

End-of-life attitudes in the Intensive Care Unit (ICU) amongst final year medical students at International Medical University, Malaysia

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Abstract: With recent medical advances and the availability of newer sophisticated technologies, critically ill patients tend to survive longer.¹ Thus, decisions to forgo life-sustaining medical treatment generate challenging issues that all doctors must face.² The aim of this pilot study was to assess attitudes towards end-of-life care in ICU which included futile therapy (withholding and withdrawing therapy) among final year medical students who had received the same degree of clinical exposure and training in medical school. The results revealed varying attitudes and views towards end-of-life care in ICU suggesting other factors such as religion, ethnicity and culture may influence decision making.

IeJSME 2014 8(1): 32-33

Keywords : end of life care, education, medical students, ethics

Intensive care medicine aims not only to help patients survive acute threats to their lives but also to restore as good a quality of life as possible.¹⁻³ In recent decades, sophisticated technological support has allowed ill patients to survive longer.¹ However, continued aggressive care may not always be beneficial for a critically ill patient. Thus, the question of who should be responsible for withholding or withdrawing treatment remains a difficult issue.¹ The topic of death or end-of-life care is profound, even though we know that death is the ultimate consequence of life.⁴

End-of-life attitudes in ICU may vary depending on the availability of resources. A study done by Yaguchi *et al.* (2005) revealed that variation in attitudes existed even between physicians from different developed countries where intensive care medicine is relatively well developed.¹

A study done in Hong Kong by Gruber *et al.* (2008) to assess the effect of medical education on medical students' attitudes towards end-of-life decisions

revealed that attitudes changed during medical training and differed significantly from those of non-medical students.²

Malaysia has a multi-racial and culturally diverse population; as such there may be socio-cultural factors at play that may influence attitudes more than medical education. On review of the literature there was no published data on medical student attitudes towards end of life care in Malaysia. As such, this study was carried out to assess the views of final year medical students who had received the same formal training in medical school.

This study was conducted at the International Medical University (IMU) in Malaysia. A modified version of a validated questionnaire was used for this pilot study.¹ The questionnaire consisted of a hypothetical case scenario of a 50 year-old lady who had been resuscitated following a cardio-pulmonary arrest due to myocardial infarction. Upon review by the medical team, it was felt that the best possible outcome for her was a persistent vegetative state. She had no next of kin or advance directive.¹ Seventy four medical students out of a class of eighty who had completed their final semester of medical undergraduate training participated in this study. They had to answer five questions which had multiple choice answers. The questions dealt with the decision making process, do-not resuscitate (DNR) orders and their course of management of such a patient in the given hypothetical scenario.¹

Data analysis consisted of completed questionnaire obtained from the 74 students. For the question on who should make the decision on treatment for this hypothetical patient, there was no uniform consensus. Approximately 50% of the students felt that the decision should be made after collaborating with other physicians; 10% of them would involve the nurses too; and approximately 35% of the students would consult the hospital ethical committee or refer to court.

In relation to the question on intervention in the event of a recurrent cardiac arrest in the hypothetical patient, there was a split in views. About 60% of the respondents

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would not resuscitate the patient provided there was either a written or verbal DNR order, whilst the rest felt that the patient should be actively resuscitated.

In the event the hypothetical patient remained unconscious but was stable and breathing spontaneously, again there were varied responses. About 35% of the students would keep the hypothetical patient in ICU and intervene if complications set in; 40% would transfer the patient to the general ward after performing a tracheostomy, out of which 12% would stop enteral feeding; and 9% would withhold therapy or opt for terminal weaning respectively.

Should a situation in which a young boy in respiratory failure needing ICU care arise and ICU is full, nearly all agreed they would admit the boy. In making space in ICU, 84% of them would transfer the hypothetical patient to the general ward of which, 56% of them would first perform a tracheostomy. 13% would transfer out another patient who is recovering from pneumonia.

The final question was that the hypothetical patient developed fever and septic shock and was diagnosed to have pneumonia. Approximately 85% of the students were keen for aggressive treatment (giving antibiotics and vasopressors), whilst the remaining respondents chose to give morphine, reduce ventilator support, perform terminal extubation or not treat the patient.

Medical futility implies that the proposed therapy should not be carried out because available data showed that it will not improve the patient's medical condition.⁶ However, medical futility remains ethically controversial as there is no unanimity regarding the statistical threshold for a treatment to be considered futile.⁶ Another ethical dilemma highlighted in this study is the morality of passive euthanasia where withholding treatment leads to the demise of the patient.

This study has revealed significant differences in the attitudes and views of students towards end-of life care issues including determining medical futility and practice of euthanasia. These students had received the same formal education and similar clinical and educational experiences. This study suggests that other factors such as gender, ethnicity, religion and culture may influence decision making. This is supported by previous studies in end-of-life care, which have shown variation among physicians, hospitals, and countries.⁵

In conclusion, this study done at IMU has raised several questions in terms of teaching about end-of-life care and addressing attitudes to treatment options at end-of life to a culturally diverse student population. If large variations in attitudes towards end-of-life care exist within a single teaching institution, what about the Malaysian medical fraternity at large? In ethical issues where the law is silent, common law with morality and justice should form the guiding principles in clinical decision making on end-of-life care. Substantial work remains if national consensus on end-of-life care in Malaysia is to be reached.

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