Criteria for referring patients to Intensive Care Units

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Abstract
The shortage of resources in the healthcare sector often leads to situations where patients are exposed to extreme conditions while healthcare professionals have to deal with technical and ethical dilemmas such as the indication of patients to intensive care units. A descriptive, quantitative and qualitative, conducted at the Health Department of the Federal District. It was used a questionnaire developed for this study. Fourteen physicians and 40 nurses answered the questionnaire. Patients with acute, potentially reversible disease and young adults are the ones who are more likely to be referred to the ICU, unlike the elderly, chronically ill and with potentially irreversible disease. Marital status, educational level, socioeconomic level, race/color, use of licit or illicit drugs do not influence. The decision to refer patients to intensive care units is usually in the hands of the physician treating the patient and this decision is based only on clinical criteria and the patient age.
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Introduction

The shortage of resources in the public healthcare sector often leads to situations where patients are exposed to conditions while healthcare professionals have to deal with technical and ethical dilemmas. Given the shortage of data on randomized clinical tests to keep track of most medical decisions, individual judgment is frequently used in several decision-making situations.[1]

Intensive Care Unit (ICU) beds are homogeneous and not divisible assets. Considering that a hospital bed may only be used by a single person, the issue of hospital bed shortages in public hospitals needs to be brought to light. In view of such shortages, it is necessary to establish who has the right to use the service and for how long each individual may enjoy these collective assets.[2]

In Brazil, the shortage of beds in intensive care units is difficult to solve due to the large number of patients needing this type of treatment and an insufficient number of beds available. Thus, studies that better define the use of ICU vacancies are of the highest relevance.[3]

The objective of this study was to assess the role of healthcare professionals in referring patients to intensive care units and the possible criteria they use.

Methods

The present paper reports the findings of a cross-sectional, quantitative and qualitative study. The participants in this study were physicians and nurses of both sexes, who had been working for at least a year in emergency rooms of public hospitals in the Federal District, Brazil.

The study comprised a specifically-designed questionnaire with three parts, featuring objective and subjective questions. In the first part the questions sought to characterize the participants with regard to profession, gender, age, workload in

emergency units and length of employment. The second part consisted of questions aiming to check the ethical dilemmas faced by professionals in their decision-making regarding the referral of patients to intensive care units.

The third part consisted of subjective and objective questions in order to determine what major criteria were used by health professionals to refer patients to intensive care units. Among the possible pre-established criteria for this study were: gender, age, race / skin color, education level, socioeconomic status, marital status, parental status, religion, nationality, origin, use of licit and illicit drugs, work, type of disease, time of referral to an ICU. Participants could indicate other criteria in addition to the pre-established ones. For the evaluation of each criterion for referral to the ICU, a scale ranging from +2 to -2 was used, where +2 would indicate high probability of referral to an ICU; +1 would indicate probability of referral to an ICU; zero would not interfere with the referral; -1 would decrease the possibility of referral to ICU, -2 vastly decrease the possibility of referral.

All participants signed an informed consent from and the study was approved by the Ethics Committee of the Foundation for Teaching and Research in Health Sciences (CEP-FEPECS), of the Government of the Federal District, Brazil.

Results

Fourteen physicians (25.9%) and 40 nurses (74.1%) participated in the survey, totaling 54 health professionals. The average age of the physicians (41.7 years-old) was higher than that of the nurses (34.2 years-old), as was their work experience in emergency units (6.7 and 3.4 years, respectively). Most were female (72.3%) and almost all professionals (92.5%) declared having a religion. Of these, 67.2% were practitioners of the religion to which they belonged, 26.6% did not practice it and 6.2% chose not to answer.

When asked if discussions were held within the team that takes care of the patient about the criteria for referral to the ICU, 72.7% of the physicians stated that these

discussions rarely or never occurred. In the group of nurses 87.5% of the respondents revealed that discussions were never or rarely held. According to these professionals, when there is no team decision-making the physician takes that responsibility alone.

As for the question on whether the decision was discussed with the patient's family only 9.1% of the physicians and 10.0% of the nurses responded that there is discussion with the family. It was verified that 78.5% of doctors and 85.0% of nurses experience sadness or depression when having to choose between two patients for an ICU vacancy or when they fail to secure a vacancy for a patient who needs it.

With regard to possible criteria that could increase or decrease the possibility of referring patients to the ICU, clinical reasons are the most commonly cited (Figure 1). The fact that a disease was potentially reversible was the criterion most likely to increase a patient's chances, according to the physicians (+1.5) and nurses (+1.3). Conversely, a potentially irreversible disease would be the criterion that would most likely reduce their chances, according to physicians (-1.6) and nurses (-1.4).

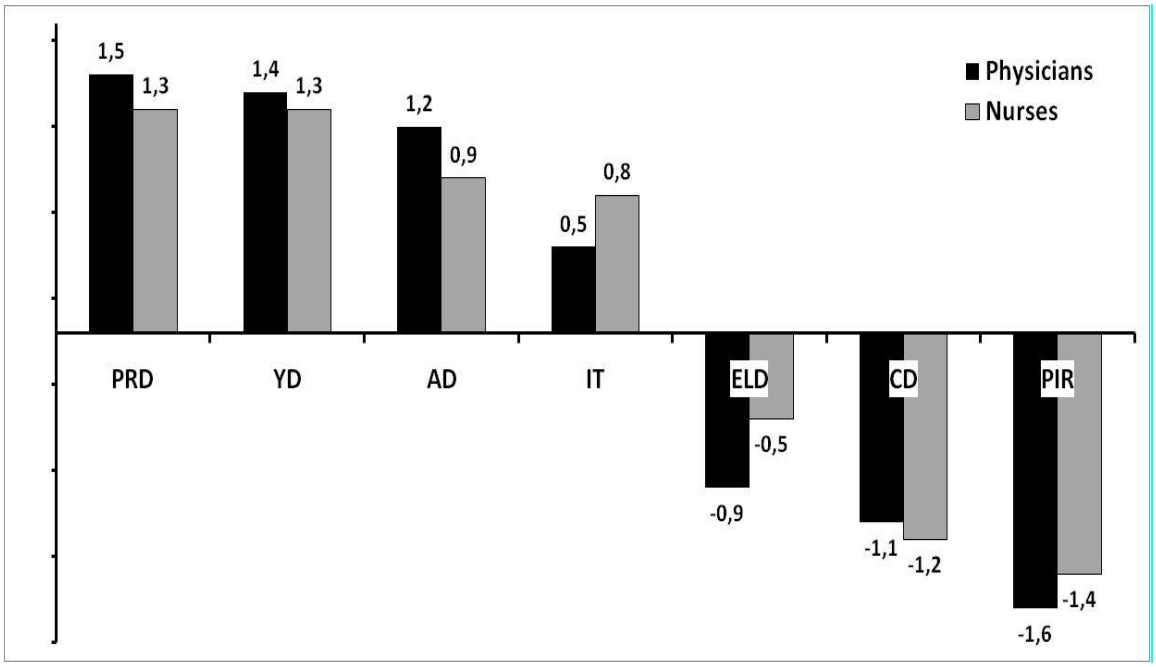

Figure 1 – Interfering factors (positive and negative) in referring patients to intensive care units. PRD: Potentially Reversible Disease; YA: Young Adult; AD: Acute Disease; HT: Hospitalization Time; ELD: Elderly; CD: Chronic Disease; PID: Potentially Irreversible Disease.

Age was also an important factor in a possible referral. Among doctors, young adults (+1.4) would more likely get a vacancy than older individuals (-0.9). The same criterion was followed by nurses (+1.3 and -0.5, respectively).

For doctors and nurses a patient with an acute illness (+1.2 and +0.9) was more likely to get an ICU bed than one with a chronic illness (-1.1 and -1.2). For both professionals a patient who had been waiting longer for the ICU bed was more likely to be referred to a vacancy (+0.5 and +0.8).

Among doctors and nurses in general, other features were also identified as likely to increase a patient's ICU chances: being female (+0.3), having children (+0.3) and working in healthcare (+0.2). Origin, marital status, educational level, socioeconomic level, race / color, employment status, legal drug (alcohol) or illicit drug abuse had indices between -0.1 and 0.1 thus having no importance or minor importance in entitling patients to ICU beds.

Discussion

The question of how to use public resources in healthcare often leads to moral conflicts because social inequalities and scarce resources require one to choose priorities.[4] During the last few decades, predictive systems have been sought in order to improve discernment and the allocation of scarce ICU resources so as to make the process fairer.[5]

In situations of resource scarcity, the better the clinical information on patients the better qualified the ethical decision will also be. To this end, it is necessary to further studies that describe clinical features and prognosis of patients treated in different clinical

conditions.[6] It was verified that the decision of referring patients to the ICU is the sole responsibility of the physician treating the patient, who usually makes decisions based on their knowledge and beliefs, or as described by one of them: "There is no team discussion . Each one can decide for himself."

Medical decision-making should obviously begin with knowledge of the patient's individual condition. However, on some occasions the doctor may rely more on instinct and personal judgment than on data from randomized controlled trials. Thus, known protocols for stock hierarchical decisions in extreme situations can reduce individual behavior variations and lead to more ethical decisions.[1]

Just as in any hospital area, emergency rooms, where the participants of this study worked, are places of power struggles among health professionals, which can cause conflict and even pain to nursing staff.[7] This power struggle is amply illustrated in the fact that nursing staff have a very slight participation in decision-making processes related to the referral of patients to ICUs. This fact can be exemplified in the testimony of a nurse: "I don’t refer patients to the ICU. I have no such power."

Providing information to patients and their families about the decision to be taken must always be part of the decision-making process.[6] However, as noted in this study, discussions with the patients and their families are rare.

The situation of having to decide between two or more patients needing an ICU vacancy or the sheer lack of vacancies leads the vast majority of healthcare professionals to experience feelings of sadness. The turning down of patients needing intensive care often occurs in clinical practice for reasons related to the shortage of beds, age, presence of chronic or severe acute illness.[8] Clinical criteria for referring patients were the most commonly cited. This preference can be found in the words of a doctor, "I refer those who stand the greatest chances of surviving." According to healthcare professionals, referral is made especially if the patient has an acute and potentially reversible illness.

The slight preference for females may be due to the fact that most participating professionals were females and also in part to the view that a woman is responsible for child rearing, or as one nurse noted: "It is women who usually take care of their children". Patient age also influences a possible referral. In this case, the elderly would be less likely to be referred. However, not prioritizing the elderly is a controversial position as it does not take individualities into account.[4]

A study of medical students showed that future doctors will not refer to resources people who abuse alcohol.[9] However, in the present study, lifestyles, abuse of licit and illicit drugs did not influence patient referrals.

The use of social criteria in choosing people in need and their competitors for limited healthcare resources is controversial among healthcare professionals and bioethicists, with positions for and against.[10] Among healthcare professionals working in the emergency room, it was verified that social and economic characteristics did no prove to be of importance in referring patients to the ICU.

This study verified that the decision to refer patients to intensive care units is usually in the hands of the physician treating the patient. This decision is based on clinical criteria, in which the disease being acute, potentially reversible and affecting young individuals are positive factors for referring a patient to the ICU while chronic, irreversible diseases in elderly patients are potentially negative factors in the referral.

References

1. Lyden, PD, Meyer BC, Hemmen TM, Rapp KS. An ethical hierarchy for decision making during medical emergencies. Ann Neurol. 2010:67:434–440.

2. Medeiros M. Princípios de justiça na alocação de recursos em saúde. Instituto de Pesquisa Econômica Aplicada. Rio de Janeiro 1999: 1-12.

3. Japiassu AM, Cukier MS, Queiroz AGCM, Gondim CRN, Penna GLA, Almeida GF, Kurtz PMP, Rodrigues AR, Freitas MB, Souza RV, Rosa PA, Faria CJC, Drumond LEF, Kalichsztein M, Nobre GF. Fatores preditores precoces de reinternação em unidade de terapia intensiva. Rev Bras Ter Intensiva. 2009:21:353-358.

4. Freitas EEC, Schramm FR. A moralidade da alocação de recursos no cuidado de idosos no centro de tratamento intensivo. Rev Bras Ter Intensiva. 2009:21:432-436.

5. Batista CC, Gattass CA, Calheiros TP, RB Moura. Avaliação prognóstica individual na UTI: é possível diferenciar insistência terapêutica de obstinação terapêutica?. Rev Bras Ter Intensiva. 2009:21:247-254.

6. Ribeiro CDM, S Rego. Clinical bioethics: contributions to decision-making in neonatal intensive care units. Cien Sau Col. 2008:13:2239-2246.

7. Lunardi VL, Lunardi Filho WD, Silveira RS, Silva MRS, Svaldi JSD, Bulhosa MS. Nursing ethics and its relation with power and work organization. Rev Latino-am Enfermagem. 2007:15:493-497.

8. Rocco JR, Soares M, Gago MF. Pacientes clínicos referenciados, mas não internados na Unidade de Terapia Intensiva: prevalência, características clínicas e prognóstico. Rev Bras Ter Intensiva. 2006:18:114-120.

9. Hossne WS, Hossne RS. Opinião do estudante de medicina sobre algumas questões bioéticas. Bioética. 1998;6:127-33

10. Fortes PAC. Selecionar quem deve viver: um estudo bioético sobre os critérios sociais para microalocação de recursos em emergências médicas. Rev Assoc Med Bras 2002:48:129-134.