Revista de Enfermagem do Centro-Oeste Mineiro
2020;10:e4167
DOI: 10.19175/recom.v10i0.4167
www.ufsj.edu.br/recom

RECOM
REVISTA DE ENFERMAGEM DO CENTRO-OESTE MINEIRO

Original Article

BIOÉTICA E A ALOCAÇÃO DE RECURSOS NOS CUIDADOS PALIATIVOS DURANTE A PANDEMIA DE COVID-19: PERCEPÇÃO DE PROFISSIONAIS DE SAÚDE

BIOETHICS AND THE ALLOCATION OF RESOURCES IN PALLIATIVE CARE DURING THE COVID-19 PANDEMIC: THE PERCEPTION OF HEALTH PROFESSIONALS

LA BIOÉTICA Y LA ASIGNACIÓN DE RECURSOS EN CUIDADOS PALIATIVOS DURANTE LA PANDEMIA DEL COVID-19 - PERCEPCIÓN DE LOS PROFESIONALES DE LA SALUD

Priscila Kelly Silva Neto[1], Juliana Dias Reis Pessalacia[2], Elton Fogaça da Costa[3], Paulo Roberto Haidamus de Oliveira Basto[4], Luciana Regina Ferreira da Mata, Sandra Pinto[5]

RESUMO

Objetivo: Analisar a percepção de profissionais de saúde sobre as questões bioéticas na tomada de decisão acerca dos recursos escassos, no contexto dos Cuidados Paliativos (CP), durante a pandemia de COVID-19 no Brasil. **Métodos:** Estudo transversal, descritivo e de abordagem quantitativa, realizado por meio de um questionário *on-line,* contendo quatro afirmativas sobre os dilemas éticos para que os participantes pudessem concordar ou não com elas, totalizando um escore máximo de 20 pontos. Os dados foram tabulados e analisados, por meio de estatística descritiva, utilizando-se o *software Statistical Package for Social Sciences* (SPSS), versão 25.0. **Resultados:** Participaram 190 profissionais de saúde, 45,3% (86) enfermeiros, 23,7% (45) médicos, 10,5% (20) dentistas e 12,6% (24) outros profissionais de saúde. Identificaram-se os seguintes percentuais de erros: restrição do acesso a Unidades de Terapia Intensiva (UTIs) (93 - 48,9%), disponibilização de ventiladores (117 - 61,6%), decisão de triagem para recursos escassos (158 – 83,2%), interrupção do atendimento a pacientes crônicos e paliativos na pandemia (11 – 5,8%). **Conclusão:** Os resultados demonstraram que os profissionais ainda apresentam conhecimento insuficiente sobre critérios de justiça e equidade na alocação de recursos escassos e que há necessidade de educação permanente no assunto voltado à temática.
Descritores: Bioética; Equidade em Saúde; Alocação de Recursos para a Atenção à Saúde; COVID-19; Cuidados Paliativos.

ABSTRACT

Objective: To analyze the perception of health professionals about bioethical issues in decision-making processes about scarce resourcesfor Palliative Care (PC) during the COVID-19 pandemic in Brazil. **Methods**: This is a cross-sectional, descriptive study with a quantitative approach, carried out through an online questionnaire containing four statements about ethical dilemmas for participants to agree or disagree on, totaling a maximum score of 20 points. The data were tabulated and analyzed using descriptive statistics, on software Statistical Package for Social Sciences (SPSS), version 25.0. **Results**: 190 health professionals participated, 45.3% (86) nurses, 23.7% (45) doctors, 10.5% (20) dentists and 12.6% (24) other health professionals. The following percentages of errors were identified: restriction of access to Intensive Care Units (ICUs) (93 - 48.9%), availability of ventilators (117 - 61.6%), screening decision for scarce resources (158 - 83.2%), interruption of care for chronic and palliative patients in the pandemic (11 - 5.8%). **Conclusion**: The results demonstrate that the professionals still have insufficient knowledge about the criteria of justice and equity in the allocation of scarce resources and that there is a need for permanent education on the subject
Descriptors: Bioethics; Health Equity; Resource Allocation for Health Care; COVID-19; Palliative Care.

RESUMEN

Objetivo: Analizar la percepción de los profesionales de la salud sobre temas bioéticos en la toma de decisiones sobre recursos escasos en el contexto de Cuidados Paliativos (CP) durante la pandemia de COVID-19 en Brasil. **Métodos**: Estudio descriptivo transversal con enfoque cuantitativo, realizado a través de un cuestionario online que contiene cuatro afirmaciones sobre dilemas éticos para que los participantes estén de acuerdo o en desacuerdo con ellos, totalizando una puntuación máxima de 20 puntos. Los datos fueron organizados y analizados mediante estadística descriptiva, utilizando el *software Statistical Package for Social Sciences* (SPSS), versión 25.0. **Resultados**: Participaron 190 profesionales de la salud, 45,3% (86) enfermeras, 23,7% (45) médicos, 10,5% (20) odontólogos y 12,6% (24) otros profesionales de la salud. Se identificaron los siguientes porcentajes de errores: restricción de acceso a Unidades de Cuidados Intensivos (UCI) (93 - 48,9%), disponibilidad de ventiladores (117 - 61,6%), decisión de selección de recursos escasos (158 - 83,2%), interrupción de la atención de pacientes crónicos y paliativos en la pandemia (11 - 5,8%). **Conclusión**: Los resultados demuestran que los profesionales aún tienen un conocimiento insuficiente sobre los criterios de justicia y equidad en la asignación de recursos escasos y que existe la necesidad de una educación permanente en la materia enfocada en el tema.
Descriptores: Bioética; Equidad en Salud; Asignación de Recursos para la Atención Médica; COVID-19; Cuidados Paliativos.

[1]Master's student in Nursing at the Federal University of Mato Grosso do Sul. [2]Post-doctorate in Nursing at the Nursing School of the University of São Paulo, São Paulo. Professor at the Federal University of Mato Grosso do Sul. [3]Ph.D. in Law from the Federal University of Santa Catarina. Professor at the Federal University of Mato Grosso do Sul. [4]Ph.D. in Education from the Pontifical Catholic University of São Paulo (PUC-SP). Professor at the Federal University of Mato Grosso do Sul. [5]Ph.D. by the Fundamental Nursing program at Nursing School of Ribeirão Preto, University of São Paulo. Professor at the Federal University of Minas Gerais. [6]Master´s student in Nursing at the Federal University of Mato Grosso do Sul.

How to cite this article:
Neto PKS, Pessalácia JDR, Costa EF, et al. Bioethics and the allocation of resources in palliative care during the Covid-19 Pandemic: the perception of health professionals. Revista de Enfermagem do Centro-Oeste Mineiro. 2020;10:e4167. [Access_____]; Available in:_____. DOI: http://doi.org/10.19175/recom.v10i0.4167

INTRODUCTION

In Brazil, the Unified Health System (SUS) guarantees universal health access for any citizen of the country. However, in times of crisis and with the scarcity of resources in health systems, services began to face several ethical challenges due to the lack of technical and operational capacity, to deal with an unexpected number of patients and with decision making involving fairly distribution resources (human, material, equipment). Few new or emerging infectious diseases have presented vital ethical challenges as quickly and dramatically as the new SARS-Cov-2, which causes Corona Virus Disease 2019 (COVID-19)[1].

In situations of crisis, as in this current COVID-19 pandemic, humanitarian action is committed to vulnerable populations, including people in Palliative Care (PC) who are at the end of their life conditions. The ethical responsibility to provide PC in situations of humanitarian crisis aims to meet a basic human right, including the right to dignity and comfort in the process of illness and death. The lack of integration of PCs with screening protocols during the pandemic ignores the needs of patients who need this type of care, under the false dichotomy that the option of not offering PCs is due to the need to provide treatment (even if aggressive) to save the patient's life. If health teams choose aggressive treatment instead of exclusion, there are scarce resources on futile and costly care for patients who can be better assisted by palliative interventions[2].

From the results of a systematic review[2] based on the analysis of 95 publications on the provision of PC in humanitarian crises, we observed a lack of data on the needs of PC and interventions provided in these contexts and the lack of consensus on the ethics of providing or limiting PC as part of the humanitarian health response. Such results justify the importance of conducting studies on ethics and PC in humanitarian crises, such as the current COVID-19 pandemic.

For some researchers[3], the duty to care is a critical component of any pandemic classification plan. In this sense, the role of PC teams is to prioritize the relief of suffering, fundamental during the epidemic, especially in the integral and continuous care of those patients who are not hospitalized or outpatients. They should incorporate ethical guidelines into pandemic and disaster planning to support providers and health professionals who would otherwise be able to make hasty decisions to assist the urgent patient and exceed ethical limits[4].

In this context, this study aims to analyze the perception of health professionals about bioethical issues in decision-making about scarce resources in the context of PC during the COVID-19 pandemic in Brazil.

METHODS

This is a cross-sectional, descriptive study with a quantitative approach, approved by the Research Ethics Committee of the proposing institution, CAAE 31479820.5.0000.0021, opinion No. 4.042.275, in compliance with the recommendations of the Resolution of the National Health Council/Ministry of Health (CNS/MS) 466/2012, which is part of a larger study entitled: Perceptions of health professionals about the allocation of scarce resources in the pandemic of COVID-19.

We invited health professionals directly involved in health care or management at all levels of care, during the COVID-19 pandemic in Brazil to participate in the research. Health professionals who were working remotely due to the risk factors related to the pandemic were disregarded.

The process of obtaining the sample was non-probabilistic since the participants were invited by chain sampling. Each researcher in the study chose in his network of contacts health professionals from different states of Brazil. These people were called influencers, whose objective was to share and encourage participation in the research. The influencers sent the survey link to professionals on their social networks and reached a diversity of respondents. We sought to obtain a sample of national coverage. Information about the study was also released through the media by the institution that proposed the research.

Data collection took place between July and October 2020 through an online self-completed questionnaire by participants, sent through digital media and social networks, using the Google forms tool. In June 2020, the questionnaire was subjected to a content assessment by five health professionals with different backgrounds to assess the clarity of the items of their writing and comprehension. The questionnaire was adapted after this stage. Before starting to fill out the form, we applied the Informed Consent Form (ICF), using the same tool, and a PDF copy signed by the responsible researcher was available.

The first part had a questionnaire containing closed questions. It is an instrument

built by the researchers, composed of four statements related to decision-making, involving the allocation of scarce resources during the COVID-19 pandemic, which the respondent should indicate according to their perception (Chart 1).

The statements were written and their agreement or not was analyzed, based on data found in the literature[3-8] to evaluate the responses of the participants and answer the research objective, regarding their perception in the process of decision-making in the face of hypothetical situations presented. For a better understanding of the collected data, the questions were systematized in four thematic axes, that is, each question corresponded to a thematic axis that supported the analysis of the study: Restriction of access to Intensive Care Units (ICUs)[5-7]; Availability of ventilators[4.6]; Screening decision for scarce resources[5,7]; and Interruption of care for chronic and palliative patients in the COVID-19 pandemic[3.8] (Chart 1).

The total score of the questionnaire was 20 points, corresponding to five points for each answer considered correct and zero points for the answers considered incorrect or if the participant chose the option "I am not able to give an opinion". The higher the score, the greater the knowledge of the ethical criteria in making decisions about scarce resources during the COVID-19 pandemic. At the end of the questionnaire, the participant received feedback on the results.

Chart 1 - Questions of the analysis of the study on dilemmas in bioethics, regarding decision-making involving the allocation of scarce resources amid the pandemic of COVID-19.

Thematic axis 1. Restriction of access to Intensive Care Units (ICUs)	**I agree**	**I disagree**	**I cannot give my opinion**
Affirmative 1. It is recommended to exclude access to Intensive Care Units (ICUs) to patients with an unfavorable prognosis, amid the need to allocate beds for the care of people with a better prognosis, during the COVID-19 pandemic.			
Thematic axis 2. Availability of ventilators	**I agree**	**I disagree**	**I cannot give my opinion**
Affirmative 2. When providing ventilators, it is always recommended to prioritize those critical patients most likely to survive until hospital discharge with treatment.			
Thematic axis 3. Screening decision for scarce resources	**I agree**	**I disagree**	**I cannot give my opinion**
Affirmative 3. In the case of patients with a similar prognosis and with the same severity/urgency of care, it is more appropriate to allocate resources by lot instead of the order of arrival.			
Thematic axis 4. Disruption of care for chronic and palliative patients in the COVID-19 pandemic	**I agree**	**I disagree**	**I cannot give my opinion**
Affirmative 4. In the context of the COVID-19 pandemic, it is appropriate to interrupt the care for patients with urgent needs, such as cancer, diabetes, heart disease, and pregnant women, reducing the circulation of people in health institutions.			

Source: elaborated by the authors.

Subsequently, the participants filled in items related to the profession, degree of training, professional status, and questions about their knowledge in bioethics, such as having or not having knowledge about bioethics, how they acquired the knowledge, how they consider their level of knowledge in bioethics, the importance of bioethics in professional practice and the importance of bioethics in the elaboration of public policies in a pandemic context.

The data were tabulated in the Microsoft Office Excel program (Microsoft ©, 2010) and presented using descriptive statistics. Descriptive statistics were performed to obtain the mean, standard deviation, absolute and relative frequencies, using the Statistical Package for Social Sciences (SPSS) software, version 25.0.

RESULTS AND DISCUSSION

Participaram 190 profissionais de saúde, e a sua caracterização encontra-se descrita na Tabela 1.

Table 1 shows the characteristics of the 190 health professionals participating in the study.

Table 1 - Characterization of health professionals working during the COVID-19 pandemic, Brazil, 2020 (n=190).

Variables	N	%
Profession		
Nurse	86	45.3
Doctor	45	23.7
Dentist	20	10.5
Pharmaceutical	10	5.3
Physiotherapist	5	2.6
Other health professionals	24	12.6
Degree		
Specialization	88	46.3
Graduation	53	27.9
Master's degree	25	13.2
Doctorate	12	6.3
Post-doctorate	4	2.1
Others	8	4.2
State		
Mato Grosso do Sul (MS)	72	37.9
São Paulo (SP)	64	33.7
Minas Gerais (MG)	14	7.4
Paraná (PR)	14	7.4
Piauí (PI)	4	2.1
Espírito Santo (ES)	3	1.6
Other States	19	10

Source: Research data (2020).

Most nurses and doctors were participating professionals since they are often the most involved in the decision-making process in ethical conflicts and the screening of patients regarding the allocation of beds and ventilators during the pandemic [7, 9].

A study[10] carried out with doctors, nurses and nursing technicians in a pediatric ICU in Porto Alegre/Brazil aimed at evaluating the perceptions of these professionals about participation in the decision-making process regarding the limitation of life support in terminal pediatric patients identified that doctors and nursing staff perceive a lack of voice in the decision-making process.

Most of the participants had a degree at a specialization level, besides master's degrees, doctorate, and post-doctorate, which demonstrates the complexity of the study's theme involving decision-making through scarce resources during the COVID-19 pandemic[11]. We believe that the limited participation of professionals with other levels of education and professional categories is possibly due to the discomfort with the topic addressed or to their lack of knowledge on the subject as observed in another study[10].

The greater participation of professionals from the states of Mato Grosso do Sul and São Paulo is justified by the chain sampling procedure since they were the places where there was the largest network of contacts of the researchers of the study team.

Table 2 shows the perception of the participants in the level of knowledge and the importance of training, in the area of Bioethics, for their performance during the pandemic.

Table 2 - Perception of health professionals regarding the level of knowledge and importance of bioethics to act during the pandemic of COVID-19, Brazil, 2020 (n = 190).

Perception of knowledge in Bioethics	n	%
Do you know about Bioethics?		
Yes	144	75.8
No	36	18.9
I do not know	10	5.3

"continues on the next page"

Perception of knowledge in Bioethics		
How did you acquire knowledge in Bioethics?		
During graduation training	95	50
In a Postgraduate Course	27	14.2
In continuing service education	26	13.7
Other courses or events on the theme	15	7.9
I have no prior knowledge in Bioethics	27	14.2
What is your level of knowledge about Bioethics?		
Broad knowledge	6	3.2
Sufficient knowledge	80	42.1
Minimum knowledge	21	11
Little knowledge	71	37.4
No knowledge	12	6.3
The importance of Bioethics for professional performance during the Covid-19 pandemic		
Very important	88	46.3
Important	81	42.6
Little important	4	2.1
It is not important	1	0.5
I cannot give an opinion	16	8.4
The importance of Bioethics for the elaboration of public policies on the distribution of health resources in the Covid-19 pandemic		
Very important	127	66.8
Important	50	26.3
Little important	1	0.5
It is not important	0	0
I cannot give an opinion	12	6.3

Source: Research data (2020).

Most participants declared that they had sufficient knowledge about Bioethics acquired at their graduation, recognizing the importance of this type of knowledge for the performance and elaboration of public policies for the allocation of scarce resources in the pandemic of COVID-19.

Teaching Bioethics at the undergraduate level is essential to raise awareness among future health professionals about decisions involving dilemmas and problems that will arise during professional practice[12]. Some authors[13] investigated the knowledge about Bioethics in the decision-making process by students of the Physiotherapy, Pharmacy, Nursing, Physical Education and Dentistry courses of a public university in the state of Bahia/Brazil. The results on knowledge about the concept of Bioethics pointed out that just over half (52.4%) of the participants presented satisfactory answers. Those who attended Nursing, Physiotherapy, and Dentistry obtained a better percentage of correct answers for the other categories because they have mandatory disciplines of Deontology and/or Bioethics in the course curriculum.

From the results of a study[14] carried out with professionals from the Family Health Strategy (FHS) aimed at investigating the perception of professionals of the importance of ethics and bioethics for health practices, 54.8% did not participate in any training activity on the theme, 16.1% of the participants declared to have acquired knowledge about bioethics, during graduation or through courses provided by the professional council, 9.7% with courses or training promoted by a public agency, 6.5% acquired knowledge, but did not specify where and 3.2%, in technical study courses. Most of them (83.9%) expressed the desire to learn more about the theme, recognizing its importance.

Table 3 shows the percentages of correct and incorrect answers from participating health professionals in the statements regarding decision making facing bioethical dilemmas, involving the allocation of scarce resources, during the COVID-19 pandemic, considering the questions related to PC.

Table 3 - Perception of health professionals, regarding the level of knowledge and importance of bioethics, to act during the pandemic of COVID-19 Brazil, 2020 (n = 190).

Thematic axes			Correct answers		Incorrect answers		I cannot give my opinion	
	Mean	SD*	n	%	n	%	N	%
1- Restriction of access to Intensive Care Units (ICUs)	4,29	6,163	75	39,5	93	48,9	22	11,6
2- Availability of ventilators	3,11	5,452	58	30,5	117	61,6	15	7,9
3- Screening decision for scarce resources	2,74	6,657	8	4,2	158	83,2	24	12,6
4- Disruption of care for chronic and palliative patients in the Covid-19 pandemic	4,87	1,954	177	93,2	11	5,8	2	1,1

Source: Research data (2020).
*SD: Standard deviation.

The findings of this study show the insufficient knowledge of health professionals in the ethical dilemmas of professional practice, involving the allocation of scarce resources in the pandemic and that can threaten the success of the response to a public health emergency[6]. Such insufficiency contradicts the perception reported by the professionals that they would have sufficient knowledge on the subject. One hypothesis for the high rate of errors is because of the context of a pandemic caused by a new pathogen with a constantly changing clinical and epidemiological scenario in which we find uncertainty. We observe that the human brain has difficulties consciously analyze situations with several variables involved[15-16]; however, a decision-making process based on intuition and insecurity must be avoided, even though the importance of quick decision making is recognized in an emergency context[17].

Another hypothesis is the insufficiency of training in Bioethics due to the complexity of the bioethical reflections necessary for professional performance. We observed that many professionals have some difficulty in identifying situations and problems of a bioethical nature in their daily lives, showing confusion in the concepts involving the theme, or they believe that knowledge in Bioethics is restricted to the health sciences area[14].

The results of the professionals' perceptions were discussed according to the following axes.

Restriction of access to Intensive Care Units (ICUs)

The question brought the statement that "it is recommended to exclude access to ICUs to patients with an unfavorable prognosis, during the need for the allocation of beds, for the care of people with a better prognosis, during the COVID-19 pandemic". Thus, 93 (48.9%) believe that even with an unfavorable prognosis and the scarcity of resources, access to ICU for patients with PC indication should be maintained.

The Recommendations of the Brazilian Association of Intensive Care Medicine (AMIB) for the approach of COVID-19 in intensive care[7] in its screening principles are "The decision to limit access to scarce resources, such as ICU beds, should be shared and coordinated jointly with the hospital's technical director and health authorities at the local, regional or national level. This decision can only be made after the exhaustion of critical care resources at the health system level and with a declaration of a catastrophe situation"[7]. It also provides that the assessment is based on the priority levels established in Resolution CFM 2156/2016, in priority 1 to 5.

CFM Resolution 2156/2016 establishes five levels of priority access to ICUs: "Priority 1: patients who need life support interventions, with a high probability of recovery and without any limitation of therapeutic support; Priority 2: patients who require intensive monitoring due to the high risk of needing immediate intervention and without any limitation of therapeutic support; Priority 3: patients who need life support interventions with a low probability of recovery or with limited therapeutic intervention; Priority 4: patients who need intensive monitoring due to the high risk of needing immediate intervention but with limited therapeutic intervention; Priority 5: patients with a terminal illness or dying with no possibility of recovery ". In general, these patients are not suitable for admission to the ICU (unless they are potential organ donors). However, their admission can be justified exceptionally, considering the peculiarities of the case and conditioned to the criterion of the intensive care doctor[18].

The AMIB document also highlights that "Patients who due to priority allocation will not be treated by Intensive Care should be treated at other units, with an emphasis on symptom

control. Even if limited, care must be provided compassionately, so that patients do not feel abandoned"[7].

Thus, the restriction on the supply of scarce resources should not imply the discontinuity of health care in its other dimensions, including end-of-life care if death is inevitable. However, the lack of criteria for restricting access is the misuse of ICU beds and contributes to accentuating the depletion of these resources[7]. The Medical Code of Ethics, CFM Resolution No. 1,805 of November 28, 2006, states that, in "irreversible and terminal clinical situations, the doctor will avoid performing unnecessary diagnostic and therapeutic procedures and will provide all an appropriate palliative care to patients under his care."(Chapter 1, item XXII)[19].

Thus, the restriction of access to ICU beds by patients in PC does not imply abandonment or discrimination of this type of patient but respect for the inherent dignity of each individual who approaches the end of life, providing him with a better quality of survival, including appropriate symptom control treatments, in particular, pain control and acceptance of their emotional, social and spiritual needs[20].

Therefore, we observe that almost half of the respondents did not agree to restrict access to resources (beds), maximizing the benefits for a greater number of people. We believe that such disagreement is due to the perception that this type of decision must consider the opinion of the patient and family, respecting the principle of autonomy. However, in a pandemic context such as COVID-19, with a shortage of beds and ventilators, doctors and health professionals have an ethical obligation to provide benefits to the greatest number of people at the expense of the individual needs and perceptions of patients[6].

The application of the principle of justice must occur uniformly to all people. The criterion of chronological age should be separated as the only strategy and incorporating other variables such as the degree of fragility, biological age, and values and preferences of patients so that decision-making occurs in a shared way between the team and, whenever possible, with the patient and family through respectful, transparent and confident communication. In general, we propose to apply the principle of distributive justice, prioritizing the best cost/opportunity and the principle of proportionality, eliminating conditions in which a minimum benefit is expected[21].

Thus, technical knowledge must be instrumentalized due to the complexity of the circumstances involved, so as not to admit a superficial and unfounded look, governed by protocols since, in these moments, emotions influence the individual's discernment. Even if bioethics considers it unlikely to find consensual solutions to persistent moral conflicts in health care, we should seek solutions that are reasonable and prudent[11].

Consequently, institutions and clinics across the country needed to develop protocols to determine fair, systematic, and evidence-based methods to decide who will receive health resources when the demand exceeds the available supply[8].

Availability of ventilators

The following statement was presented to the participants: "When providing ventilators, it is always recommended to prioritize those critical patients most likely to survive until hospital discharge with treatment". Participants were expected to respond that it is not 'always' recommended, but 61.6% (117) of the responses were incorrect, as they agreed with the statement. Although this criterion may immediately seem appropriate as it tries to do the greatest good for the greatest number of people, it may be inadequate in some cases because it ignores other ethical considerations, such as the relevance of considering saving the greatest number of years of life (long-term survival)[4].

According to the recommendation of the US Centers for Disease Control and Prevention[22], the ethical justification for restricting access or removing the ventilator is that, in a public health emergency, the objective of maximizing the population's results would be compromised if the patients unlikely to survive were allowed to use ventilators indefinitely. The relocation will be distressing for health professionals, patients, and families, but when mechanical ventilation is interrupted, a comprehensive PC is essential[6].

In what almost seems like a harbinger, the distribution of limited resources was recently explored by an intensivist from the Department of Community Health at Johns Hopkins Hospital in the United States and his team, in which the community participated in the survey and 72% of the participants agreed that there are certain people or groups of people who should receive priority treatment over others when there is not enough treatment available to help everyone.

They also found that, in times of crisis, short- and long-term results should be considered, mainly, when deciding scarce resources[23].

In 2018, the World Health Organization[20] launched a guide aimed at PCs, which seeks to assist the professional responsible for screening in the process of integrating symptom relief in times of crises and humanitarian emergencies. In this instrument, the screening recommendations for PC patients are categorized, following the following classifications:

- Red classification: "Survival is possible with immediate treatment", PCs must be integrated with life-sustaining treatment;
- Blue classification: "Survival is not possible" due to available care so the PCs are for symptom control, welcoming the family or patient, and bereavement;
- Yellow classification: "The patient is not in immediate danger of death", but treatment is needed soon. PC and/or symptom relief may be needed immediately;
- Green classification: "The patient will need medical care at some point", in this case, after treating patients with more critical conditions in PC, symptom relief and reception may be necessary.

Therefore, it is recommended[7] to use the Supportive and Palliative Care Indicators Tool (SPICT) to save the greatest number of years of life, that is, long-term survival. It is a clinical tool used by health professionals to calculate clinical indicators, based on evidence of the main advanced and progressive health conditions, with no curative therapeutic perspective, whose long-term life expectancy is less than one year for one or more diseases to refer the patient to PC. This instrument allows for a review of current conduct and treatment, providing better care planning[24].

Screening decision for scarce resources

The question with the highest percentage of error (158 - 83.2%) was related to the thematic axis that addresses the screening decision in situations involving scarce resources. In this scenario, the following statement was presented: "In the case of patients with a similar prognosis and with the same severity/urgency of care, it is more appropriate to allocate resources by lot instead of the order of arrival". Participants were expected to agree with this statement, but 158 (83.2%) did not agree. Such disagreement was probably because of the perception that the allocation by lot is not the most appropriate form from an ethical point of view. However, the question stated that the draw would be not the best criterion, but that it would be more appropriate than considering the "order of arrival" criterion.

Some authors[5] recommend that, in cases of a clinical tie, the draw is more appropriate than the order of arrival, as the treatments for COVID-19 meet urgent needs, which means that a "first coming, first to be assisted" would unfairly benefit patients who live closer to health facilities.

Researchers[25] conducted an investigation in the state of Maryland in the United States to assess the perception of community members about the ethical decision-making process regarding the allocation of scarce medical resources, during a pandemic. Their results demonstrated that the "order of arrival" criterion at first was well accepted by the community (82%). However, after the educational intervention on ethical principles carried out by the researchers, 52% of these participants changed their opinion and believed that they should never use this criterion in screening. Also, 80% spoke out against the draw criterion after the intervention. Therefore, there is a greater tendency in accepting the order of arrival criterion than drawing lots. From an ethical point of view, the draw criterion is more appropriate than the order of arrival. However, the most appropriate behavior would be to have criteria linked to an individualized clinical approach, based on guidelines and protocols that guarantee the ethics of public health[25].

In the national context, AMIB, ABRAMEDE (Brazilian Association of Emergency Medicine), SBGG (Brazilian Society of Geriatrics and Gerontology), and ANCP (National Academy of Palliative Care) have a protocol on the allocation of scarce resources during the COVID-19pandemic, which includes a screening model to propose a practical tool to healthcare professionals in the face of complex decisions associated with the allocation of ICU beds and ventilators. To have this resource, it is recommended to use individual assessment instruments for severity scores such as the Sequential Organ Failure Assessment (SOFA) and the Acute Physiology And Chronic Health Evaluation (APACHE). SOFA is the most used. These instruments stratify the degree of severity of organ dysfunctions presented by a patient and, as a tiebreaker criterion, they use, sequentially, the clinical fragility score proposed by the National Institute for Health and Care Excellence (NICE) in

the United Kingdom, the total score SOFA and, finally, randomization, that is, the random draw[7].

Thus, for the health system to work effectively, teams need to know which decisions on resource allocation will enable them to save the greatest number of lives. For this, we should consider making these resources available to non-COVID-19 patients with unstable clinical conditions, using the same criteria. This is because these patients will need intensive treatment to relieve their acute illness, with certain therapeutic limits, such as not intubating. Also, poorly designed screening protocols that interrupt the care for chronic patients or that prioritize categories of people for the ventilatory support could expose health systems to ethical and legal claims of unfair discrimination[3].

Disruption of care for chronic and palliative patients in the COVID-19 pandemic

In this context, the following statement was made: "In the context of the COVID-19 pandemic, it is appropriate to interrupt the care of patients with urgent needs, such as cancer, diabetes, heart disease, and pregnant women to reduce the circulation of people in health institutions". Respondents were expected to disagree, stating that this interruption is not appropriate. This question involved the highest percentage of correct answers (177-93.2%), and the participants agreed that the pandemic does not justify interruptions in the attendance of conditions other than COVID-19 by the health system, as it would probably cause more deaths people with a variety of urgent health needs than patients diagnosed with COVID-19.

In cases of crisis, the professional is responsible for the treatment of these patients who assumes full responsibility to encourage them not to interrupt the treatment, and not the patient or a close friend since the health professional knows the real impact of this interruption. In PCs, the duty to care is a critical component of any pandemic classification plan and challenging for health teams, as it refers to conflicts related to futile and prolonging suffering therapies[3].

As institutions and governments reduce the priority of access to elective procedures and non-urgent medical care, they must be aware of the usual needs of the regions they assist and recognize that there will be sick patients who do not have COVID-19 and who need specialized care, such as patients in PC. Having these resources can cause conflict between the institutions' duty to care for patients and their responsibility to manage scarce resources[8].

Thus, good contingency planning can help to mitigate the effects of resource allocation and redistribution. Also, disease severity scores should allow simultaneous assessment of patients with and without COVID-19 and support integrated rather than isolated resource allocation[8].

The limitations of this study include the reduced number of participants and the greater representation in two Brazilian states. However, we understand that the results of this research reflect the reality in Brazil.

CONCLUSION

The perception of health professionals who are working during the COVID-19 pandemic shows that, even with prior knowledge about bioethics in undergraduate education, they are not sufficiently prepared to make decisions in dilemmatic situations in professional practice. We need to encourage participation in permanent education programs in services focused on bioethics themes.

Professionals also demonstrated insufficient knowledge in decision-making in the face of ethical problems related to PC in crisis contexts such as the pandemic. There is an urgent need for public policies aimed at PC in the country and policies that consider ethical criteria in the allocation of scarce resources in times of crisis. Also, health institutions and services must provide screening protocols, capable of recognizing the needs of patients, in the social context of a pandemic and with the participation of bioethics committees.

This study contributes to knowledge in the Nursing area as the participants were professionals in this area, showing the insufficiency of knowledge and their training in decision making involving the allocation of scarce resources during periods of a humanitarian crisis. Based on the identification of ethical criteria and instruments involved in decision-making, nurses will be able to guide their actions and care more assertively and fairly, guaranteeing assistance that considers a broad and comprehensive view of health and that meets the principle of SUS equity.

REFERENCES

1- Gostin LO, Friedman EA, Wetter SA. Responding to COVID-19: How to Navigate a Public Health Emergency Legally and Ethically. Hastings

Cent. 2020;50(2):8-12. DOI: 10.1001/jama.2020.5046
2- Nouvet E, Sivaram M, Bezanson K, Krishnaraj G, Hunt M, Laat L, et al. Cuidados paliativos em crises humanitárias: Uma revisão da literatura. Ação Humanitária Int J. 2018;3(5). DOI: 10.1186/s41018-018-0033-8
3- Maglio I, Valdez P, Cámera L, Finn B, Klein M, Pincemim I, et al. Guías éticas para la atención durante la pandemia covid-19: recomendaciones multisocietarias para asignación de recursos medicina. Medicina 2020 [cited 2020 set 18]; 80(Suppl 3):45-64. Available in: https://www.medicinabuenosaires.com/indices-de-2020/volumen-80-ano-2020-s-3-indice/guias_eticas/
4- Biddison ELD, Gwon HS, Schoch-Spana M, Regenberger AC, Juliano C, Faden RR, et al. Scarce resource allocation during disasters: A mixed-method community engagement study. Multicenter Study 2017;153(1):187-95. DOI: 10.1016/j.chest.2017.08.001
5- Emanuel EJ, Persad G, Hupshur R, Thomé B, Parker M, Glikman M, et al. Fair allocation of scarce medical resources in the time of Covid-19. N Engl J Med. 2020;382(21):2049-55. DOI: 10.1056/NEJMsb2005114
6- White DB, LO B. A framework for rationing ventilators and critical care beds during the COVID-19 pandemic. JAMA 2020;323(18):1773-4. DOI: 10.1001/jama.2020.5046
7- Kretzer L, Berbigier E, Lisboa R, Grumann AC, Andrade J. Recomendações da AMIB (Associação de Medicina Intensiva Brasileira), ABRAMEDE (Associação Brasileira de Medicina de Emergência, SBGG (Sociedade Brasileira de Geriatria e Gerontologia) e ANCP (Academia Nacional de Cuidados Paliativos) de alocação de recursos em esgotamento durante a pandemia por COVID-19. São Paulo: AMIB; 2020.
8- Laventhal N, Basak R, Dell ML, Diekema D, Elster N, Geis G, et al. The ethics of creating a resource allocation strategy during the COVID-19 pandemic. Pediatrics 2020;146(1):e20201243. DOI: 10.1542/peds.2020-1243
9- Conselho Federal de Enfermagem (COFEN). Recomendações gerais para organização dos serviços de saúde e preparo das equipes de enfermagem: As unidades de saúde devem se adequar às mudanças necessárias para enfrentamento da pandemia de COVID-19. Brasília: COFEN; 2020.
10- Trotta EA, Scarpa FC, Halal MG, Goldim JR, Carvalho PR. Health professionals' perceptions about the decision-making process in the care of pediatric patients. Rev Bras Ter Intensiva 2016;28(3):335-40. DOI: 10.5935/0103-507X.20160057
11- Sanches MA, Cunha TR, Siqueira SS, Siqueira JE. Perspectivas bioéticas sobre tomada de decisão em tempos de pandemia. Rev Bioét. 2020;28(3):410-7. DOI: 10.1590/1983-80422020283401
12- Finkler M, Verdi MIM, Caetano JC, Ramos FRS. Formação profissional ética: um compromisso a partir das diretrizes curriculares? Trab Educ Saúde 2010;8(3):449-62. DOI: 10.1590/S1981-77462010000300007
13- Biondo CS, Rosa RS, Ferraz MOA, Yarid SD. Perspectivas do conhecimento da bioética pelos acadêmicos de saúde para atuação profissional. Enfermería Actual de Costa Rica 2018;(35):63-74. DOI: 10.15517/revenf.v0i35.30014
14- Motta LCS, Vidal SV, Gomes AP, Lopes TCC, Rennó L, Miyadahira R, et al. En busca del ethos de la Estrategia Salud de la Familia: Una investigación bioética. Rev Bioét. 2015;23(2):360-72. DOI: 10.1590/1983-80422015232075
15- Gigerenzer G, Brighton H. Homo heuristicus: Why biased minds make better inferences. Top Cogn Sci. 2009;1(1):107-43. DOI: 10.1111/j.1756-8765.2008.01006.x
16- Han PKJ, Zikmund-Fisher BJ, Duarte CW, Knaus M, Black A, Scherer AM, et al. Communication of scientific uncertainty about a novel pandemic health threat: Ambiguity aversion and its mechanisms. J Health Commun. 2018;23(5):435-44. DOI: 10.1080/10810730.2018.1461961
17- Teixeira C, Rosa RG, Rodrigues Filho EM, Fernandes EO. The medical decision-making process in the time of the coronavirus pandemic. Rev Bras Ter Intensiva 2020;32(2):308-11. DOI: 10.5935/0103-507x.20200033
18- Conselho Federal de Medicina (CFM). Resolução CFM nº 2.156, de 28 de outubro de 2016. Estabelece os critérios de admissão e alta em unidade de terapia intensiva. Diário Oficial da União 2016;1:138-9.
19- Conselho Federal de Medicina. Resolução CFM nº 1.805, de 28 de novembro de 2006. Na fase terminal de enfermidades graves e incuráveis é permitido ao médico limitar ou suspender procedimentos e tratamentos que prolonguem a vida do doente, garantindo-lhe os cuidados necessários para aliviar os sintomas que levam ao sofrimento, na perspectiva de uma assistência integral, respeitada a vontade do paciente ou de

seu representante legal. Diário Oficial da União 2006;1:169.
20- World Health Organization (WHO). Integrating palliative care and symptom relief into the response to humanitarian emergencies and crises: A WHO guide. Geneva: World Health Organization; 2018.
21- Rubio O, Estella A, Cabre L, Saralegui-Reta I, Martin MC, Zapata L, et al. Recomendaciones éticas para la toma de decisiones difíciles en las unidades de cuidados intensivos ante la situación excepcional de crisis por la pandemia por covid-19: Revisión rápida y consenso de expertos. Med Intensiva 2020;44(7):439–45. DOI: 10.1016/j.medin.2020.04.006
22- Centers for Disease Control and Prevention. Ethical Considerations for decision making regarding allocation of mechanical ventilators during a severe influenza pandemic or other public health emergency. USA: CDC; 2011.
23- Biddison ELD, Gwon HS, Schoch-Spana M, Cavalier R, White DB, Dawson T, et al. The community speaks: Understanding ethical values in allocation of scarce lifesaving resources during disasters. Ann Am Thorac Soc. 2014;11(5):777-83. DOI: 10.1513 / AnnalsATS.201310-379OC
24- Supportive and Palliative Care Indicator Tool (SPICT): SPICT-BRTM. 2020 [cited 2020 Nov 8]. Available in: https://www.spict.org.uk/thespict/spict-br/
25- Romanò M. Fra cure intensive e cure palliative ai tempi di CoViD-19. Recenti Prog Med. 2020;111(4):223-30. DOI:10.1701/3347.33185

Note: Article from the Master's Dissertation entitled "Perceptions of health professionals about allocation of scarce resources in the COVID-19 pandemic", from the Post-graduate Program in Nursing at the Federal University of Mato Grosso do Sul.

Received on: 18/10/2020
Approved on: 18/12/2020

Corresponding address:
Priscila Kelly da Silva Neto. Viela seis, nº 62 – Setsul. CEP: 79610-370 - Três Lagoas/MS.
e-mail: priscila.baldonado@gmail.com