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## Physicians just need to be better trained to provide the best care at the end-of-life

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Over the last decades, caring for terminally ill patients, either in the latter phases of progressive chronic diseases or in the setting of refractory organ failures in the course of acute critical illnesses, has become very frequent in intensive care units (ICUs) and such demand is expected to increase substantially in the next decades [1]. Although the end-of-life (EOL) decision-making process and the consequent strategy vary largely depending on several factors such as cultural aspects, religious beliefs, legal burdens, ethical and moral values, medical knowledge

regarding terminally ill diseases and palliative care, up to three-quarters of all ICU deaths are preceded by limitations of treatment [2, 3]. However, the care provided to patients at the EOL and their families needs to be urgently improved. Current information indicates that EOL care in ICUs is frequently inappropriate as a consequence of several factors including poor communication [4], inadequate symptom control [5] and divergence among the ICU team, families and the patients themselves regarding their expectations and values [6]. It is well known that conflicts in the context of EOL are perceived as much more severe and dangerous when compared to other conflicts [6].

Several relevant barriers to improving EOL care at the levels of the patient/family (e.g. inability to participate in EOL discussions, lack of advance directives, unrealistic expectations), the clinician (e.g. both insufficient training in communication and expertise in symptom management, and competing demands on intensivists' time) and the hospital/institution (e.g. inadequacy or absence of local family conferences and lack of palliative care service) were raised by nurse and physician ICU directors in a survey involving 468 ICUs in the United States [7]. In this sense, many interventions have been tested to improve the quality of EOL care with different results. Ethics and palliative care consultations, intensive communication strategies, formal family conferences combined with the bereavement brochure have been demonstrated to improve the quality of EOL care by reducing the length of stay and the use inappropriate ICU resources, preventing conflicts and reducing psychological burden on family members [8–11]. Unfortunately, such interventions are still not widely adopted in ICUs [7]. On the other hand, the benefit of multifaceted quality improvement strategies remains unclear [12, 13].

In the current issue of Intensive Care Medicine, Forte et al. [14] present the results of a questionnaire submitted to 105 Brazilian ICU physicians selected from 11 ICUs in

a university-affiliated hospital evaluating EOL decisions involving a hypothetical severely brain-damaged patient with no family members or advance directives. The study has two major findings: (1) physicians who would not apply do-not-resuscitate (DNR) orders less frequently attended EOL classes; and (2) almost half of respondents would not proceed according to what they believed to be most appropriate for the patient (i.e. provide less aggressive treatment), motivated chiefly by legal concerns. As expected, both the interest in and reading about EOL were lower in physicians who would apply "full-code" status than in those who would decide to withdraw of life-sustaining therapies. Furthermore, the authors also demonstrated that younger physicians and ICU physicians reading at least four articles per year on ethical aspects were more prone to involve family and nurses in the EOL process, as well as make proactive decisions.

Current guidelines recommend that besides a compassionate approach, ICU clinicians should be competent in all aspects of EOL care, including the ability to provide efficient communication, symptom management, and the practical and ethical aspects of different modalities of withdrawing or withholding life-sustaining therapies [15]. Additionally, it has been demonstrated that knowledge of pain control and communication figure among the main skills expected by patients and families of ICU physicians [16]. However, education in medical and nursing schools

from many countries (including Brazil) is focused mostly on curative care, and there is little training in palliative medicine, and specific curricular teaching on ethics and communication skills is not available in many schools [17, 18]. If the ICU staff do not have enough knowledge on EOL there may be disastrous consequences for the patients as well as for the residents and fellows that will be trained with an inadequate and inefficient model [18].

While the legal framework for palliative and EOL care is progressively being reworked in Brazil and other countries, such regulatory changes are usually complex and occur slowly [19]. For all the above-mentioned reasons, the study by Forte et al. will certainly be of help to guide initiatives aiming to improve EOL care as it nicely demonstrates that ethical knowledge positively modifies the EOL decision-making process and provides additional evidence that, like any other procedure or intervention performed in ICUs, specific training in EOL-related topics should be formally incorporated into training programs in critical care.

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