Reflection Article

doi: https://doi.org/10.1590/1983-1447.2021.20200172

Do-not-resuscitate order in COVID-19 times: bioethics and professional ethics

Ordem de não reanimação em tempos da COVID-19: bioética e ética profissional

Orden de no re-animación en COVID-19: bioética y ética profesional

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How to cite this article:
Oliveira HC, Sauthier M, Silva MM, Crespo MCA, Seixas APR, Campos JF. Do-not--resuscitate order in COVID-19 times: bioethics and professional ethics. Rev Gaúcha Enferm. 2021;42(spe):e20200172. doi: https://doi.org/10.1590/1983-1447.2021.20200172

ABSTRACT

Objective: To reflect about the do-not-resuscitation order at COVID-19 in Brazil, under bioethical focus and medical and nursing professional ethics.

Method: Reflection study based on the principlist bioethics of Beauchamps and Childress and in professional ethics, problematizing actions, and decisions of non-resuscitation in the pandemic.

Results: It is important to consider the patient's clinic, appropriation of treatment goals for people with comorbidities, elderly people, with less chance of surviving to resuscitation, or less quality of life, with the palliative care team, to avoid dysthanasia, use of scarce resources and greater exposure of professionals to contamination.

Conclusion: COVID-19 increased the vulnerabilities of professionals and patients, impacting professional decisions and conduct more widely than important values such as the restriction of freedom. It propelled the population in general to rethink ethical and bioethical values regarding life and death, interfering in decisions about them, supported by human dignity.

Keywords: Coronavirus infections. Ethics. Bioethics. Cardiopulmonary resuscitation. Critical care. Nursing.

RESUMO

Objetivo: Refletir sobre ordem de não reanimação na COVID-19 no Brasil, sob foco bioético e da ética profissional médica e de enfermagem.

Método: Estudo de reflexão embasado na bioética principialista de Beauchamps e Childress e na ética profissional, problematizando ações e decisões de não reanimação na pandemia.

Resultados: Importa considerar a clínica do paciente, apropriação das metas dos tratamentos de pessoas com comorbidades, idosas, com menores chances de sobreviver à reanimação, ou menor qualidade de vida, junto à equipe de cuidados paliativos, para evitar distanásia, uso dos recursos escassos e maior exposição dos profissionais à contaminação.

Conclusão: A COVID-19 ampliou as vulnerabilidades de profissionais e pacientes, impactando nas decisões e condutas profissionais mais amplamente do que nos valores importantes como a restrição da liberdade. Impulsionou a população em geral a repensar valores éticos e bioéticos referentes à vida e à morte, interferindo nas decisões sobre elas, respaldas na dignidade humana.

Palavras-chave: Infecções por coronavirus. Ética. Bioética. Reanimação cardiopulmonar. Cuidados críticos. Enfermagem.

RESUMEN

Objetivo: Reflexionar sobre el orden de no reanimación en COVID-19 en Brasil, bajo enfoque bioético y ética profesional médica y de enfermería.

Método: Estudio de reflexión basado en la bioética principialista de Beauchamps y Childress y ética profesional, acciones problemáticas y decisiones de no reanimación en la pandemia.

Resultados: Considerar la clínica del paciente, con un esquema apropiado de los objetivos del tratamiento, especialmente en los ancianos y las personas con comorbilidades y contar con el apoyo del equipo de cuidados paliativos, para evitar la distanasia, así como el mal uso de los recursos y la exposición de los profesionales a la contaminación.

Conclusión: COVID-19 aumentó las vulnerabilidades de profesionales y pacientes, impactando decisiones profesionales y conductas más amplias que valores importantes como la restricción de la libertad, pero especialmente haciendo que la población en general reconsidere los valores éticos y bioéticos con respecto a la vida y la muerte, interferir en las decisiones sobre ellos apoyadas por la dignidad humana.

Palabras clave: Infecciones por coronavirus. Ética. Bioética. Reanimación cardiopulmonar. Cuidados críticos. Enfermería.

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INTRODUCTION

The coronavirus disease (COVID-19), caused by the new SARS-COV-2 virus, started in 2019 in China, in the city of Wuhan and reached the pandemic level in early 2020. Biological disasters at this level bring numerous challenges to health systems, society and professionals directly responsible for assistance. In this pandemic, efforts are being channeled towards the development and implementation of coping strategies, including the reorganization of the very dynamics of society to establish social distance, as a preventive measure against infection and to expand the time to prepare health services[1].

Even so, an overload of care in the hospital units could be noticed. In the short term, the demand for infirmary and intensive care beds, with the availability of life-sustaining technology, rose rapidly. This occurred due to the evolution to severe syndromes of acute respiratory distress, due to hypoxemic respiratory failure, in addition to myocardial injury, ventricular arrhythmias and other cardiac complications, which generate situations of Cardiopulmonary Arrest (CPA) and therefore require care of Cardiopulmonary Resuscitation (CPR)[2–3].

In CPR, the health team performs maneuvers to ensure pulmonary oxygenation and blood circulation, in a collaborative and coordinated manner. The procedure includes checking responsiveness, checking breathing and pulse, starting chest compressions, ventilation and analyzing heart rate[4]. However, in situations of patients in the terminal phase of life, with irreversible loss of consciousness or who may have untreatable cardiac arrest, the Do-not-resuscitate order (DNR), which consists by the decision not to perform an attempt at CPR, may be instituted[5].

High mortality, especially in risk groups such as high age and the presence of comorbidities; the potential droplets aerosolization, increasing the risk of contamination of the health professionals involved[3] and the scarcity of material resources, such as Personal Protective Equipment (PPE) and mechanical ventilators, are factors that seem to influence decision making for not resuscitation in the current pandemic context.

In defense of life, it is in the field of health care that the greatest ethical dilemmas are faced, however, the new systematization of services and decision-making, must be carried out with responsibility and reflection that considers ethical, bioethical, sociocultural aspects, legal and normative, focusing on human dignity.

Recommendations and guidelines on CPR point out to the importance of ensuring effective communication between the team regarding DNR, which must be established with patients and family members and with adequate documentation[4]. Likewise, it is essential to follow institutional policies to maintain palliative care, aiming to improve the quality of life of patients, and their families, with problems associated with potentially fatal diseases[6], as has been shown COVID-19[7]. This care continues until the end of the natural life process, for orthothanasia, without obstinate interventions that undermine the ethical principles of non-maleficence, beneficence, autonomy, and justice.

According to the theory of "common morality" by Beauchampas and Childress [5], the most used model in clinical bioethics, ethical principles are classified as deontological and teleological. The teleological ones, which concern the purposes of the actions, are autonomy and beneficence. Autonomy can be explained as establishing intentional choices, of subjects aware of decisions and free from influences. In this perspective, beneficence is in the moral obligation of professionals to act according to the will of the patients and not to make decisions without consulting the patients and their families.

The deontological principles refer to non-maleficence and justice, in which non-maleficence is in not causing harm and not causing unnecessary pain, which includes the termination of futile or obstinate treatment. Justice, in the perspective of health, is in the ethics of treating each one according to what is morally correct, working in a way that does not allow social, religious, economic issues to interfere in decisions, among others, in order to distribute resources to the greater number of people, in a balanced way[5].

That said, it is urgent to reflect on how the DNR, in the bioethical perspective and the professional medical and nursing ethics, has been structured in the Brazilian pandemic context, which is the objective of this article.

METHOD

This is a reflective theoretical study[8] based on bioethics and professional medical and nursing ethics in the light of the principlist ethics of Beauchamps and Childress[5]. The reflection was based on legal bases, such as Resolutions in the area of health: Resolution of the Federal Medicine Council No. 2.217/2018[6], motivated by the need to decide on cardiopulmonary non-resuscitation and which supports orthothanasia based on human dignity; and Resolution of the Federal Nursing Council nº 564/17[9], referring to the Code of Ethics for Nursing Professionals. It was also based on studies about the subject and on guidelines published by the National Health Surveillance Agency[3], Brazilian Intensive

Care Medicine Association[7], Brazilian Society of Cardiology[10] and Resuscitation Council UK[4], all in the context of the COVID-19 pandemic.

This study was developed by professors with experience in the areas of bioethics and professional ethics, palliative care, fundamental nursing care and intensive care, within the scope of the *Stricto Sensu* Postgraduate Program, and master and doctoral students who work on objects that touch the content of this reflection.

RESULTS AND DISCUSSION

Bioethical perspective and professional ethics in the do-not-resuscitate order during COVID-19

The high demand for specialized health services in a pandemic context can lead to a critical situation in which resources (intensive care beds, mechanical ventilators, and qualified professionals) are insufficient to supply the demand of critically ill patients, compromising the supply and quality of care for both patients with COVID-19 and patients with non-pandemic diseases.

Considering that supportive care is the basis of treatment among critically ill patients with COVID-19, the unavailability of intensive care beds confers an outcome that injures the right to life, as the scenario where CPA takes place influences the result of CPR. Patients with COVID-19 resuscitated in the general ward compared to those who received CPR in the Intensive Care Unit (ICU) have worse outcomes[2]. This reality leads to reflection and the understanding that non-resuscitation decision-making must be based on the possibility of benefiting the individual, based on the available resources.

On the other hand, another necessary reflection, with imposed parsimony and thoughtful use of resources, deals about decisions that lead to therapeutic futility. The biggest bioethical dilemma concerns the fine line between futility and harm. In order to make a decision to revive or not to revive, the professional must assess the futility of the act, that is, an action that cannot achieve the objectives, regardless of the frequency with which it is repeated[11].

In order to avoid disproportionate treatment, consequently, death, there is a risk of dysthanasia, considered a prolongation of the death process, thus extending the biological life of the patient in a painful way and with greater suffering[12]. In orthothanasia, on the other hand, it is proposed that the patient has a dignified death, without abbreviating it or prolonging it, recognizing it as a process that is part of life[5]. In this perspective, the right measure between orthothanasia and dysthanasia, with a focus on human dignity, is difficult to reach consensus.

Striving for human dignity, it is proposed that the practice accompany the change in the balance between risk and benefit in the pandemic situation by COVID-19, in favor of collective security and not just individual[13]. It is understood that the execution of CPR maneuvers generates aerosols and exposes the professionals involved in the procedure[3–4,7,10]. In this way, ethical and responsible behavior is also aligned with individual and collective protection, in addition to the perception of their own vulnerability since the deaths of professionals and quarantines due to contamination plague health systems and impact on the mental health of professionals.

The decision to resuscitate the patient in the context of COVID-19 in the face of a CPA requires the professionals involved to be discerning, which includes factors such as the use of already contingent resources and predictive criteria for survival. It should be noted that in the ICU scenario, it is easier to gather all these factors, in order to contribute to the understanding of therapeutic proportionality and, thus, better conduct clinical reasoning based on the principles of non-maleficence and beneficence. It is ratified that non-maleficence consists of the professional's obligation not to cause harm to the patient. Beneficence, on the other hand, is based on actions that provide benefits to the patient after weighing risks[5].

Data from the clinical evaluation assist professionals in discussing cases with the health team, patients and family members, and help to define the prognosis and objectives of care, whether curative or exclusive palliative. The ideal and plausible to happen is to monitor the clinical evolution, in order to identify possible benefits and conditions of survival from resuscitation. The most serious cases by COVID-19 are characterized by the recruitment of immune cells in different sites, resulting in a dissemination of endothelial and inflammatory dysfunction of the lungs, heart, kidneys, liver and brain[2]. In this clinical evaluation, when the benefits are outweighed by the risk of failure in resuscitation, the order should be not to resuscitate. This needs to be aligned with everyone involved in this process. In this way, communication with the family is facilitated, given the possibility of gradually understanding the seriousness of the case and ensuring that comfort measures will be ensured.

Some countries are developing protocols to facilitate the designation of inputs through the application of exclusion criteria, mortality risk assessment and periodic clinical assessments[14]. The objective of applying exclusion criteria is to identify patients with a short life expectancy, regardless of their age and current acute illness, in order to prioritize patients more likely to survive on mechanical ventilator therapy. The assessment of the risk of mortality is performed by

a clinical scoring system in order to assess the probability of survival of a patient. This is done based on clinical measures of function in six key organs and systems: lungs, liver, brain, kidneys, blood clotting and blood pressure. Finally, periodic clinical evaluations (48 and 120 hours) are carried out on a patient who started ventilator therapy to assess whether to continue treatment[14]. Although these protocols vary in terms of the clinical considerations and ethical principles on which they are based, everyone agrees that the goal is to save as many lives as possible.

An important data, which can guide the professional's decision-making process in the face of a conflict situation for non-resuscitation, can be observed in a research that investigated 136 cases of patients with COVID-19 who underwent CPA submitted to the resuscitation maneuver. From the 136 cases analyzed, only four patients survived 30 days from the date of the cardiorespiratory arrest, which represented only 2.9% of the sample[2]. Variables of the sample profile were pointed out, highlighting: 66.2% were men; 80.9% were 60 years old or older; 87.5% had respiratory system problems as a cause of the arrest; 30.2% had arterial hypertension; 19.9% had diabetes; and 11% had coronary heart disease[2].

It is worth mentioning that, in cardiac arrests by COVID-19, 80% have pulseless electrical activity or asystole as the initial rhythm of CPA, which reduces the positive response to resuscitation maneuvers, with survival and hospital discharge of about 15 to 20%[13]. The numbers that indicate the lethality by COVID-19, after resuscitation maneuvers, should be carefully analyzed, as patients with many fragilities and who suffer from CPA as the final stage of an irreversible death process should not be resuscitated[13].

Thus, the way in which is configuring the evolution of the pandemic by COVID-19 in the world, some services announce the need to conduct assistance practice aligned with palliative care, including the identification and attendance of assistance goals, control of moderate symptoms and support for the family, including mourning[1].

An answer to this situation can be elaborated from the training of the health team to provide palliative care to address key questions about the clinical worsening, the deprivation of visits, the need for self-quarantine and the possibility of death, in an attempt to humanize assistance and make it possible for the family to choose not to resuscitate, making it easier for the team to identify these cases[1].

In this sense, in addition to the family approach, the perspective of palliative care can also guide the team in directing treatment goals, in addition to providing support in the implementation of DNR, based on clinical information and the allocation of adequate or scarce resources in view of the capacity contingency and crisis[1]. In Brazil, we can come up against the limitation of our palliative care services/programs that are in the early stages of development and are still scarce.

Due to the fact that the decision of non-resuscitation is being implemented in an unveiled way today, due to the situation of the biological disaster caused by COVID-19, it is necessary to be guided by the bioethical culture in order to avoid unilateral and imposing decisions, both by health professionals and patients and their families, in defense of autonomy. Autonomy therefore means self-government, which guarantees people to make decisions for themselves[5]. Its guarantee is conditioned to a clear and informative dialogue, based on the individual's due guidance on the options available and their consequences. In this way, you will be able to decide for yourself, which include decisions about your life and your own death, based on your beliefs and values[11]. It also highlights the patient's right to deny treatment, always with ample communication about the risks and vulnerabilities to which he is exposed[10].

A study carried out in China found out that only five patients with COVID-19 from a sample of 151 opted for DNR[2]. To these results, one must question the quality of communication between professionals and patients, or even reflect on the decisions that impose mastery of the family's will to the detriment of the will of the most vulnerable patient, if he is unconscious. If this is the case, the patient's autonomy in the decision is hurt and puts him in a situation of dysthanasia, prolonging the suffering.

It is also worth mentioning professional autonomy, which, although WHO has been concerned with issuing preliminary information on infection, control, screening, diagnosis and treatment in the cases of COVID-19, it is observed that the emergence of the situation and its deleterious effects check the right to the full exercise of professional ethics, with autonomy. This, therefore, in the case of emergencies, disasters and pandemics, the clinical assessment in face of contingency requires professionals to make a decision about investing in lives that are most likely to survive. But this fact must be understood with great caution, since the lack of resources and the disorder caused by the catastrophe, may prevent you from even guaranteeing the care for symptom relief, especially since it is a disease that evolves quickly to respiratory failure.

Thus, although the health professional, based on clear and transparent communication with patients and family members/legal representatives, and that their act is not unilateral, is authorized to decide not to resuscitate in case of serious illnesses in the terminal phase, the circumstances who demarcate a crisis situation may interfere in the full exercise of this decision as it affects the ability to provide

comprehensive care and to respect the will of the patient or their family members/legal representatives[11].

In this way, the implementation of DNR in patients with COVID-19 can be conducted in the following ways: when the patient or family member expresses the desire not to perform invasive procedures to prolong life; the patient or family member can follow the recommendation of the health professional so that these measures are not instituted, ensuring all necessary information for this decision; and in extreme situations, when resuscitation cannot be effective, considering the risk at the expense of the benefit[15].

This pandemic has altered the risk-benefit ratio in CPA: from 'no harm in trying' to 'there is little benefit to the patient and potentially significant harm to the team'. Which brings us to the vulnerability, both of patients and professionals, as a bioethical element to be considered in the reflections on the theme, in which, due to human dignity and the patient's right, resuscitation is not indicated and considering the vulnerability of professionals with greater risk from aerosols, they now have as a priority the maintenance of biosafety to stay alive and active in the care of others affected by COVID-19.

Nurses in coping with COVID-19 and the do-not-resuscitate order

It is noteworthy that CPR, in some cases, has been initiated by nurses, but the decision-making process for non-resuscitation is made by the physician, who, based on the discussion between the team, considers not being useful the CPR maneuvers[6]. It depends on the nurse, among other actions, the functionality of the stop cart, with availability of materials necessary for this type of assistance; technical procedures for venipuncture, preparation and administration of medications; supervision of the technical professionals of the nursing team and possible relay in resuscitation maneuvers.

Assistance to critically ill patients must be multi-professional and interdisciplinary. However, in situations of pandemic and collapse of the health system, such as the one we are living in, some fronts of professional categories may be deficient in number and the simultaneous episodes of seriousness of the cases may imply in not meeting certain care needs, either patient or their family members.

However, it is ratified that the nurse is forbidden to stop providing assistance to the patient, which must be realigned according to the purpose of the assistance at that time, as in the case of palliative care, which prescribe comfort and quality of life and, what should be carefully preserved, like dignity and humanity[9].

Because it is a recent disease, with new knowledge every day, communication between nursing professionals and a multidisciplinary team and between nurses and patients is not always efficient or resolutive. Even recognizing that communication presents hermeneutic problems, reality requires reflection with a professional ethical focus on the duty of updating professionals, provided for in the Code of Ethics for Nursing Professionals[9], and which determines that the patient has the right to receive correct information, to be heard in their needs and to receive resolute humanized care[9].

These determinations refer to the bioethical reflection and the recognition that not all nursing professionals, involved in palliative care to COVID-19 patients with DNR, are able to offer communication that supports this decision, either by acting in a protocol way, or by providing nursing care without updating or reflecting on orthothanasia. In this case, disregarding the knowledge of those involved or failing to listen to the patient and family, interferes with effective communication and their autonomy, generating conflicts and difficulties in the management of nursing care.

Another factor that interferes in the ethics of nursing care, also related to the lack of inputs, is the guarantee of training and adequate practice regarding biosafety, due to the risk of contamination in the removal of PPE after the care provided to the patient with COVID- 19[3]. Contamination takes a large number of professionals to quarantine; and the greater the absenteeism and the number of deaths of health professionals, in general, the more deficient will be the human resources to face the pandemic.

With this in mind, it becomes prudent and contributory to refer professionals to psychological care and training to act in times of biological health disaster, and to expand the supply of inputs. It is noteworthy that nursing professionals have the right, guaranteed in COFEN Resolution No. 564/17[9], to refuse to act without vestments to protect their physical integrity, considering the danger of life and health.

FINAL CONSIDERATIONS

In the face of so many uncertainties and complexities inherent to the pandemic, reflections on DNR in times of COVID-19 showed that this decision needs to be multidisciplinary involving patients and families, however, it should not be delegated to them and, rather, offered support through communication to ensure patient autonomy. In addition, a careful clinical assessment of the patient should be considered, especially in the elderly and people with comorbidities, with an appropriate outline of the treatment goals in an attempt to curb therapeutic obstinacy in favor of human dignity, ensuring non-maleficence, avoiding futile decisions, greater suffering and pain to the patient due to dysthanasia.

It is directed that the DNR decision should have a multidisciplinary approach in the perspective of palliative care

with a view to orthothanasia, even though the pandemic situation reduces human and material resources causing a deficit in this care.

Although the study has achieved its objective, there is a limitation regarding the complexity of the theme so that the decision by the DNR still has an impact and requires reflection, making consensus difficult due to religious, cultural or lack of knowledge about current legislation and the evolution of bioethics. In addition, there is a limitation of studies that address this theme in patients with COVID-19, which makes it difficult to advance in more structured reflections in the field of bioethics and professional ethics.

COVID-19 extended the vulnerabilities of professionals and patients, so this reflection can contribute to professional practice, impacting decisions and conduct in the face of rethought non-resuscitation orders based on ethical and bioethical values regarding life and death, supported in human dignity.

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Acknowledgments:
To the Academic Excellence Program (PROEX) of the Coordination for the Improvement of Higher Education Personnel/Ministry of Education (CAPES/MEC).

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The authors declare that there is no conflict of interest.

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Associate editor:
Dagmar Elaine Kaiser

Received: 06.08.2020
Approved: 03.26.2021

Editor-in-chief:
Maria da Graça Oliveira Crossetti