffering.<sup>6</sup>

Despite being considered as a process that could end human suffering, the practice of administering euthanasia has been in constant debate over the centuries. As this process brings in the religious beliefs, personal views, political opinions, legal obligations of the treating physician and the suffering patient against each other, it results in professional ethical nightmare for the treating physician. The primary role of physician viewed as being a healer adds on to the ethical dilemma.<sup>7-10</sup>

Euthanasia has been classified as passive and active depending on whether life maintaining management is being withheld or deliberate administration of lethal drugs is being done. The active euthanasia is sub classified into voluntary, non-voluntary and involuntary based on the position of patient to consent the process.<sup>11</sup> Though, Do Not Resuscitate (DNR) comes with in the ambit of passive euthanasia, legally it stands without much debate. Whereas, assisted suicide and physician assisted suicide doesn't enjoy similar legal sanction.<sup>11-13</sup>

Healthcare in global as well as Indian context has taken leaps and bounds over the years. Growing number of terminally ill patients with much reduced quality of life and nil scope for curative management, patients with psychological factors caused by terminal illness and patients who feels inadequacy in the palliative care given to them were seen to ask for euthanasia.<sup>14</sup>

In India, passive euthanasia has been legalised recently. The status of active euthanasia and physician assisted death remains illegal. Despite this, studies have found out positive justifiability of active euthanasia by few physicians and patient or their relatives in intractable illness.<sup>15-18</sup>

Multitude of factors determine the opinion of medical professional, health care providers, and medical graduates towards euthanasia. Previous studies stand divided in their observation that religion place a major influence on the attitude of medical professional towards euthanasia.<sup>1,19-27</sup>

It's been reported that there exists difference in knowledge about euthanasia between a medical student and students from other streams.<sup>28,29</sup> Also among medical graduate the year of study and the clinical exposure was observed to exert its influence on their attitudes towards euthanasia.<sup>30,31</sup> Among the practicing medical profession the area of speciality was said to determine their views towards euthanasia.<sup>16</sup>

The current medical curriculum also has limited exposure regarding these issues to the undergraduate level. Also the recently implemented ATECOM module in teaching attitude, ethics, and communication in formal curriculum to medical graduates by the Medical council of India in its competency number 52 states that “Identify, discuss and

defend medico-legal, socio-cultural and ethical issues as they pertain to refusal of care including do not resuscitate and withdrawal of life support” as a non-core competency only.<sup>32</sup>

With so much different views and when the country is trying to shape its policy towards euthanasia it becomes imperative to equip one of the stakeholders, the medical graduates with the knowledge, attitude to handle end of life dilemma. And so, in order to understand the current notions on concept of euthanasia, the factors that influenced in shaping those notions and the adequateness of the time allotted in the curriculum for this pertinent issue were studied in a linguistically, socially, economically and politically diverse pool of medical graduates in a rural tertiary health care set up.

### Methodology

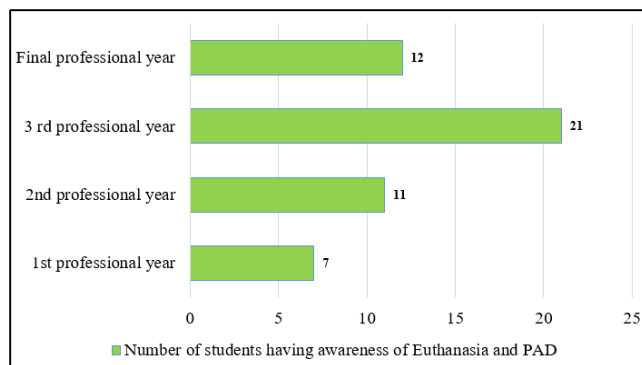
A single institute cross sectional survey was done among medical graduates belonging to all professional years. On volunteer enrolling, 1/4<sup>th</sup> of students belonging to each year of medical graduation were taken for this study which was 25 students per professional year. The sample size was thus 100 students of both genders and heterogeneous religions. The gender distribution was 52 males to 48 females. The religious diversity found was 8 Christian, 3 Muslims and rest all Hindus.

The questionnaire was developed after reviewing the available literature related to this topic. It was divided into three logical segments in alignment with the aim of the study. First segment had 9 questions that dealt with awareness of the student to various basic aspects of euthanasia. Among them five were about awareness of legal status of euthanasia in India. The second segment of 5 questions dealt with personalised opinion about administration of euthanasia. The last segment had 6 questions related to duration of hours dedicated to these topics in the curriculum. Internal consistency of the questionnaire items was determined by Cronbach's alpha scoring.

The questionnaire was content validated by two experts from forensic medicine department and piloted for linguistic validity among senior residents of institute. The 20-item structured questionnaire having scope for open ended answers was administered to the sample after clearly explaining them about the study objectives and obtaining informed consent. The study was done after obtaining institutional ethical clearance. The data was collected by direct questionnaire answering by the participants in printed format in the presence of the principle investigator. Findings were tabulated and analysed by simple descriptive statistics using SPSS package.

### Results

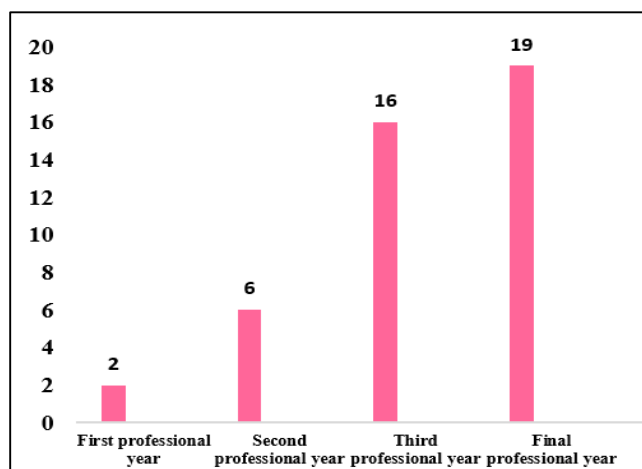
Among the study participants 53% were aware of the terms euthanasia and physician assisted death. Among the study participants, the third professional year students were seen to exhibit more awareness about these concepts when compared to other years. (Fig. 1)



**Fig. 1:** Number of students having awareness of Euthanasia and PAD

Among those who were aware of euthanasia and PAD, 9 participants (17%) had stated they were unclear about the difference between the two terms. Majority of the participants didn't know the distinction between active and passive euthanasia except the third professional year participants, where 22/25 had answered correctly.

Irrespective of the year of study all respondents were aware that euthanasia has no legal sanction in India. But similar clear idea was observed to be lacking about PAD. Also, when the participants from 1<sup>st</sup> and 2<sup>nd</sup> professional years were more sceptical about legalising euthanasia in India compared to 3<sup>rd</sup> and final professional year participants. (Fig. 2)



**Fig. 2:** Number of participants who think euthanasia needs legalisation in India

In their professional life, only 37% among the study participants were ready to administer euthanasia if and when need arose. "Being humanistic" best explained the meaning of euthanasia for around 40% of the study participants. Majority of the study participants answered to the enquiry about the scenario where all they might consider administering euthanasia as terminally ill or cancer patients. But surprisingly, 90% of the participants categorically stated they would never consider euthanasia for congenitally deformed or severely ill children. They went on to reason out that there is always a possibility of newer methods of

management in those cases which they were not willing to deprive those unfortunate children.

When asked to state the reason for those who were against the concept of euthanasia the participant's response was like, "doctors are life saves, not life takers" "I am not strong enough to kill somebody" "New treatment might come in future to treat those terminal ill patients" "May become abuse". When 70% thought the concept of euthanasia was against their personal belief, 23% were against it because of legal obligations. Less than half of the participants were of correct opinion that patient holds the right to decision on euthanasia while the majority were divided between both the treating physician and the family. (Fig. 3)

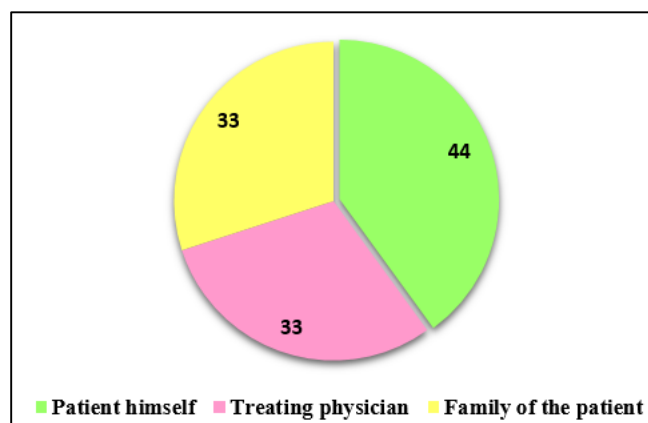


Fig. 3: Who should decide on administering euthanasia?

A polarised response centring around second professional year was obtained for the enquiry on whether they had formal teaching sessions on these topics and the time allotted for it in the curriculum. (Fig. 4)

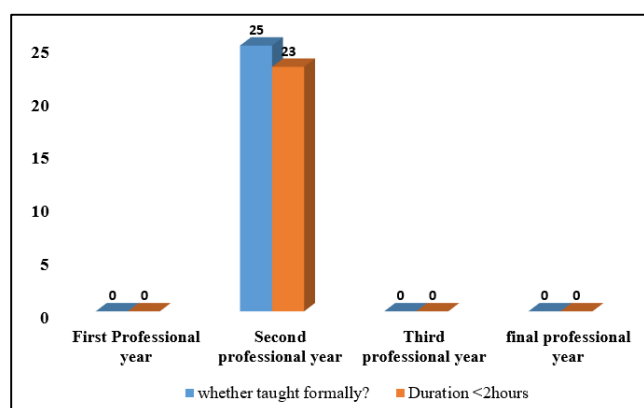


Fig. 4: Whether taught formally about euthanasia and for how long?

During their course duration the number of students who actually witnessed in some way these end of life dilemmas in real was reported to be more in final professional year. Elucidation of their response to such situations brought in responses that exposed the limitation like "am not myself clear in all these what can I tell them" "I don't know what is

correct to do" "I escaped that situation" "am not confident enough to talk and help the patient attenders handle that". Those who had learnt from exposure of others were also more in final professional year when compared to others years. (Fig. 5)

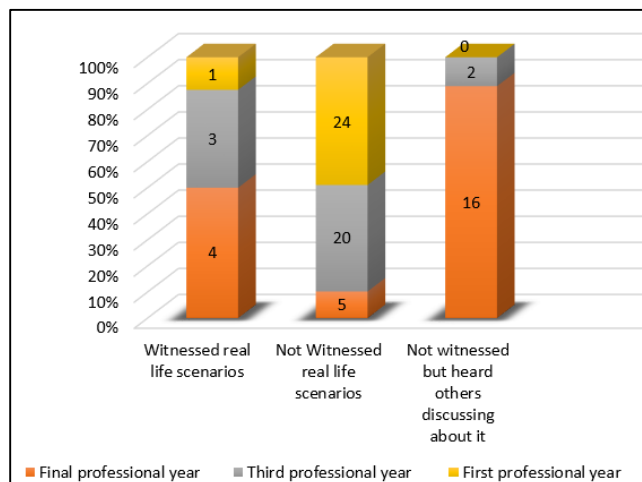


Fig. 5: Number of students who had real life witnessed with end of life dilemmas

Unanimous need expressed was increased time allotment for this topic in the curriculum by the students. Their professional year of study determined that the first and third years wished for more time of teaching about these things formally while final years felt more time for discussion and simulated case scenarios to be provided to make them confident in dealing such dilemmas.

### Discussion

End of life decision brings in a lot of ethical, moral and clinical consensus into play for the stake holders concerned. Lack of clear cut knowledge about basic concepts of euthanasia will prove to be hindering the decision making in many a situations.

The percentage of medical students who claimed to be aware of concepts of euthanasia in this study was found to be even less than previous report done among arts and science students.<sup>33</sup> The year of study as observed in this study was reported to have influence on their knowledge and opinion about euthanasia.<sup>29-31</sup> Clinical exposure and contact with terminally ill patients were claimed to influence the ethical reason. And it was said to lower the level of acceptance of euthanasia among medical students from fourth to sixth year compared to first three years.<sup>21, 29-31</sup> Studies involving non-medical students also observed that year of study was incongruous to their knowledge and opinion about euthanasia.<sup>27, 28</sup> But studies among nurses found that year of study did not influence the opinion about euthanasia.<sup>18, 34</sup> Differentiating and describing terms related to euthanasia was found to be difficult for both medical and nursing students who proclaimed to have knowledge about euthanasia as observed in this study also.<sup>21,35-37</sup> Thus a

definite knowledge gap about the concepts and terminologies of end of life issues had been clearly observed in this study.

The opinion about the need for legalising active euthanasia coincided with previous such positive opinions by studies done with physicians and nurses.<sup>15-18</sup> Moreover it was noticed in this study that year of study of the participants did have influence in shaping their opinion. But very strong opposing voice for legalisation of euthanasia was also being reported.<sup>38</sup> Hesitancy to administer euthanasia even if were to be legalised as seen in majority of the participants in this study was a phenomenon that was seen across other previous studies too.<sup>17,24</sup> The pursuit for primary reason preventing health care professionals to administer euthanasia pointed religion as the factor followed by the speciality to which the health professional belongs to.<sup>1,19-27,39</sup> Whereas, a couple of studies put forth moral consciousness as the deciding factor.<sup>40,41</sup> In contrast, participants of the current study held personal beliefs as the prime reason for their hesitancy to administer euthanasia. The observation of supporting legalisation and the willingness to administer euthanasia was seen to be in a paradox with each other in this study. In the context of administering euthanasia the right to ask for it lies with the patient alone.<sup>42</sup> Neither the family nor the treating physician don't have a say in that decision. Even though medical ethics proclaims autonomy of patients need to be valued, there were arguments that puts forth the context of situational relevance of execution of such autonomy of the patient in these end of life decisions.<sup>43,44</sup> Contrary to these views an editorial presented that euthanasia need to be allowed if autonomy is held important.<sup>45</sup> In view of these discussions, the result of this study highlighted the lacunae of knowledge on principles of autonomy among the medical students.

Even though studies exist that reported the attitude, knowledge of medical students on end of life dilemmas,<sup>16,19-31</sup> the present study uniquely ventured into the analysis of curricular gaps and tried suggesting probable solutions for bridging those gaps. The less duration with only basic lecture on these topics as seen in this study were the reason for less confidence reported by students in handling such scenarios. In order to equip our medical graduates to handle the end of life dilemmas in an informed manner, the Medical council of India should bring in necessary curricular changes by allotting more time for formal teaching and discussion of these issues in the formative years of the medical student in a focussed way. The conversion of non-core competency number 52 in ATECOM into a core competency for undergraduate could be thought off.<sup>32</sup>

As the year of study does influence their decision taking ability in such dilemmas, gradual introduction of these end of life dilemmas from first till final professional year needs a serious consideration by curriculum makers.

## Conclusion

End of life ethical dilemmas are definite landmines for health professional opening up a whole lot of ethical issues to be addressed. This study data clearly showed only limited proportion of medical graduates being aware of the concept

of euthanasia. The knowledge gap among medical graduates who happens to be one of the stake holders, is bound to hamper the delivery of ethical health care. And so, lack of knowledge to the bioethical concept of euthanasia necessitates the need for exposing them through curriculum changes. This also becomes pertinent in the wake of country trying to formulate its policy guidelines to handle such ethical scenarios in shaping safe and ethical future end of life care and also health care delivery system.

## Limitation of the study

The study's result has limited power because of the small sample size and single centre study.

## Funding

Nil

## Conflict of interest

There are no conflicts of interests

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