

REVISTA

Bioética CREMEGO

VOLUME 4

N.01
2022



REVISTA

Bioética CREMEGO

Vol. 4 | N. 01 | 2022



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Bioética CREMEGO



REVISTA BIOÉTICA CREMEGO
VOL. 4 | N.01 | 2022

Conselho Editorial da Revista Científica do Conselho Regional de Medicina do Estado de Goiás

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Fone: (62) 3250-4900 - E-mail: revistabioetica@cremego.org.br

Ficha catalográfica

R454 Revista Bioética Cremego [recurso eletrônico] / Conselho
Regional de Medicina do Estado de Goiás. - Vol. 4, no. 1
(2022). - Goiânia: Cremego, 2022-

Semestral

ISSN xxxx-xxxx versão eletrônica

Modo de acesso: <<https://revistabioetica.cremego.org.br/cremego>>

1. Bioética. 2. Ética Médica. I. Conselho Regional de Medicina
do Estado de Goiás

CDU 614.25 (05)

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Bioética CREMEGO



Editorial

Scientific journals and books have a mission to bring the basic and advanced knowledge of true science.

Cremego, like the House of Ethics and the House of Doctors in Goiás, has the precept of configuring the crystalline truth of medical art for the protection of the population's health.

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Ethical aspects of the doctor-patient relationship in telemedicine: integrative review

Emerson Alves Miguel Batista Barreto¹, Geovana Christina Isidoro Bezerra², Arnon Coelho Bezerra Filho³, Yago Ferreira Ferro⁴, Waldemar Naves do Amaral⁵

ABSTRACT

Objective: To analyze the ethical aspects of the doctor-patient relationship in telemedicine consultations.

Method: Integrative review, in which 63 articles were identified, based on the following descriptors: ethics, telemedicine, and doctor-patient relationship, of which 16 were selected.

Results: We identified a need to update the regulations to ensure the ethical aspects of the doctor-patient relationship since the existing ones no longer meet the needs of this health tool that is being used with increasing frequency.

Conclusions: Much of the safety of the doctor-patient relationship depends on the doctor's choices, requiring greater articulation on the part of the responsible bodies to guarantee the safety of both doctor and patient.

Keywords: Telemedicine; Ethics; Doctor-patient relationship

RESUMO

Aspectos éticos da relação médico e paciente na telemedicina: revisão integrativa

Objetivo: Analisar os aspectos éticos da relação médico-paciente nas consultas de telemedicina.

Método: Revisão integrativa, na qual foram identificados 63 artigos, a partir dos seguintes descritores: ética, telemedicina e relação médico-paciente, dos quais 16 foram selecionados.

Resultados: Identificou-se uma necessidade da atualização das normas para assegurar os aspectos éticos da relação médico-paciente, sendo que as existentes não suprem mais as necessidades dessa ferramenta da saúde que está sendo cada vez mais usada.

Conclusões: Muito da segurança da relação médico-paciente depende das escolhas do médico, precisando de maiores articulações por parte dos órgãos responsáveis, a fim de garantir a segurança de ambos os lados.

Palavras-chave: Telemedicina; Ética; Relação médico-paciente

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All authors declare that they have no conflicts of interest.

Introduction

The possibilities of providing medical services have increased significantly with the advancement of medicine. One of these possibilities originates from technological resources, telemedicine, which can be applied in the most diverse areas of medicine. According to the World Health Organization¹, telemedicine is the term intended for services related to health care in cases where distance is the critical factor. For the Federal Council of Medicine, “telemedicine is the exercise of Medicine through the use of interactive methodologies of audiovisual and data communication, with the objective of assistance, education and research in health”².

In Brazil, telemedicine came to the fore in the 1990s, in the public and private sector, which is related to autonomous projects and, in most cases, linked to universities³. In recent years, Brazilian telemedicine has advanced due to government incentives, which has enabled the formation of new teams and research centers in universities. As a result of this incentive, several public and private institutions began to use telemedicine as a model. This allowed patients far from major centers to receive the same attention as people whose hospitals are close to their homes⁴.

In this aspect, telemedicine works as an instrument to accelerate access to health, especially in the population that does not reach medical care easily, either due to the most diverse factors, such as distance or overcrowding in the health system⁵.

Telemedicine has a wide range of applications in the medical fields, as it provides several services, which include teletriage, teleconsultation, tediagnosis, telesurgery, telescreening and telemonitoring. For this reason, it carries postures that confront the traditional principles of medical ethics, especially regarding the aspect of the doctor-patient relationship, since the personal relationship between the doctor and his patient is eliminated. Therefore, ethical standards and principles must be applied and respected by professionals who use telemedicine⁶.

There is a partial regulation in Brazil, presented by the Ministry of Health, of the ordinances that provide for the use of telehealth in the public network. The Federal Council of Medicine (CFM) created resolutions in order to establish ethical and technical limits for telemedicine, such as CFM nº 1.821/2007 and nº 1.643/20022, ⁷.

In this sense, the objective of this study is to analyze which ethical aspects surround the doctor-patient relationship in telemedicine consultations, in light of the importance and increasing use of this tool in modern medicine. It should be noted that, due to the role of telemedicine in the COVID-19 pandemic and its relatively emerging character, there is a shortage of works that systematize the ethical aspects and norms that must prevail in this doctor-patient relationship.

Method

This is an integrative review (IR) study of the literature, which synthesizes the available studies on the topic and leads to a practice based on scientific knowledge. This study model has the following steps: formulation of a guiding question, literature search for studies related to the topic, categorization, evaluation, inclusion, interpretation, results and synthesis of the knowledge brought by the articles. Thus, this study has as a guiding question: “what are the main ethical aspects and standardization necessary for an effective and safe doctor-patient relationship?”

Search source and study period

For this study, materials already published on the topic were used as a guiding tool, whether scientific articles, doctoral theses, books, guides and points of view. The search sources used were Google Scholar and PubMed. The sample included publications from 2017 to 2022 in Portuguese and English. As a result of the search, 63 references were found, based on the descriptors: telemedicine, ethics and doctor-patient relationship. With this survey, it was necessary to use exclusion criteria to direct the study, thus excluding articles that were not in English or Portuguese, whose methodology was not scientific, that escaped the guiding question and texts that were not available in full. At the end of the process, 16 (sixteen) papers were considered eligible for the study.

Results

Of the 16 selected articles, 14 were found on Google Scholar and two on PubMed, being three points of view, a guide, a book, a doctoral thesis and ten scientific articles, of which one was an integrative review, two update articles, one observational analysis, a qualitative and integrative review, and five review articles. Such information is described in table 1, below.

TABELA 1 – CHARACTERISTICS OF THE ANALYZED PAPERS

ORDER	AUTHOR	TITLE	METHODOLOGY
A1	Oliveira AB, Tokarski CCR, Japiassu FKAG, Silva JCQ ⁷	Challenges of advancing telemedicine and its ethical aspects: integrative review	Integrative review
A2	França GV ⁶	Telemedicine: brief ethical-legal considerations	Point of view
A3	Garcia EF, Tagawa GSG, Amaral WN ⁸	Bioethics and telemedicine	Update article
A4	França GV ⁹	Telemedicine: Ethical-Legal Approach	Point of view
A5	Almeida JP, Vieira LTQ, Diniz LTG, Martinelle MFS ¹⁰	Telemedicine and bioethics: the future is now	Update article
A6	Cavet CA ¹¹	Ethical-legal aspects of telemedicine: a Luso-Brazilian Panorama	Review article
A7	Cruz AO e Oliveira JGS ¹²	Ethics and bioethics in telemedicine in primary health care	Review article
A8	Azevedo R Jr. ¹³	Teleservice, revolution with ethics and security	Review article
A9	Calado VN e Lamy M ¹⁴	Medical teleconsultation: ethical limits and the risk of informational negligence	Qualitative and integrative review
A10	Valente SE ¹⁵	Regulatory aspects of telemedicine in Brazil: repercussions on the responsibility of health teams	Doctoral thesis
A11	Sartori GLZ, Ronchetti R, Nogaro A ¹⁶	The challenges of medical ethics and bioethics in medicine	Book
A12	Harzheim E, Kats N, Ferri C, Fernandes JG, Barbosa, I ¹⁷	Guide for the evaluation, implementation and monitoring of programs and services in telemedicine and telehealth	Guide
A13	Lopes MACQ, Oliveira GMM, Júnior AA, Pereira ESB ¹⁸	Window to the future or door to chaos?	Point of view
A14	Koga RCR e Koga JRS ¹⁹	Telemedicine and its relationship with communication, technology and convergence	Observational analysis
A15	Cordeiro JV ²⁰	Digital technologies and data science as health enablers: an outline of appealing promises and compelling ethical, legal, and social challenges	Review article
A16	Langarizadeh M, Moghbeli F, Aliabadi A. ²¹	Application of ethics for providing telemedicine services and information technology	Review article

Caption A: article following the numerical sequence adopted for data presentation.

Discussion

The progress of mobile health technologies, such as video calls and smartphone applications, promotes new diagnostic and therapeutic applications. In the sense of the doctor-patient relationship, in this form of care, the primary ethical aspect should be highlighted, which would be respect for secrecy, confidentiality and privacy of information^{6,7}.

Two aspects stand out, the first would be that this relationship requires the transmission of electronic information, such as blood pressure and electrocardiogram information, known as telesurveillance, which depends on a certain capacity of the patient and their families. When there are health professionals in the place, the reliability of this data is greater^{6,9}. The second would be the security in the transmission of information in this system, since the data about the generated patients are used and shared by the institutions, members of the health team, patient and family members, allowing a unique identification and, thus, must be submitted to a secure authentication and data access control mechanism, in order to obtain greater control over access to this confidential information¹⁰.

Then, it was noted that telemedicine must be subject to ethical and legal principles of the country, as a way to protect the rights of both the patient and the doctor. Understanding these aspects is important to understand the implications of telemedicine and its applications. The Federal Council of Medicine, based on the Code of Medical Ethics, prohibits the physician from prescribing treatment or procedures without direct examination of the patient. In addition, articles 73 and 75 prohibit the sharing of facts and clinical cases, articles 85 and 87 the transmission and custody of medical records and article 114 the use of mass communication^{11,20}. However, despite this already existing regulation, there have been changes and advances in the use of technologies in medicine. This has led to undefined ethical and bioethical questions regarding the applicability and limits of telemedicine¹⁴. A situation that exemplifies this need to update ethical and legal rules was the COVID-19 pandemic situation, which in 2020 forced an adaptation of the use of telemedicine as a way to download the system.

It was found in the present study that something fundamental for the establishment of a good doctor-patient relationship is trust between the parties, which is built by verbal expression and body language, something difficult to establish at a distance through video calls. In addition, there is also the impossibility of physical examination, an essential step for the doctor's semiological reasoning^{13,20}. In view of this, in addition to the ethical issue, which is fundamental to be resolved, there is the issue of impasses in establishing the stages of a consultation, which, according to the code of ethics, require the direct examination of the patient and, therefore, should not be performed remotely¹⁴.

The big question of regulation is that everything we have about telemedicine in Brazil only touches on the topic. It does not indicate or prohibit, leaving the physician the right and independence to decide when to use and recommend the use of telemedicine to patients. Thus, it is up to the physician to inform the patient of the importance and relevance of the physical examination¹⁴. Thinking in this sense, it appears that the solutions for the establishment of a safe telemedicine for both parties are moving slowly in Brazil, as well as the little scientific production in this area. For telemedicine to reach a level of operation with sustained regulation, it needs a routine¹⁷.

In the current scenario, with legislation being updated as needed and when thinking about the doctor-patient relationship as the humanization of patient care, there is a new patient profile, people with access to information, internet, social networks, channels news. The important point is that doctors and patients interact in such a way that there is free consent¹⁹.

It is noticed that doctors have a free action and a power in decision-making regarding telemedicine. With this, it is convenient for the physician to remember the two pillars of medical ethics, care and zeal in diagnostic and therapeutic decision-making. In addition to the three pillars of bioethics, beneficence, nonmaleficence and autonomy¹⁸.

Another point to highlight is the need to change how doctors treat their patients in telemedicine, and there should be no standardization, given that each medical area requires care, for example, teleradiology care will be very different from teledermatology. But a common point is that the use of digital technologies requires good quality, with regard to guidelines and standards that strengthen ethical aspects. With this in mind, greater attention should be paid to the information provided by the patient, in order to avoid diagnostic errors to which this method is more susceptible²¹.

Evidence shows that telemedicine is a tool that can bring benefits to health systems, such as reducing service time, travel costs and improvements in the quality of care, by making specialists available to the population in more remote places. In terms of public service, it promotes improvements in the service network, especially in Primary Health Care (PHC), by strengthening the Health Care Networks (HCN)¹⁶. But for effective quality assurance in the provision of services through telemedicine, there was a need for awareness and education of health professionals, residents, students, as well as patients⁷.

Conclusion

Telemedicine is a tool that, when well used, can provide better care to people who are unable to access medical centers, or even to relieve the health system in conditions of chaos, as occurred during the COVID-19 pandemic. This study showed that it is a tool of considerable scope and of great relevance in the current and future scenario of medicine in a complementary way, and not as a substitute for traditional medicine. In terms of confidentiality and information management, the Federal Council of Medicine and the Ministry of Health still need articulations to defend ethical and bioethical principles.

Among the main issues related to medical ethics regarding the doctor-patient relationship, there are: the lack of a standardization that holds both the patient and the doctor, the guarantee of the preservation of the reliability of the data generated in the consultations, the establishment of a relationship of trust and respect between doctor and patient, adequacy of conflicts between commercial paradigms and the centrality of patient care, as well as the adequacy of the method of performing physical examinations and the use of images for diagnostic evaluation on online platforms.

Although there is a need to adjust the regulation and some operational factors for the good establishment of the doctor-patient relationship, telemedicine came with the potential to improve the provision of health services and advances as a disruptive innovation in relation to traditional medicine. Thus, a new update of the existing norms and the creation of new ones that better adapt to this new scenario is necessary, as well as a greater scientific production that disseminates the ethical and legal norms for doctors and patients.

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Received on: 21/03/2022

Revisions required: 07/04/2022

Approved on: 12/04/2022

Euthanasia, orthothanasia and dysthanasia

Rui Lopes Filho¹, Lucas Carvalho Lopes²

ABSTRACT

The knowledge of bioethics allows for reflections, when, as doctors and health professionals, we are faced with care and decision-making that involve patients at the end of life. The medical student has doubts, even at the end of graduation, on how to proceed in these cases of difficult conduct. The conceptual differentiation between euthanasia, orthothanasia, and dysthanasia, which are directly related to the palliative care given to end of life patients such as those facing cancer and degenerative diseases, becomes important. This article is a literary review whose bibliographic analysis covered the period from January to March 2021. The descriptors euthanasia, orthothanasia and dysthanasia were used. The articles were selected from the Scientific Electronic Library Online (SciELO), PubMed, and Latin American and Caribbean Literature in Health Sciences (LILACS) databases. The study was carried out between January to March 2021. Initially 25 articles were selected with 10 articles being excluded for not directly relating to the studied descriptors. It was concluded that the conduct towards patients at the end of life and without the possibility of clinical improvement proves to be very difficult; however, the principle of beneficence, one of the precepts of bioethics, should be adopted, always seeking to relieve the suffering those who find themselves in this period of life, which, inexorably, approaches death.

Keywords: euthanasia; orthothanasia; dysthanasia.

RESUMO

Eutanásia, ortotanásia e distanásia

O conhecimento da bioética permite reflexões, quando, como médicos e profissionais da saúde, nos encontramos diante do cuidado e tomada de decisões que envolvem pacientes no fim da vida. Existem dúvidas do acadêmico de medicina, mesmo no final da graduação, de como proceder nestes casos de difícil conduta. Torna-se importante a diferenciação conceitual entre eutanásia, ortotanásia e distanásia, que se relacionam diretamente com os cuidados paliativos administrados aos pacientes na fase final da vida, tais como aqueles acometidos pelo câncer ou doenças degenerativas. Trata-se de uma revisão literária cuja análise bibliográfica abrangeu o período de janeiro a março de 2021. Foram utilizados os descritores *euthanasia* (eutanásia), *dysthanasia* (distanásia) e *orthothanasia* (ortotanásia). Os artigos foram selecionados nas bases de dados Scientific Electronic Library Online (SciELO), PubMed e Latin American and Caribbean Literature in Health Sciences (LILACS). O estudo foi realizado no período de janeiro a março de 2021. Foram selecionados inicialmente 25 artigos, sendo excluídos 10 que não estavam diretamente relacionados com os descritores estudados. Conclui-se que a conduta diante de pacientes no fim da vida e sem a possibilidade de melhora clínica mostra-se muito difícil, porém o princípio da beneficência, um dos preceitos da bioética, deve ser adotado, procurando sempre aliviar o sofrimento daqueles que se encontram neste período, que, inexoravelmente, se aproxima da morte.

Palavras-chave: eutanásia; ortotanásia; distanásia.

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Introduction

Bioethics is the science that aims to indicate limits and purposes of human intervention in life. Therefore, palliative care for patients at the end of life becomes the objective of the study in this area.

Knowledge of bioethics allows for reflection¹, when, as physicians² and health professionals³, we are faced with care and decision-making that involve patients at the end of life⁴. Even at the end of graduation, medical students have doubts about how to proceed in these difficult cases⁴.

The conceptual differentiation between euthanasia, orthothanasia and dysthanasia becomes important, which is directly related to palliative care administered to patients, such as those affected by cancer and degenerative diseases.

Methodology

This is a literary review carried out from January to March 2021, whose bibliographic analysis covered the aforementioned period. The descriptors euthanasia, dysthanasia and orthothanasia were used. The articles were selected from the Scientific Electronic Library Online (SciELO), PubMed and Latin American and Caribbean Literature in Health Sciences (LILACS) databases.

Results

Number of selected articles

Initially, 25 articles were selected, being discarded 10 that were not directly related to the descriptors studied, and selected 15 articles, considered referring to the descriptors studied and that appear in the bibliographic references of the present study. The selected articles were published from 2011 to 2020, with two published in 2011, one in 2013, two in 2014, three in 2019 and seven in 2020.

Theoretical References

Euthanasia

Euthanasia refers to the active acceleration of an individual's death process, consisting of the act of purposefully causing the death of a patient in intense suffering⁵. The Houaiss dictionary defines it as "the act of providing death without suffering to a patient affected by an incurable condition that produces intolerable pain"⁶.

Euthanasia is considered active or passive, depending on how it is performed to terminate life. The active occurs when there is assistance or the participation of a third party. A person intentionally interrupts the sick person's life by means of a device that forces the cessation of his vital activities.

Orthothanasia

Orthothanasia is considered passive euthanasia, which is characterized by the act of not performing resuscitation procedures or those aimed at prolonging life, such as drugs aimed at resuscitating the sick or life support machines, such as artificial ventilation.

Dysthanasia

Dysthanasia is the disproportionate attempt to maintain a patient's life, inflicting suffering on the patient and his family. It is the attempt to maintain life at any cost, with disproportionate medical acts, which make death more difficult, inflicting more afflictions on the sick without a real prospect of their recovery⁷.

Gomes and Menezes state that “dysthanasia is associated with the use of unnecessary and excessive resources, which could benefit other patients”⁸, since it is a disproportionate attempt to maintain life, but with no prospects of improvement, due to an incurable disease at the end of evolution.

Dysthanasia is not intended to prolong life, but to postpone death with methods that will not bring any success. Also called therapeutic obstinacy, dysthanasia does not prolong life with quality, employing methods that would momentarily remedy the cause of the patient's death, and that would not properly characterize the treatment of illness or suffering, serving only to prolong biological life and, consequently, suffering⁷.

Discussion

Palliative care promotes the quality of life of patients and their families through the prevention and relief of suffering, early identification of situations that can be treated, careful and thorough assessment and treatment of pain and other physical, social, psychological and spiritual symptoms. According to the National Cancer Institute (INCA), “it is active and comprehensive health care provided to people with a serious, progressive disease that threatens the continuity of their life”⁹.

The knowledge of the concepts of euthanasia⁵, orthothanasia⁶ and dysthanasia¹⁰ become important during the graduation of health professionals, given the attention to the sick who walk irreversibly towards the end of life.

The contact with death is a dilemma for everyone, especially for undergraduate students in the areas of health. The limits established by the patient, who for various reasons, such as degenerative diseases, cancer and situations of impossibility of treatment, are in a situation of palliative care, reinforce the importance of knowledge of the topics addressed for students.

The goal would be, then, the broad discussion of the themes and dilemmas attributed to them during the graduation of health professionals. A good understanding of the concepts of euthanasia, orthothanasia, dysthanasia and palliative care will contribute to an integrative care for the patient in the final stage of life, who walks irreversibly towards death.

Palliative care becomes more evident when the principle of beneficence, the action of doing everything to save someone, becomes ineffective^{9,10}. Faced with the situation of palliative care and the ethical dilemmas^{11,12} related to the situation, it is important for health professionals to reflect, in order to avoid the use of excessive therapeutic methods that do not bring benefits, as they do not alleviate the symptoms and suffering of the patient^{13,14,15,16,17}.

Conclusion

The conduct towards patients at the end of life and without the possibility of clinical improvement is very difficult, but the principle of beneficence, one of the precepts of bioethics, must be adopted, always seeking to alleviate the suffering of patients who are in this period, which inexorably approaches death.

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Received on: 03/05/2021

Revisions required: 31/03/2022

Approved on: 14/04/2022

Importance of Bioethics in Medical Activity

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ABSTRACT

The bioethics, or ethics applied to life, is mentioned as science of survival, which stood out in recent years, building a bridge between medicine, philosophy, and ethics. We aim to present a synthesis of the importance of bioethics for doctors in their professional practice. This knowledge must be complete, not limited to a general reflection about principles. The doctors, on top of the science and technology knowledge, will greatly improve with the ethical and moral precepts applied to the profession.

Keywords: Bioethics; Principles; Beneficence; Autonomy; Justice.

RESUMO

Importância da Bioética na Atividade Médica

A bioética, ou ética aplicada à vida, é mencionada como ciência da sobrevivência, que muito se destacou nos últimos anos, constituindo uma ponte entre medicina, filosofia e ética. Objetiva-se apresentar uma síntese da importância da bioética para os médicos no exercício profissional. Este conhecimento precisa ser pleno, não se limitando à reflexão geral dos princípios. Os médicos, além dos conhecimentos de ciência e tecnologia, apresentarão grande evolução com os preceitos éticos e morais aplicados a profissão.

Palavras-chave: Bioética; Princípios; Beneficência; Autonomia; Justiça.

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All authors declare that they have no conflicts of interest.

Introduction

Bioethics, or ethics applied to life, emerged in the United States, initially being used by Van Rensselaer Potter, in 1971, as a science of survival, one that combines science and ethics, playing the role of bridge between these areas, medicine and philosophy¹. Physicians must present, in their professional practice, scientific, technological and ethical knowledge^{2,3}. Bioethics consists of a systematic study of human conduct, in the areas of life and health sciences, and is evaluated according to its values and moral principles⁴. Its knowledge by physicians must have a precise character, not being limited to the general reflection of the principles^{5,6,7}. In 1978, the National Commission for the Protection of Human Subjects from Biomedical and Behavioral Research published the Belmont Report, which established three fundamental principles of bioethics: beneficence, autonomy and justice⁸.

Method

The study consists of a text that was elaborated from the analysis of the literature, which made it possible to subsidize the conception of information regarding the important aspects of bioethics in the life of physicians in professional practice. A careful evaluation of the literature was carried out, including scientific articles in Pubmed database, Scientific Electronic Library Online (SciELO) and Latin American and Caribbean Health Sciences Literature (LILACS), as well as chapters of books consecrated in the literature, related to the central theme of the study. Keywords that were used: Bioethics, Principles, Beneficence, Autonomy, Justice.

Results

The principle of beneficence aims at the well-being of the sick, having its roots in the oldest tradition of Western medicine, in which the doctor must aim, above all, for the good of the patient. The exercise of autonomy is characterized by knowledge and information; in following this principle, the doctor must respect the wishes of the patient or his legal representative, and must have all relevant data at his disposal to enable him to make a decision. The principle of justice demands equity in the sharing of goods and benefits regarding the practice of medicine or the health area, forcing the guarantee of fair, equitable and universal distribution of the benefits of health services.

Discussion

Beneficence is a universally accepted principle, practiced in all cultures. The good, according to sociobiology, as well as the different philosophical schools and religions, is an innate character in the human species^{8,9}. The changes brought about by the new democratic times made the patient conquer the right to decide about himself, including in matters related to his health status.

The principle of autonomy is one in which the doctor must respect the will of the patient or his legal representative^{8,10}. The manifestation of the essence of this principle is informed consent, an act of voluntary decision, performed by a capable person, who has adequately understood the information revealed, accepting or refusing proposals for action that affect him.

The principle of justice aims at the re-establishment of the social order in accordance with the law, supposedly capable of determining the right place for acts and things in the world, born of the correlation between individual freedom and social equality. Impartiality and equity are the main theories of justice in the modern conception. Impartiality considers an action to be morally legitimate when it results from the evaluation and approval made by an ideal spectator who takes an impartial point of view. Equity theory guarantees fair, equitable and universal distribution of the benefits of health services. The bioethical phenomenon as a manifestation of an ethical concern, particularly related to the progress of life sciences, is recent in time, but quite diversified in its development. Bioethics is a branch of philosophical ethics, the result of a time, a culture and a civilization, becoming the most dynamic field of the rebirth of ethics and one of the most suggestive sectors of philosophical reflection^{12,13,14,15}.

Conclusion

The study carried out allowed us to infer that the knowledge of bioethics needs to be full, not limited to the general reflection of the principles; physicians, in addition to knowledge of science and technology, will show great evolution with the ethical and moral precepts applied to the profession.

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Received on: 28/10/2021

Revisions required: 01/04/2022

Approved on: 04/04/2022

Notes on ethical dilemmas in the coronavirus pandemic

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ABSTRACT

By a systematic-critical literature review, prioritizing the dialectic method of exposing both sides of the problem, trying for a possible synthesis, we will analyze some publications that portray the theme of the pandemic that the world is facing in this second decade of the twentieth century, seeking, first, to present an overview of some of the great health catastrophes that have marked human history. Then, we will try to present epidemiological characteristics of the COVID-19 virus, and, finally, we will critically discuss how the Brazilian civil society and the political-institutional elites are facing this catastrophe, bringing to light some of the main ethical-moral dilemmas that extend over a theoretical-philosophical reflection on the future of our time

Keywords: COVID-19; pandemic; ethics; society.

RESUMO

Notas sobre dilemas éticos na pandemia de coronavírus

Por meio de uma revisão de literatura sistemático-crítica, priorizando o método dialético de expor os dois lados do problema, tentando uma possível síntese, far-se-á uma análise de algumas publicações que retratam o tema da pandemia que o mundo enfrenta nesta segunda década do século XX, buscando-se, primeiramente, apresentar um panorama de algumas das grandes catástrofes sanitárias que marcaram a história da humanidade. Depois, apresentam-se características epidemiológicas do vírus COVID-19 e, por fim, disserta-se, criticamente, sobre a forma como a sociedade civil brasileira e as elites político-institucionais estão enfrentando esta catástrofe, trazendo à luz alguns dos principais dilemas ético-morais que se estendem sobre uma reflexão teórico-filosófica sobre o futuro de nosso tempo.

Palavras-chave: COVID-19; pandemia; ética; sociedade.

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Introduction

The year 2020 will be marked in the history of humanity forever, because generations have not known a disease that caused such a transformation in the way of life of populations on a global scale. It can be said that given the effects and transformations caused by the gigantic impacts of the disease, we are living in a new civilization or in a new time frame. Faced with the worsening situation, the World Health Organization (WHO) declared the new coronavirus a pandemic on March 11, 2020.¹ According to them, a pandemic implies the spread on a global scale of a new contagious disease; in this way, the concept is used when an epidemic, an outbreak that affects a certain region, spreads across different continents and regions of the globe and is transmitted from person to person.²

At the beginning of the 20th century, humanity was already faced with some catastrophic situations that threatened the health of several populations, however none with the magnitude of what is experienced now, Schueler declares:

Before Covid-19, the most recent pandemic had been in 2009, with the so-called swine flu, caused by the H1N1 virus. The virus is believed to have originated in pigs and birds and then passed to humans. The first case was registered in Mexico. The WHO upgraded the disease to a pandemic status in June of that year, after counting 36,000 cases in 75 countries. In total, 187 countries have reported cases and nearly 300,000 people have died. The end of the pandemic was decreed by the WHO in August 2010.

These pandemic situations are aggravated because countries are not prepared to face the necessary demands to protect their populations, even more endangering the citizens of countries of emerging economies. Aware that this article is still being presented amid the unfolding tragedy of the pandemic and that other socio-political-economic variables can influence the current and future history of nations, the objective is, with the necessary and fair prudence - cum grano salis - not to make a definitive and ready judgment about the current health situation lived, experienced and suffered by Brazil and the countries that were most impacted by the disease, sometimes fatal and that leaves indelible sequelae to those affected, both physically and psychologically. Sequelae, perhaps, that not even time will heal. It is only intended to shed some theoretical light on some points that can help in reflection and discernment, so that we can all understand the current moment. It is believed that to overcome this situation stronger, more conscious and articulated; in order to better face other health challenges that human history has placed before us, we must know and be aware of the causes that brought us here.

COVID-19 adds to an extensive list of diseases. It is known that the health calamities that befell peoples and civilizations during the entire historical process are not new. Several examples can be exemplified, among them: the typhoid fever that decimated a quarter of the Athenian soldiers and a large part of the urban population during the Peloponnesian War. This fatal disease weakened Athens' hegemony, but the sheer virulence of the disease prevented its spread to other regions and parts of Asia Minor. The disease wiped out its hosts at a rate faster than the speed of transmission. For millennia much has been conjectured, hypothetically, about the causes of this devastating plague in Ancient Greece, with many suppositions fueling various theories. However, in 2006, after much research, scientists at the University of Athens painstakingly analyzed materials recovered from burial graves found beneath the ancient city and discovered the presence of typhoid-causing bacteria, thus rewriting more reliably part of ancient history².

Furthermore, according to Schueler's research, it can be said, making a brief historical retrospective of other remarkable moments, that:

in the Antonine Plague (165-180) – perhaps caused by smallpox brought near the East; killed a quarter of the infected. Five million in total. The Plague of Cyprian (250-271) - possibly from smallpox or measles, started in the eastern provinces and spread throughout the entire Roman Empire. According to reports, at its peak it killed 5,000 people a day in Rome. Already the so-called Black Death (1300) - eight hundred years after the last appearance, the bubonic plague had returned to Europe [...] beginning to spread in Asia, the disease reached Mediterranean and Western Europe in 1348 (possibly from merchants fleeing from Italians fighting in Crimea), and killed twenty million Europeans in six years, a quarter of the total population and up to half in the worst-affected urban areas. In the previous century, the Spanish Flu (1918-1920) was an influenza virus pandemic that, between January 1918 and December 1920, infected 500 million people, about a quarter of the world population at the time. The death toll is mostly estimated to be between 17 million and 50 million, with some projections putting as high as 100 million. Regardless of the difference between the numbers, it is one of the deadliest epidemics in human history.²

The COVID-19 pandemic, caused by the Sars-CoV-2 virus, originated in late 2019, supposedly in China, and quickly spread to other countries. Nowadays, given the universe of fierce wars of political narratives that permeate our time, there is a lot of speculation about the real and true cause of the emergence of the pandemic. It is not here to analyze them; but theories for all tastes and satiety can be found from various angles of the contemporary political spectrum. There is debate, among other things, whether the spread of the pandemic is correlated with a political project of economic control of world markets; or a new form of bioterrorism to change the world order. But what is certain is that the pandemic intensified, firstly, in Italy, Spain, the United Kingdom and the United States, where the number of infected people and fatal victims formed a dramatic scenario³. In 2021, Brazil was also the epicenter of the pandemic. .

It is known that, scientifically, Sars-CoV-2 is the viral agent that causes what has been called "coronavirus disease 2019", popularly known as COVID-19. A biological analysis of its genetic material reveals that it is basically made up of 30,000 genes organized in enveloped RNA. The coronavirus family is known for causing diseases of abundantly varied severity and well documented in the medical literature.⁴ We cannot forget that the first epidemic caused by this type of virus - severe acute respiratory syndrome (Sars) - gained prominence in the news and in the international media in 2003, in Asia, causing great astonishment and terror in populations that saw themselves strongly threatened by a new disease, whose cure and immunization were unknown. In 2012, the world was once again terrorized by another coronavirus, which made Saudi Arabia make headlines around the world and enter the priority health care agenda of agencies and international organizations, with the Middle East respiratory syndrome (MERS). In addition to these three variants, four others can be mentioned - HKU1, NL63, OC43 and 229E -, known worldwide for causing low-severity diseases in humans.^{5, 6, 7}

It is important to record what has been disclosed and publicized all over the world: the first officially recorded case of Sars-CoV-2 infection took place in Wuhan, Hubei province, China, where a patient, a regular from the live animal market for slaughter in the city, presented a clinical picture of severe acute pneumonia hitherto unknown.⁴ Some animals that are not palatable to Western food tastes - such as the bat (*Rhinolophus affinis*) and the Malayan pangolin (*Manis javanica*) - can be considered the possible original vectors of transmission to humans, given the genomic proximity of the coronaviruses found in these species and the virus that causes covid-19.^{5, 8}

Scientific studies emphasize broad genome similarity of all mapped lineages in the world, suggesting that a single animal-human contagion was the genesis of the pandemic.^{5, 8, 9} Since the beginning of dissemination, issues involving biosecurity, bioterrorism and bioprotection, including governance, have assumed unparalleled importance in international geopolitics and in the agendas of interest of countries. It seems that we are reliving the hardest and most nebulous times of the Cold War, or perhaps the Second World War. Although Sars-CoV-2 has been classified as risk grade 2 by the specialized health authorities, its high transmissibility and virulence attest to the need to adopt higher biosafety levels than those currently in vogue, that is, those that humanity was prepared for and adapted to. Especially for health professionals, among whom the number of infections and deaths has been quite expressive.^{10, 11} Patients in a serious clinical condition have received medications to alleviate symptoms, in addition to sedation, coma induction and, when necessary, mechanical respiratory support, in the expectation that the immune system will respond and be able to quell the viral process.^{12, 13}

Impacts of the pandemic on our time

Sanitary crises are not new in the history of humanity - as seen above -, despite being rare and, sometimes, centuries pass without any being recorded. But it's not just pandemics that terrorize populations in quadrants around the world with pain and suffering. It is known that, when the World Health Organization (WHO) decreed the coronavirus pandemic, the world was already facing serious and challenging humanitarian issues, social calamities and environmental catastrophes. However, none of them is new in the history of humanity¹⁴. Our time is particularly marked by other apocalyptic catastrophes that, generally, do not gain the media dimension necessary to alert and sensitize populations about the large-scale suffering and deaths that affect

thousands of people every day. There are many wars and bellicose conflicts that are impoverishing thousands of people in Third World countries, taking the lives of countless people, in addition to generating a trail of misery, with a significant increase in the hungry and homeless.

The growing phenomenon of immigration of citizens from Africa and Haiti to Brazil and Europe is just one more symptom of this sociopolitical hecatomb of our time, which opens up an even greater crisis: the failure of our economic system to absorb with dignity, employment and income people. Social exclusion is one of the biggest wounds of our days, and it bleeds thousands of innocent lives, taking away the opportunity for a better existence. Aside from the resurgence of racist and xenophobic discourses - such as neo-Nazis -, driven by social networks, which weaken the civilizing achievements made after the French Revolution. In addition, the internal political crises in the countries, combined with the terrible local conditions of health services and the lack of an adequate social protection network in advance to receive immigrants, make this scenario challenging. Data from 2019, according to the UN agency (United Nations) for refugees, show that there are 68.5 million refugees; of which, unfortunately, 52% are children and adolescents.¹⁴

According to Ferreira, in addition to this,

the resurgence of diseases considered eradicated in many countries, such as measles and polio, and the decline in vaccination coverage. The origin is not only in the "anti-vaccination movement", which threatens the world with its ignorance and irresponsibility, but in several other factors, such as relaxation due to the temporary absence of the disease, the lack of adequate investment in public health and the political will to solve the problem as well as misguided management models and corruption. Unemployment, which in Brazil reached 11.8 million citizens in 2019, is a matter of concern and threat for many countries, developed or not. The speed of technological progress, misunderstandings in the evolution of food and consumer goods production and in the distribution of income and priority attention to the unemployed and their families, make it practically impossible to solve this serious obstacle to human development today. The assistance to the unemployed and underprivileged does not have a defined strategy, much less effective, with insufficient resources and attention, with visible incompetence, neglect and irresponsibility. [...] Health and life followed their course, in perennial risk due to negligence with the environment, a crime committed by governments, but also by society, which insists on ignoring or not believing in global warming and the imminent end of life on the planet.¹⁴

Given the historical neglect of governments with the essential public service for the population, it can be safely said that our country was not sufficiently equipped to face a health catastrophe with such lethal characteristics and with high contagion power among the population. According to Ferreira, "Brazil was not prepared for the daily life of the population without an environmental disaster or pandemic, much less for the present day imposed on us by the new coronavirus".

In these times of calamity, medicine and ethics are forced to review their paths and improve their concepts; for we never needed them more than we do now. In turn, since the emergence of bioethical reflection, in the 20th century, perhaps this is the moment when the discussion about themes about life has reached its apex. Thus, there is an urgent need for a theoretical-practical bridge between the humanities and the new technology, since the pandemic is permeated by ethical-moral dilemmas, and only a mature and serious reflection will be able to help bring new lights to lighten these dark times at all senses.

As Porto states, in chapter two of the book *Bioética e Covid-19*, the best measure in the face of a global outbreak of such a contagious and serious disease, that is, the best possible intervention, would be the effective and active search for the identification of cases. and the rapid adoption of prophylactic measures to prevent the spread and treat infected people. For this, it is necessary to guarantee testing, isolate cases and ensure appropriate hospital beds for treatment. These would be smart measures and enshrined in the medical literature to contain the pandemic. It appears that these measures can guarantee social and economic health and meet the utilitarian precept.¹⁵

The lack of trained human resources to carry out tests and follow up on patients also penalizes nations that do not massively invest in quality education for all, and that neglect effective health care, restricting access to basic public services for privileged groups. As a result, they do not even have the necessary quality of trained professionals to minimally face the pandemic. Added to this: there is the fact that the understanding of the population about the gravity of the facts is not up to the required.¹⁵

From this, it can be said that the COVID-19 pandemic, with its thousands of dead, sick and sequelae; and with its socioeconomic losses, it would already be the greatest tragedy our generation faces. It can only be compared to the Second World War. However, it brings out the dilemmas arising from the great social inequality, and potentiates the consequences of the lack of education in large groups of the population. Our society, not today, let the truth be told, is experiencing a true social apartheid, with a socio-economic disruption that impacts all the indices and statistical indicators that can be analyzed. There is a lack of basic sanitation for millions of people to a lack of basic food that sickens significant portions of the population.

It is known that of the great nations in the world in terms of natural and industrial wealth, Brazil is the country that has the greatest economic disparity among its citizens. Many Brazilians do not enjoy the achievements of the rule of law and are on the margins of full citizenship, that is, lacking education, health, income and retirement. Despite being a young democracy – with periodic elections and a tripartite power – enormous social ills are a daily reality: queues at health centers, many homeless people, children far from schools or in vulnerable conditions, in addition, the low income of the employed class, who have a monthly income that is far short of meeting their basic needs, in order to have a full and dignified life. According to the 2018 report of the United Nations Development Program, the Human Development Index (HDI) places our country in the 79th position of a total of 188 countries on the globe.¹⁶ A dishonorable position, a painful situation that portrays a sad and harsh reality that can be seen, easily, on the corners and traffic lights of our cities or in the most remote corners of the center of Brazil.

According to Porto, in the face of difficulties, to adopt appropriate interventions to contain the pandemic, which encompass long-term policies in the administrative, economic, fiscal, educational and health dimensions; the last effort remains for containment: social isolation. If this ends up being the only way out, especially for those who live in places where the mortal threat is an everyday reality, it is not always feasible. Thus, the real problem arises: how to impose on people the obligation to stay at home, when hunger and misery impose the search for immediate survival? In addition, for those who live in poverty, food deprivation is added to living in an uncomfortable space and the precariousness of the working situation.¹⁵

According to Érico Andrade, the experience of time is not uniform in the pandemic:

for unemployed people, the experience of time is always immediate. That is why there is a resistance on the part of the population to simply stop all their activities. While the middle class can organize their time by dividing it according to the routine that the pandemic imposes on them, most of the working class deals with time in a deeply apprehensive way about the imminence of a layoff or in a strongly resigned way in the face of a contamination from which it can hardly escape.¹⁷

It is known that society is not just the arithmetical sum of the number of individuals, but something much greater. Thus, the enormous inequalities in the living conditions of the different population strata inevitably lead to the questioning of the real existence of collectivity. Even though we all recognize ourselves as Brazilians, can we say that we live in the same Brazil? As if the cultural differences of this continental country were not enough, which amalgams peoples of different origins, we still have social discrepancies so accentuated that perhaps – in fact – we are only sharing space, without constituting a collectivity that can point out what would be the common good.¹⁶ A difference in the way of seeing, feeling and valuing the world in different social strata is accentuated as inequalities increase.

The more unequal people's living conditions, the further their worlds are, even when they inhabit the same urban spaces¹⁵, both from a social and economic point of view, based on strong economic asymmetry and abyssal social inequality, that is, in the presence of privileges for a privileged minority and in the lack of effective policies to protect human life in all its dimensions. So, when we realize that we are just occupying the same space within a city and using the same Portuguese language, but very far from a group of people who seek a common goal - as a nation - that is the collective well-being of all, we can admit, with certainty, that we are very far from being a society, a nation that aims at greater goals¹⁵.

The crisis is worsening as health authorities and political representatives are unable to articulate themselves to respond to the height of the pandemic. There is a great mismatch in public policies to alleviate the harm arising from a social protection system that is not protecting the population.

When personal interests are being put first to the detriment of republican care structures, one cannot expect effective results of improvement in the quality of life or even a victory over the current disease that baffles our country. Many of the difficulties arising from the pandemic arise from a lack of social sensitivity, whether on the part of public authorities or even ordinary people who do not follow the minimum medical recommendations for prevention. The worsening of the pandemic is a sign that the Brazilian social fabric is not so connected; because it seems that society is formed by a set of islands that do not connect and do not interact, that is, in which each group thinks only of its particular interests and of meeting its needs based on the sacrifice of the most vulnerable.

To make the situation worse - on the other hand -, pseudo-intellectuals intoxicated with false and sophisticated knowledge contribute with disconnected theories of all kinds that mitigate the reflexive capacity of pointing out real paths, to solve the country's difficulties. Few were those who admitted, despite having academic degrees and dedicated to study, that we are at a unique moment in human history and that there are no simple and quick solutions to such complex problems. The pandemic has shown that we are immersed in a narcissistic and extremely individualistic culture and has laid bare our apparent certainties. People, in general, are not concerned with the collective health and well-being, but only with their self; individuality was indeed exacerbated. It can be seen that there is a lack of care for the health of the other, an almost total lack of responsibility for otherness; which is the most valuable thing in human life. By neglecting to wear a mask, you are endangering the other, and, even more, potentially putting your own life in danger, and this does not seem to cause the slightest remorse, embarrassment or moral feeling in many people who make immorality their own *modus vivendi*. To exemplify this terrifying situation: the wealthiest social groups in society, supposedly the most intellectualized, seek to buy vaccines and immunize themselves without going through the republican and isonomic procedures that public health agencies provide. The irresponsibility, whether of the economic or political elite, or of less wealthy people who organize parties and agglomerations, faithfully mirror a hedonistic culture that transforms the self and the pursuit of pleasure or excessive well-being into an ethical-moral imperative, subverting any reasonable range of values.

Conclusion

The impact of COVID-19 was quite profound and spread to all countries, however, as always, the social classes that are most affected reside in the social stratum with the lowest income and accessibility to consumer goods. In this way, medicine and the sciences of care have to reinvent themselves to cope with the enormous demand and work overload, with resources that are sometimes scarce and precarious. It is necessary to recognize that the Herculean efforts of the professionals who are on the front lines of the fight against the pandemic were a stimulus for other people to also be sensitized, to aim for and provide a better quality of life for all. Rethinking people's way of life in the light of ethics and bioethics that incorporate humanistic principles seems to be one of the great characteristics of these hellish days that saw many people cry and/or bury their loved ones.

Through this article, without intending to exhaust the subject, it was humbly learned, once again, that epidemics have always been present at certain moments in the history of human civilization, negatively impacting the life expectancy of the population and leaving an immense trail of pain, an avalanche of misery and apocalyptic suffering. However, unlike previous pandemics, COVID-19 happens at a singular and rare moment, of many scientific and technological advances; thanks to the internet, human society is all connected and we all form a global village. Literally, what happens in China impacts us directly. If this has a good and positive side, as it helps to advance science and accelerate discoveries in medicine and, in addition, to socialize medical knowledge; on the other hand, unfortunately, it represents an opportunity for certain economic-political groups to disseminate fake news, hateful speeches and distorted messages about the disease, generating unnecessary alarms, or even encouraging denialist attitudes in relation to preventive practices enshrined in the international scientific literature.

It is necessary to be attentive so that public and state policies to combat the pandemic are articulated with civil society in a cohesive, organic way, and with the best and most current epidemiological strategies. The answers to the confrontations that arise with the increase of the coronavirus,

in society, are not simple or subject to limited analysis; as they affect the whole fabric and structure of society. For this, first of all, every citizen, whether in the health area or not, must be well-informed about the disease; because the first war to be won in the fight against the pandemic is against distorted and denialist information.

The ethical dilemma between the preservation of life and economic growth is a reality that is very present in the media debates and in the lives of common people, it has its own reason for being and cannot be mitigated. However, in order to make responsible and correct judgments, one must assume a position of empathy with the people who suffer: either those who are victims of the disease, or those whose economic activity and income are impaired. We live in society to seek common solutions for the collective good and to overcome the civilizational challenges that arise. Thus, public authorities must take care, as much as possible, for people's health, through medical-sanitary measures, as well as through subsidies and economic stimuli, such as tax reductions - within the limits of what the state treasury includes -, to implement and encourage proactive work and income dynamics. Less political use of the pandemic, regardless of political biases, or sensationalist media directions, is an extremely important part for society to minimize the catastrophic effects of the pandemic and point out hopes for a better future for all.

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Received on: 19/06/2021

Revisions required: 03/03/2022

Approved on: 01/04/2022

Research with Human beings and its ethical aspects: integrative review

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ABSTRACT

Objective: Analyze the ethical aspects of research with human beings.

Method and results: Integrative literature review, with 66 articles identified, using Academic Google and SciELO databases, from the following descriptors: ethics and research with humans, of which ten were selected for the study.

Conclusion: Research on human beings is essential for the development of science and medicine; however, they represent major challenges related to ethics. Guidelines are constantly improved to ensure safety, integrity and respect for the people who participate in research, but they have limited scope if not accompanied by the strengthening and improvement of ethics committees.

Keywords: Research with human beings; ethics

RESUMO

Pesquisas em seres humanos e seus aspectos éticos: revisão integrativa.

Objetivo: analisar os aspectos éticos das pesquisas em seres humanos.

Método e resultados: revisão integrativa de literatura, com identificação de 66 artigos usando os bancos de dados Google Acadêmico e SciELO, a partir dos descritores: ética e pesquisas em seres humanos, dos quais dez foram selecionados para o estudo.

Conclusão: As pesquisas em seres humanos são imprescindíveis para o desenvolvimento da ciência e da medicina, porém representam grandes desafios relacionados a ética. Diretrizes são aprimoradas constantemente com o intuito de garantir a segurança, a integridade e o respeito às pessoas que participam de pesquisas, porém apresentam alcance limitado se não forem acompanhadas de fortalecimento e aprimoramento dos comitês de ética.

Palavras-chave: Pesquisas em seres humanos; Ética.

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Introduction

There was a time when many researchers believed that their firm determination to do good, their integrity of character and their scientific rigor were enough to ensure the ethics of their research, nowadays this conception is no longer the object of consensus. The great development and increasing incorporation of new technologies in the field of health care; the greater diffusion of scientific knowledge through traditional media and, in particular, through the internet, as well as the expansion of social movements in defense of individual and collective rights, the discussion on ethics applied to health began to have philosophers, theologians, jurists, sociologists and, above all, citizens, whether as users of the system of health, or as subjects of scientific research.¹

Over the centuries, experiments with human beings have been carried out with different standards of quality and ethics. History reports several examples of the use of human beings in studies and research that shocked, and still shock humanity. In these cases, the absence of control mechanisms based on ethical and moral criteria resulted in abuse of experiments and in human beings being coerced.²

The ethical concern with research involving human beings presents the Nuremberg trials as a great landmark. On that occasion, criminals from the Second World War were tried, including some doctors who had been involved in or participated in torture disguised as research. In these experiments, human lives were sacrificed to know the limits of tolerance to extreme conditions, such as hypothermia, oxygen deficit and massive injection of pathogenic germs.³

From the horrors revealed in these trials, the Nuremberg Code was born, which also represents a historic rupture. Although this document was triggered by the events revealed, it does not refer to them, but to the conduct that a scientific researcher must follow. It is a show of wisdom that this first code of ethics in research avoided alluding to highly anomalous situations and preferred to focus on general ethical norms valid for all research. Even so, it is noteworthy that a trial of war criminals inspired a code of ethics in research.³

Despite the knowledge of the cruelties that took place in the concentration camps and the Nuremberg Code, research with human beings that violated fundamental ethical principles continued to be carried out. Consequently, the Declaration of Helsinki was created in 1964 in Finland, which is divided into: basic principles, medical research combined with professional care and non-therapeutic biomedical research involving human beings. This declaration addresses the need to comply with accepted scientific principles, as well as ethical and scientific review and good qualification of researchers when carrying out research with human beings. It places the need to provide and consent to information to the subject, assessment of risks/benefits, assuring study participants the best diagnostic and therapeutic methods available after the end of the research. And yet, it condemns the use of placebo when there is already an established effective treatment.⁴

In addition to the basic principles, there is Medical Research Combined with Professional Care, which determines, in the treatment of the sick person, the freedom of the physician to employ new therapeutic methods, if, in judgment, they offer hope of saving a life, restoring health or relieving suffering. Being a possible solution, and according to the patient's mental state, the doctor must obtain free consent, after having given a complete explanation. In case of legal incapacity, the consent obtained must be that of the legal guardian; which replaces that of the patient. The physician can only combine clinical research with professional care, provided that the objective represents the acquisition of a new medical discovery, as long as the clinical research is justified by its therapeutic value to the patient.⁵

The Declaration of Helsinki, over the decades, has undergone changes and additions to its principles, but none of them has undermined its originality in defending and protecting the human rights of people involved in clinical research.⁶

Method and results

This is an integrative literature review (IR) study, which synthesizes the available studies on a given topic and conducts practice based on scientific knowledge⁷. This type of review proposes the

following steps: formulation of a guiding question, search in the literature for studies related to the topic, categorization, evaluation, inclusion, interpretation, results and synthesis of the knowledge evidenced in the analyzed articles⁸. Thus, this study presents as a guiding question: “What are the ethical aspects of research on human beings?”

To carry out this study, the material already published on the topic was used as a guiding tool: books, scientific articles, periodicals and materials on the Internet available in the following databases: Latin American and Caribbean Health Sciences Literature (LILACS), International Literature on Health Sciences (MEDLINE) and Scientific Electronic Library Online (SCIELO). As a result of the search, 66 references were found, using the Boolean descriptors and operators: ethics in research in human beings. After this survey, repeated texts were excluded. At the end of the analysis, ten articles were considered eligible for the proposed study. After a thorough reading of each text, we tried to integrate the themes in order to achieve the objective proposed by this work.

TABLE 1 – RESEARCH.

ORDER	AUTHOR	TITLE
A1	Araújo LZS ⁹ .	Ethical aspects of scientific research.
A2	Amorim KPC ¹⁰ .	Research ethics in the Brazilian CEP-CONEP system: necessary reflections.
A3	Kottow M ³ .	History of ethics in research with human beings
A4	Veloso SCS, Cunha TR, Garrafa V ¹¹ .	Ethical control of research whose results pose a high risk to the health of the population.
A5	Schuch P, Victoria C ¹² .	Research involving human beings: reflections from Social Anthropology
A6	Ribeiro SAB, Ferreira SBL ¹³ .	Research involving human beings: research ethics committee
A7	Sardenberg T, Müller SS, Pereira HR, de Oliveira RA et al ¹⁴ .	Analysis of the ethical aspects of research on human beings contained in the Instructions to Authors of 139 Brazilian scientific journals
A8	Oliveira MLC ¹⁵ .	Ethics committees: research on human beings in Brazil
A9	Lima DF, Malacarne V ¹⁶ .	Ethics in research involving human beings: reflections from the experiences of UNIOESTE – science and education
A10	Bento LA ¹⁷ .	Bioethics and research in humans

Discussion

In modernity, scientific research is no longer the search for knowledge just for the sake of knowledge. It started to be thought of, above all, in terms of its practical and instrumental application.¹⁸ This paradigm has brought great advances in the areas of biology and life sciences. However, in addition to the intrinsic factors of science, there are several health, social, political and economic factors that influence the conduct of research, ranging from the choice of the object of study to the practical application of the results.¹⁹

In the same sense, Schramm considers that the advances achieved in the area of biotechnoscience are, at the same time, “[...] reasons for great hopes and anxieties, consensus and conflicts, in particular, of the moral type”.¹⁸

The advance of medicine towards the determination of new clinical and surgical treatments and new diagnostic methods involves experimentation in human beings. Tests on non-human animals, modern mathematical and statistical models, and intensive use of computers have not been able to exclude the final phase of experimenting on human beings.¹⁸

The use of human beings in scientific experiments brings undeniable benefits to society. However, there is always a conflict between the individual subjected to experimentation and science.²⁰

We must always remember that the purpose of research is to improve the health and well-being of patients and never cause harm or subject them to serious risk to achieve these goals.²¹

What stems from these considerations is the difficulty in determining the ideal threshold of compromise between scientific freedom and legitimate concerns for the safety and integrity of scientists, a conspiracy between science and business that turns against the protective bioethics of patients and participants.²¹

Currently, the biggest sponsor of clinical trials for the development of new drugs is the pharmaceutical industry. This segment consists of companies that follow the logic of the market. In this logic, it is necessary to see which activities give the most financial return, in order to invest and guarantee profits; a fact that, in most cases, is not in line with the priority needs of society. Angell warns "about the prudence of entrusting drug development to an industry whose responsibility lies entirely with investors, not the public (except in the narrow sense that drugs must be safe and effective)".²²

Research ethics will have to face a topic that until now has been shyly avoided under the concept that science and economics do not mix, an idea that has already become completely obsolete. The contemporary engine of scientific activity is profit, the conquest of market niches, competitiveness and obtaining patents. Curiosity has been replaced by pragmatism, in a climate where researchers, sponsors and scientific institutions take care of their respective interests.³

A paradigmatic case is that of researcher Nancy Olivieri, who revealed negative data about the drug deferiprone, which she herself was studying, contrary to the interests and instructions of the sponsoring laboratory and her own university. Its ethical integrity was questioned by researchers who had no qualms about committing transgressions, doing improper and immoral science. This conflict can be summarized as the contrast between the values of science and the values of a large company. However, when the integrity of scientists fails, there is a conspiracy between science and business that turns against bioethics, which protects patients and participants.²³

Within this whole context, an indispensable reference is the Universal Declaration on Bioethics and Human Rights (UDBHR), whose objective is to balance the fulfillment of values such as human dignity, protection of vulnerabilities and scientific freedom, among others. In its Article 20, the aforementioned document points to the need for states to promote "the assessment and adequate management of risks related to medicine, life sciences and associated technologies", while, in Article 24, it points out that : "States should promote the international dissemination of scientific information and encourage the free circulation and sharing of scientific and technological knowledge". Among the principles presented by UDBHR, Article 4 - Benefit and Harm - can be highlighted, which points to the need to maximize direct and indirect benefits to patients, research subjects and other affected individuals, and any harm to them must be minimized. This indicates that, even when carrying out studies that do not involve the human being as an object, the risks and possible damages must be weighed against the expected benefits, not only for the subjects directly involved, but for the entire present and future population.²⁴

Brazil has a recognized system for the ethical evaluation of research involving human beings, linked to the National Health Council (CNS), constituted by the National Research Ethics Commission (CONEP) and by the various Research Ethics Committees (CEP) distributed by all regions of the country. This CEP-CONEP System was created by Resolution CNS 196/96.²⁵

Conclusion

The atrocities committed during the Second World War imposed the development of ethical norms for conducting research with human beings. Since Nuremberg (1947), various codes and resolutions have governed these practices around the world. In Brazil, Resolution 466/2012 of the National Health Council establishes the ethical and scientific foundations for this type of research.²⁶

The international guidelines on research ethics presented in this article should support the actions not only of researchers, but also of research sponsors and organizers. This is a way to

ensure the dignity of participants and to bring human rights closer to science. The steps for scientific research include moral consistency on the part of the research team, as well as requiring detailed reviews by the regulatory agencies of each country. The advancement of science has brought important achievements for people's well-being, but these gains in quality of life cannot be achieved at the expense of the dignity of research participants and the integrity of the scientific community.³

An ethically justifiable research needs to respect its participants in their dignity and autonomy, recognizing their vulnerability, assuring their willingness to contribute and remain, or not, in the research, through an express, free and informed expression; needs to balance risks and benefits, both known and potential, individual or collective, committing to maximum benefits and minimum harm and risk, ensuring that predictable harm will be avoided; it must have social relevance, which guarantees equal consideration of the interests involved, without losing the meaning of its socio-humanitarian purpose; and, finally, it needs to be previously approved by a research ethics committee (CEP).²⁷

It is therefore necessary that an ethical culture be encouraged and promoted in the area of research, in which those involved can recognize the challenges related to this process and have the sensitivity to act with equity, justice and respect, having as a guide the responsibility towards current and future generations. The intention is that ethical intentions turn into actions. However, for this to materialize, it is essential to focus on a critical and permanent evaluation and review of the CEP-CONEP System, as well as to provide it with sufficient human and material resources to deal with the complex challenges and, at the same time, value and account for the work of committee members within the institutions.²⁸

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Received on: 23/03/2022

Revisions required: 19/04/2022

Approved on: 16/05/2022

Ethical point – criteria for allocation of scarce resources in the COVID-19 pandemic: a review

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ABSTRACT

Objective: to analyze the ethical issues related to the criteria for allocation of scarce resources during the COVID-19 pandemic.

Methods: integrative literature review, in which 52 articles were identified, using Google Scholar and PubMed databases, using the following descriptors: scarce resources, ICU, pandemic, and COVID-19, of which 14 were selected for the study.

Results: we identified an ethical pillar on which decision-making regarding the allocation of scarce resources should be based. Which does not make this decision easy and without psychological repercussions for those involved.

Conclusions: the situation of resource scarcity forced the adaptation of existing protocols and the creation of new ones to respect ethical and moral precepts when allocating resources that have become scarce in the COVID-19 pandemic.

Keywords: Scarce resources; ICU; Pandemic; COVID-19

RESUMO

Ponto ético – critérios para alocação de recursos escassos na pandemia por COVID-19: revisão integrativa

Objetivo: analisar as questões éticas relacionadas aos critérios de alocação de recursos escassos durante a pandemia de COVID-19.

Métodos: revisão integrativa da literatura, na qual foram identificados 52 artigos, usando os bancos de dados Google Acadêmico e PubMed, a partir dos seguintes descritores: recursos escassos, UTI, pandemia e COVID-19, dos quais 14 foram selecionados para o estudo.

Resultados: identificou-se um pilar ético no qual se deve basear as tomadas de decisões quanto à alocação dos recursos escassos. O que não torna esta decisão fácil e sem repercussões psicológicas aos envolvidos.

Conclusões: a situação de escassez de recursos forçou adequação de protocolos existentes e a criação de novos, a fim de respeitar os preceitos éticos e morais ao se alocar os recursos que se tornaram escassos na pandemia de COVID-19.

Palavras-chave: Recursos escassos; UTI; Pandemia; COVID-19.

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All authors declare that they have no conflicts of interest.

Introduction

The COVID-19 pandemic can probably be considered the biggest health issue of contemporary times. It had very wide-ranging effects, as it affected practically all countries.¹ But, in addition, the pandemic represented a supply crisis, especially in the health sector.

Faced with this situation of high burden on the health system, both public and private, there was a need to allocate and prioritize available resources.² In Brazil, the issue of resource allocation is not an exclusive reality during the pandemic, “The Brazil was already facing a shortage of ICU beds in the SUS before the new coronavirus arrived.”³ With the situation of the pandemic, this condition of the country escalated, affecting the supply of all types, from equipment such as oxygen, fans, medicines, to beds in the Intensive Care Unit (ICU).⁴

In Brazil, Resolution No. 2,156/2016 of the Federal Council of Medicine⁵ regulates the guiding criteria for ICU admission. In article 6, it provides five priority scales for evaluating people, considering the probability of recovery and the absence of limitations in therapeutic support. First in priority are people with “a high probability of recovery and no limitation of therapeutic support”. Finally, those with “disease in the terminal phase, or dying, with no possibility of recovery”.⁵

The establishment of clear and objective rules, in addition to new protocols in the face of insufficient resources, became necessary as a way of guaranteeing the maintenance of ethical and bioethical precepts when allocating scarce resources. In view of the situation, there were updates and recommendations of protocols established by the Association of Intensive Medicine, Emergency Medicine, Brazilian Society of Geriatrics and Gerontology and the National Academy of Palliative Care.⁶

In a larger context, bioethical and ethical issues are significant in the management of scarce resources and establishment of criteria for choosing patients who received the most adequate health support.⁷

In this sense, the objective of this study is to systematize the ethical issues that surround decisions to allocate scarce resources during the COVID-19 pandemic. Because, in addition to the adequacy and creation of standards and protocols, the ethical factor is essential in the face of the pandemic situation, since it represents a health and humanitarian crisis. Therefore, scientific works that focus on this issue are essential.

Methods

It is an integrative review (IR) of the literature, which gathers and synthesizes the available studies on the topic and leads to a practice based on scientific knowledge. The study model adopts steps to be followed: selection of the research question; sampling; representation of research characteristics; analysis of selected studies; analysis and interpretation of results; and review report. The guiding question of the study was: “What are the ethical issues for deciding on the allocation of scarce resources during the COVID-19 pandemic?”

Search source and study period

For the study, materials already published on the topic were used as guiding tools, considering scientific articles; official protocols and recommendations; and dissertation theses. Scientific papers were collected through searches on Google Scholar and PubMed. The samples included were those published in the last five years, from 2017 to 2022, in Portuguese and English. In total, 52 references were found, based on the descriptors: scarce resources, ICU, pandemic and COVID-19. From this survey, the following exclusion criteria were used: irrelevant titles, which did not answer the guiding question, exclusively epidemiological; texts that were not available in full; and surveys that were in Spanish. At the end of the process, fourteen works were considered eligible for the production of this study.

Results

In the present study, fourteen articles were analyzed that met the established inclusion and exclusion criteria. Of the total number of selected works, all fourteen were found on Google Scholar. As for the methodology, six were bibliographic reviews, a technical note, a guideline proposal, an integrative review, two course conclusion monographs, an ethical consideration, an official recommendation and an official protocol. Such information is described in Table 1.

TABLE 1 – CHARACTERIZATION OF ANALYZED WORKS.

ORDER	AUTHOR	TITLE	METHODOLOGY
A1	Cotta VAF ⁴	The scarcity of resources during the COVID-19 pandemic: the role of the Federal Council of Medicine and the Regional Councils of Medicine and people with disabilities	Monograph
A2	Dadalto L, Mascarenhas IL e Matos AC ¹	Also save the elderly: ageism and the allocation of resources in the Brazilian reality of combating COVID	Literature review
A3	Wang D, Lucca-Silveira M. ⁹	Dramatic Choices in Tragic Contexts: Allocation of ICU Vacancies during the COVID-19 Crisis	Technical Note
A4	Ismael MLM, Silva LOP, Marques JFS. ¹⁷	The establishment of criteria for the occupation of ICU beds in Brazil during the COVID-19 pandemic: an analysis of the legal-philosophical limitations imposed.	Literature review
A5	Schulman G. ¹⁰	Criteria for allocation of scarce resources - hospital beds - in view of COVID-19	Literature review
A6	Azevedo M, Dall'Agnol D, Bonella A et al. ¹¹	Proposal of ethical guidelines for allocation of treatment in ICU (Intensive Care Unit) during the COVID-19 pandemic	Literature review
A7	Marmelstein G, Morozowski AC. ¹²	What lives to save? Shortage of ICU beds, objective screening criteria and the COVID-19 pandemic	Literature review
A8	Silva KR, Souza FG, Roquete FF et al. ¹³	Resource allocation for health care in times of the COVID-19 pandemic: integrative review	Integrative Review
A9	Bitencourt BG ¹⁴	Intensive Care Unit admission protocol in the situation of scarcity of resources and its importance in the COVID-19 pandemic: Bibliographic Analysis and Review	Monograph
A10	Goncalves L, Dias MC. ⁸	Bioethical discussions on resource allocation during the COVID-19 pandemic in Brazil	Literature review
A11	Costa A, COSTA CMA, Pompermayer FCL. ¹⁵	Protocols in times of a COVID-19 pandemic with criteria for the allocation of scarce resources: can you consider them (un)fair?	Literature review
A12	Satomi E, Souza PMR, Thomé BC et al. ¹⁶	Fair allocation of scarce health resources in the face of the COVID-19 pandemic: ethical considerations	Ethical Considerations
A13	Kretzer L, Berbigier E, Lisboa R et al. ¹⁶	AMIB, ABRAMEDE, SBGG and ANCP recommendations for the allocation of depleted resources during the COVID-19 pandemic	Official Recommendation
A14	Kretzer L, Berbigier E, Lisboa R et al. ⁶	AMIB protocol for resource allocations in depletion during the COVID-19 pandemic	Official Protocol

Caption A: article following the numerical sequence adopted for data presentation.

Discussion

The COVID-19 pandemic has proved to be a major global challenge in many ways. Regarding the health issue, the drama faced is amplified by the scarcity of resources, especially those of the Intensive Care Units (ICU), such as beds, medicines, oxygen, equipment and mechanical fans.⁴

In this sense, it was found that having criteria for allocating such resources is fundamental for the functioning of the health system, in addition to the ethical and moral weight that such decisions have, since this choice is seen as a life or death choice. Brazil already has a CFM resolution that establishes prioritization criteria, CFM Resolution 2,156/2016.⁵ However, it was prepared for a normal situation, since in exceptional situations, such as the COVID-19 pandemic, it may not be possible to meet the patients following these criteria.⁸

With the need to create new protocols for the allocation of scarce resources, due to the COVID-19 pandemic, new questions appear to guide this issue. Questions such as, “Severity of the patient’s situation? Order of arrival? Greater chances of recovery?”.¹¹ In general, the priority is to save as many people as possible, without a well-defined criterion that allows a universal consensus. When it comes to intensive care, the severity of the patient’s condition is assumed, since patients with greater chances of recovering tend to spend less time in the ICU.¹² Studies show that decision-making for resource allocation is conflicting and, most of the time, professionals do not feel prepared to perform them.¹³

Faced with a new situation, such as the COVID-19 pandemic, adjustments are necessary to maintain ethical aspects, since new concerns arise with groups that may be harmed, such as the elderly, who may be discriminated against due to ageism practices. A resource rationing policy, when not very judicious, can end up violating isonomy, age, gender, economic, social or ethnic-racial criteria cannot be used as a justification for the reallocation of resources. So, it is noted that decisions to allocate scarce resources must be based on clinical-technical criteria.¹

In view of this alarming situation, for decisions to allocate scarce resources to be ethically defensible, such a process must occur through protocols that are clear, transparent, technically well-founded, aesthetically justified and that are in line with Brazilian regulations.⁶ During the pandemic, a refinement was carried out regarding the description of the legal bases that support the protocols developed by the Brazilian Associations of Intensive and Emergency Medicine, aiming at technical and normative balance. The bioethical aspect regarding the criteria for allocation of resources, which is consensus, is the prioritization of patients with better chances of benefit and with greater expectations of survival.¹⁶

There are legal limitations for establishing criteria for choosing which resource will be allocated to which patient. Thus, the legal system is formed by norms in order to protect the dignity of the human person.⁹ But, even in the face of the broad legislative foundation, there are no parameters in the laws that reach definitive conclusions for this new scenario, given that there is a statute that defends children and adolescents, the Statute of the Child and Adolescent (Law nº8.069/1990)¹⁸, and another statute that defends the elderly, Statute of the Elderly, art. 1519 and the Organic Health Law (SUS Law), Law No. 8.080.20.21

Thus, there is a general recommendation that the criteria be shared, above all, with the definition of a triage plan, in order to avoid individual decisions.¹⁰

Decision making can be understood as a process of ethical deliberations that involve individualized selection of people. In this follow-up, there are selection criteria that can be considered bad and appropriate. Of the bad ones, age, social value, prioritization of health professionals and order of arrival are included. From the appropriate ones, there are criteria to estimate the baseline clinical situation and to evaluate the current clinical situation.¹⁷ From this, it is inferred that the more subjective factors should be left aside and reinforces the idea that the allocation of resources should be based on criteria clinicians and technicians, which is considered an international consensus, as it is based on objectivity and pragmatic affectivity. It is considered morally valid, as it allocates resources to those with a greater prospect of recovery, requiring less care time.⁷

There is a recommendation from the Brazilian Society of Bioethics that human dignity should be the main foundation during the face of the pandemic, so everyone must have equal screening rights, transparency and access to information and care. This consideration was found to be the ethical pillar

for the establishment of protocols.¹⁵ The weight of deciding on the allocation of available resources should not fall on the professionals who are on the “front line”, since the overload of the situation can interfere with the decision-making, and thus promote failures and injustices in this process. In addition, the integrity of these professionals must also be taken into account and protected, as they play a key role in this pandemic scenario.¹⁷

Conclusion

In Brazil, the pandemic represented a sharp escalation of the lack of resources in health. Deciding which resources should be allocated to which patients in the tragic situation of the COVID-19 pandemic, even if such decisions are based on ethical and legal justifications, are traumatic for all involved, particularly for triage professionals and family members of patients.

This text was created as a way of summarizing the criteria used to allocate scarce resources from an ethical point of view. In view of this, a common factor was found, that the decision, to be as humane as possible in a scenario of public calamity, is to try to save as many people as possible. This utilitarian point of view in decision-making in the field of health would make the pain of a minority percentage of society minimally just and, if necessary, the death of some, as long as it brought about a benefit for the majority.

Evidence has shown that several places in the world, including Brazil, have developed guidelines and protocols to try to reduce the subjective criteria involved in the choice and make clinical-technicians prevail. In some situations, this may mean limiting treatment for some patients, which may cause discomfort, malaise and psychological damage to physicians. Due to the great pressure that this situation has on physicians, the protocols also serve to minimize this weariness, by offering a more objective parameter and removing the decision-making weight from them.

Establishing protocols and guidelines for such situations is important to minimize the damage that the COVID-19 supply crisis has caused. However, such decisions, in addition to being based on medical reasons, should not fail to take into account the need to provide the maximum effectiveness of available resources, respecting ethical and legal values.

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Received on: 22/03/2022

Revisions required: 13/04/2022

Approved on: 14/04/2022
