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Medical Futility and End-of-Life Decisions in Critically ill Patients: Perception of Physicians and Nurses on Central Region of Portugal

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The Intensive Care Unit (ICU) is the setting where patients are given the most advanced life sustaining treatments. However, it is also the setting where death is common and end-of-life care is frequently provided. The aim of this study was to understand the reality of the decision making process on end-of-life in ICUs of several hospitals in the central region of Portugal.

Methods: A questionnaire to assess end-of-life decision making and attitudes towards medical futility in the ICU was developed. It comprises socio-demographic-professional variables and questions on end of life decision making process and medical futility, attitudes and believes. Between May and October 2010, 183 questionnaires were returned from a total of 235 delivered - 78% response rate.

To reduce the occurrence of medical futility, strategies that were pointed out included mainly education and training and enhancing communication inside the ICU team and with the families.

Sixty-seven percent of nurses and 72 % of physicians were never faced with living wills from patients. Seventy-seven percent of nurses and 69% of physicians considered that the existence of a National Registry of living wills will facilitate end-of-life decisions (data not shown).

ere were no statistical signi cant di erences in the answers to the questionnaire concerning age, gender or religion (data not shown).

ere were statistical signi cant di erences between nurses and physician concerning decisions assumed in terminally ill patients (Question 10) - Table 2; in addition, comparing question 11 ".In your item related with ICU physician, i.e., it was consensual that the ICU physician should always be involved in decisions concerning terminally ill patients (Table 3).

e main ndings from this study are as follows: First, more than half of physicians and nurses considered that occasionally there were excessive/unjusti ed treatments in the ICU, while about forty percent of nurses and about a quarter of physicians considered that frequently there were excessive/unjusti ed treatments. ese ndings support earlier empiric observations that futility does occur in the ICU setting [8]. Di culties in the control of symptoms for the physicians, and di culties of communication between the team (physicians *vs* nurses-physicians *vs* families-nurses *vs* families) for the nurses, has been among those problems reported as being more important for these ICU professionals. Communication problems have been reported in several other studies as one area that needs intervention in order to nd strategies to improve the decision making process concerning end-of life-decisions [9,10]. Heland et al. have highlighted the need to

	Nurse				Physician				Comparisons between nurses and physicians	
	In your opinion, who should be involved in decisions concerning terminally ill patients?		During your professional experience, who is, in fact, involved in decisions concerning terminally ill patients?		In your opinion, who should be involved in decisions concerning terminally ill patients?		During your professional experience, who is, in fact, involved in decisions concerning terminally ill patients?		Should be involved*	Is, in fact, involved*
									p[1]	p[1]
The patient's physician										
Always	93	(63)	37	(26)	24	(67)	13	(36)		
Frequently	22	(15)	10	(7)	5	(14)	6	(17)	0.760	
Occasionally	26	(18)	34	(24)	7	(19)	13	(36)		
Never	6	(4)	63	(44)	0	(0)	4	(11)		
p[1]	<0,001				-					
The legal surrogate of the patient										
Always	77	(52)	15	(10)	10	(28)	3	(8)		
Frequently	39	(27)	17	(12)	11	(31)	6	(17)		0.738
Occasionally	20	(14)	67	(47)	11	(31)	19	(53)		
Never	11	(7)	44	(31)	4	(11)	8	(22)		
p[1]	<0,001				0,039					
The ICU physician										
Always	135	(92)	131	(90)	27	(75)	29	(81)		
Frequently	11	(7)	10	(7)	6	(17)	5	(14)		0.626
Occasionally	1	(1)	5	(3)	3	(8)	2	(6)		
Never	0	(0)	0	(0)	0	(0)	0	(0)		
p[1]	-				0,834					
The ICU nurses										
Always	119	(81)	17	(12)	19	(53)	10	(28)		
Frequently	15	(10)	26	(18)	7	(19)	9	(25)		
Occasionally	9	(6)	63	(44)	9	(25)	10	(28)		
Never	4	(3)	38	(26)	1	(3)	7	(19)		
p[1]	<0,001				-					
The patient's family										
Always	80	(55)	16	(11)	13	(36)	6	(17)		
Frequently	35	(24)	33	(23)	9	(25)	8	(22)		0.547
Occasionally	26	(18)	66	(45)	12	(33)	15	(42)		
Never	5	(3)	31	(21)	2	(6)	7	(19)		
p[1]	<0,001				-					
The ethics committee										
Always	60	(41)	1	(1)	2	(6)	0	(0)		
Frequently	38	(26)	9	(6)	3	(9)	0	(0)		0.216
Occasionally	44	(30)	49	(34)	26	(74)	11	(31)		
Never	3	(2)	84	(59)	4	(11)	25	(69)		
p[1]	<0,001				-					

[1]Qui-Square Test;* This comparisons were made with categories colapsed:Always/Frequently; Occasionally/Never

Comparisons between who should be and who is, in fact, involved on end-of-life decisions.

put an emphasis on collaborative decision making between all health professionals, the patient and family. Second, concerning opinions

thus needed. Fourth, lack of training/education concerning end-of-life decision making may explain the results concerning medical futility that has been indicated by more than half of the nurses and about three quarters of the physicians; this nding is in accordance with other studies [5,11] where lack of speci c education on end-of-life issues, namely futility has been felt by a large percentage of physicians and nurses on the ICU setting, with some studies reaching percentages as high as 90% [8]. Our ndings are also in agreement with the ndings from Aslakson et al. [12], where, despite the growing emphasis on end-of-life care, neither physicians nor nurses think that their educational preparation or clinical experiences have prepared them well to help patients and patients' families at the end-of-life. Although previous studies have shown that Religion is an important determinant of attitudes towards dying, death and end-of-life care, and that signi cant di erences can be found among di erent religions [4], we could not nd any di erence as 86% of the respondents were catholic.

is study presents some limitations: rst, the questionnaire was not submitted to a process of validation; second, concepts like the one of "communication" were not clearly de ned as it was assumed as a "common-sense" de nition.

Strengths from the study include the inclusion of all ICUs from a region, a relatively high response rate and the raising of hypothesis to understand di culties in the decision making process towards end-of-life decisions in critically ill patients.

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In conclusion, the present study has shown problems of communication, namely discrepancies of opinion between nurses and physicians and discrepancies between on whom should be and who is in fact involved on end-of-life decisions. ese discrepancies, together with the di culties in lack of education/training were the main ndings from our study that might explain di culties found in the decision making process. Strategies to nd an improvement in communication and to narrow the span between what is thought to be the correct choice and what is actually done are thus warranted.

Our study has add to our knowledge by showing some of the di culties in nding the ways to compassionately guide the patient and family through end-of-life decisions, which may be one of the biggest challenges for all the physicians and nurses working in ICUs.

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Concerning end-of-life decisions, we found problems of communication, namely discrepancies of opinion between nurses and physicians, and discrepancies between on whom should be and whom is, in fact, involved;

ese discrepancies, together with the di culties in lack of education/training were the main ndings from our study that might explain di culties found in the decision making process;

Strategies to nd an improvement in communication and to narrow the span between what is thought to be the correct choice and what is actually done are thus warranted.

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