ETHICAL-MEDICAL ORIENTATIONS FOR THE ATTENTION OF CRITICAL PATIENTS IN THE COVID-19 PANDEMIC CONTEXT

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Abstract: In the face of a possible health saturation due to the pandemic caused by the SARS-CoV2 coronavirus, the present paper wants to contribute with some guidelines in order to provide ethical orientation to prioritize patients and maximize the benefits for the majority of the population. This paper aims to generate an acceptable, consistent, and reasonable ethical framework to support the difficult work that health professionals will have in emergency rooms and intensive care units. The criteria and reflections in this paper aim to respect not only ethical-medical principles that focus their efforts on a particular patient, but especially on a broader public health ethics based on the principle of justice. Prioritization is therefore oriented in a utilitarian framework that seeks to save the largest number of lives, of life-years and considering the life stage, without neglecting the people's dignity. In this sense, it is not only a matter of considering epidemiological criteria, but also of establishing socially acceptable ethical criteria. This proposal is a collective effort to bring together the comparative experience of various international ethical recommendations, adapting them, if pertinent, to the Chilean reality.

Keywords: Pandemic, ethical guidelines, Chilean health system, *triage*, public health ethics

INTRODUCTION

The current pandemic situation caused by the SARS-CoV2 coronavirus, which causes the systemic COVID-19 respiratory disorder, faces us with a series of challenges related mainly to the health system. In terms of what is now known of the disease, approximately 80% of the COVID-19 cases manifest mild respiratory symptoms, while it is estimated that 20% will have pneumonia symptoms that require hospitalizing, and between 5% and 16% will need to be treated in an intensive care unit (ICU).[1] Furthermore, the mortality of COVID-19 varies between 1% and 8%.[2] The disturbing aspect of this variability lies in the fact that it will cause "mainly an overload of the health care system that hinders caring for other serious cases."[3] This is also understood considering that the emergency systems take care not only of critical COVID-19 patients, but also of other critical patients. Another important variable of this mortality is further explained by the difficulty of knowing the real number of infected persons, since no massive testing is being applied.

In this context, in addition to having the reduction of the infection curve as a goal, the additional measure that health services must take is to strengthen the health system to guarantee the care of patients who need it, especially in emergency cases. Yet, despite the

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[1] Respiratory Diseases, Epidemiology, Infectology, and Intensive Medicine Societies in Chile: https://www.medicina-intensiva.cl/site/docs/sociedades_covid19.pdf.

[2] Respiratory Diseases, Epidemiology, Infectology, and Intensive Medicine Societies in Chile: https://www.medicina-intensiva.cl/site/docs/sociedades_covid19.pdf.

[4] Recommendation of the German Interdisciplinary Association for Intensive and Emergency Medicine: *Deutsche Interdisziplinäre Vereinigung für Intensiv- und Notfallmedizin (DIVI),* performed by seven German Societies of Respiratory Diseases, Epidemiology, Infectology, and Intensive Medicine: *Entscheidungen über die Zuteilung von Ressourcen in der Notfall- und der Intensivmedizin im Kontext der COVID-19-Pandemie*.

[5] Structure and operation of Chile's health system Report, Populational Health Series Nº 2. Center of Epidemiology and Health Policies, Facultad de Medicina Clínica Alemana - Universidad del Desarrollo, 2019.

fact that these measures have started being implemented in Chile (e.g., through the purchase of mechanical ventolator, expansion of coverage by including "critical beds" from the private sector, etc.), they have a cost not only in terms of money, but also of time - both factors difficult to evaluate in the context of a pandemic.

Insofar as the health systems in the world level are heterogeneous, so are the various specific challenges that will have to be cared for in a pandemic. In the case of Chile's health system, it is composed of a public and a private sector, both in providing insurance and in offering health services. For the public sector, which covers 78% of the population, there is the Fondo Nacional de Salud (FONASA) (*National Health Fund*) insurance, while 14.4% makes use of the insurance offered by the private *Instituciones de Salud Previsional* (ISAPRE) (Previsional Health Institutions), while 3% are covered by the subsystems of the armed forces and the order and safety institutions.[4] The system's head organization is the Ministry of Health, which determines the health policies together with the Regional Ministerial Secretariats and the *Instituto de Salud Pública* (ISP) (Public Health Institute). To deal with the COVID-19 pandemic, the health authorities have decided that since April 1, the Ministry of Health shall be in charge of the management of the resources available to the private health providers, setting up a single health provider network that determines the critical beds, in a joint effort for providing timely service to the largest number of people infected with the virus who require it.[5]

Of course, one of the urgent issues to be solved is to increase the number of critical beds and distribute them to various hospitals. However, since infection peaks in Chile are hard to forecast because they vary according to multiple factors (rigid or semi-rigid quarantines, massive testing ability, efficient isolation of those infected, etc.), it is difficult to guarantee that the health system will be able to offer

[5] Resolution Nro. 156 exenta. Santiago, April 1 of 2020. Diario Oficial.

intensive care treatment to all those who need it. Therefore, a lack of medical resources could lead doctors to find themselves in a difficult resource-distribution situation. In the event of emergency care saturations, doctors will have to classify -as has already happened in European countries– between priority patients and patients who are also under life risk, who should be referred to other types of care, such as pain control and comprehensive palliative care. There is evidence, however, that such decisions have a deeply stressful impact on health professionals.[6] Since they risk their health by protecting others, we must not only protect them with rigorous safety guidelines that allow them to carry out their work with the lowest possible risk of infection (COLMED CHILE recommendations)[7], but also offer them ethical guidance that supports their decision-making in critical situations. This

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[6] Recommendation of the German Interdisciplinary Association for Intensive and Emergency Medicine; *Deutsche Interdisziplinäre Vereinigung für Intensiv- und Notfallmedizin (DIVI),* made by seven German Respiratory Diseases, Epidemiology, Infectology and Intensive Medicine Societies
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[7] Recommendations of the Colegio Médico de Chile: http://www.colegiomedico.cl/recomendaciones-para-el-uso-de-epp/
[9] Hastings Center, Ethical Framework for Health Care Institutions Responding to Novel Coronavirus SARS-CoV-2 (COVID-19) Guidelines for Institutional Ethics Services Responding to COVID-19 Managing Uncertainty, Safeguarding Communities, Guiding Practice: https://www.thehastingscenter.org/wp-content/uploads/HastingsCenterCovidFramework2020.pdf
Ethical Recommendations for Decision Making in the Exceptional Crisis Situation due to the Covid-19 Pandemic in the Intensive Care Units. (Semicyuc)of the Sociedad Española de Medicina Intensiva, Crítica y Unidades Coronarias: https://semicyuc.org/wp-content/uploads/2020/03/%C3%89tica_SEMICYUC-COVID-19.pdf

effort is aligned with those who believe that the "duty to plan" becomes a priority obligation.[8]

THE OBJECTIVE OF ETHICAL-MEDICAL ORIENTATION

In the context of a pandemic, public health ethics must be reconciled with aspects of clinical ethics.[9] This implies that guidelines must respect not only ethical-medical principles focused on particular patients, but they must especially rely on public health ethics based on the principle of justice and centered on human rights.[10] In the face of a possible health saturation, the guidelines should provide ethical orientation to prioritize patients and maximize the benefits for the majority of the population. Prioritization is therefore oriented in a utilitarian framework which seeks to save the largest number of lives, of life-years,[10] and considering the life stage,[11] without neglecting the people's dignity. In this sense, it is not only a matter of considering epidemiological criteria, but also of establishing socially acceptable ethical criteria.

Currently, the international medical and bioethical world has started reacting and raising awareness on the ethical challenge implied by the present pandemic. In Chile, ethical recommendations and/or guidelines are being made to face a possible saturation of the emergency health system. That is why the present document shows solidarity with the imperative task of **offering ethical-medical guidelines acceptable in the pandemic context**, which would provide

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[9] Royal College of Physicians (RCP), Ethical dimensions of COVID-19 for frontline staff 2 April 2020.
[10] UNESCO statement on covid-19: ethical considerations from a global perspective: https://unesdoc.unesco.org/ark:/48223/pf0000373115
[11] White, D. B., Katz, M. H., Luce, J. M., & Lo, B. (2009). Who should receive life support during a public health emergency? Using ethical principles to improve allocation decisions. *Annals of internal medicine*, *150*(2), 132–138. https://doi.org/10.7326/0003-4819-150-2-200901200-00011

orientation to health professionals in complex situations such as prioritization of the health attention of patients in life-threatening conditions. In this way, the responsibility for their decisions is being supported by orientations that have been agreed on and recommended by a community of experts, who, in turn use as a foundation the compared experience of various international recommendations.

THE ETHICAL *TRIAGE* DILEMMA

In a pandemic context, emergency rooms and intensive care units in hospital centers will have to apply so-called *triage* strategies more frequently. A *triage* strategy is necessary when it is found that the available medical resources are insufficient to offer treatment to all patients under life risk conditions, and doctors must classify and order them into various categories of importance. There are two possible prioritization scenarios, where physicians are forced to decide and determine which patients under life-threatening conditions should receive and/or stop receiving priority treatment: a) prioritize among several life-threatened patients who should receive care and where medical resources are limited (ex-ante *triage*) and b) determine, when all the equipment is already being used by patients, in which cases treatment should be stopped (ex-post *triage*).[12] Both scenarios represent extremely complex ethical problems, but to a large extent equivalent, for while in the ex-ante case only one patient is prioritized and intensive care is initiated (leaving others out); in the other case it should be decided to interrupt started treatments. Either way, in *triage* contexts, the way in which it is decided to prioritize will benefit some, but it will also harm others.

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[12] Deutscher Ethikrat, German Ethical Council: https://www.ethikrat.org/pressekonferenzen/der-deutsche-ethikrat-zur-corona-krise/

GENERAL ETHICAL PRINCIPLES

Triage decisions respond not only to particular ethical-medical duties of the profession, but must be consistent with other broader social and political rights. Although it is necessary to establish criteria for prioritizing among patients, such an assessment should never question the value of a patient's life. Therefore, the *triage* strategy that is decided must, in the first place, guarantee the **bioethical justice principle** and to be **respected in their dignity**.[13] While the former is about ensuring that everyone will have fair access to intensive care services, the latter is manifested specifically as respect for their autonomy. It is a matter of ensuring that everyone, regardless of age, economic status, gender, or ethnicity will receive equal treatment and will be respected in their clinical decisions. Precisely in the Chilean context, consisting of a multicultural and diverse population, people's self-determination concerning their medical choices must be respected, as long as they do not put public health at risk. However, even though these basic principles are respected, in cases of catastrophes such as a pandemic, no decision will be optimal. The scenario of a pandemic is not merely a lack of medical resources, but a catastrophe on multiple levels, and therefore it does not allow for maximalist ethical solutions. However, it is reasonable to reconcile **acceptable ethical-medical** recommendations, sensitive to the urgency of maximizing the health of the population, through **procedures known and applied consequently by the medical team and are known by the public**.

The categorization of patients using a given *triage* strategy should **maximize benefits** by optimizing the distribution of scarce medical resources. Distributing these resources in the best possible way means that as many patients as need it can get a clinical benefit from

[13] Contribution of the National Consulting Committee: Ethical Issues Facing a Pandemic. *Contribution du comité consultatif national d'éthique: enjeux éthiques face à une pandémie*: https://www.ccne-ethique.fr/fr/actualites/la-contribution-du-ccne-la-lutte- contre-covid-19-enjeux-ethiques-face-une-pandemie

them. Most of the international ethical recommendations available for *triage* strategies frequently recognize the implicit utilitarian ethical mandate to **save as many lives as possible and maximize life-years**. However, since to "save lives" there is no medical algorithm because every patient is an individual case with an equally unique pathography, the medical team, in addition to resorting to the ethical-medical criteria of the *triage*, must always apply their good judgment. Therefore, it is not only a matter of saving lives, but also about ensuring that as many people who will access medical resources will be able to get a benefit from the treatment.

SPECIFIC ETHICAL-MEDICAL CRITERIA

Although there is a plurality of criteria in an equally wide range of international recommendations, the present proposal not only avoids both clinical evaluative details as well as the depth of ethical reflection, so it remains within a framework of *minima moralia* that achieves the greatest possible consensus among physicians and constitutes a tool that is useful to them. Following international recommendations, they highlight the following **specific ethical-medical criteria** that should be considered when evaluating *in-situ* the admissibility of critical patients to intensive care:

- **Patient autonomy:** A fundamental criterion accepted widely in medical ethics and emphasized transversely in various international recommendations consists in respecting the patient's autonomy. This means clarifying whether the patient has left in writing or expressed in some other way if he wanted to be reanimated and/or connected to life support and/or under what circumstances. If the patient cannot express his wish in this aspect and has no Anticipated Will (or vital will), then the information from third parties like relatives is required, but only

with the purpose of clarifying the patient's exact wish. In no case can the patient's wish be subjected to whatever medical or family paternalism consideration.

- **Short term clinical benefit**: In the cases of ex-ante *triage*, a first fundamental medical criterion to assess whether a patient should enter the ICU is the prognosis of short-term clinical benefit.[14] Here it is a matter of detecting the patient who will get the most out of the intervention in the shortest time. Patients who are likely to get the most benefit in the shortest time (bed-days) from receiving intensive care should be prioritized. The therapeutic effort should be adapted (not initiating or withdrawing life support measures in an ex-post *triage* scenario) when the intervention is disproportionate and futile. For this evaluation, objective clinical criteria such as the Sequential Organ Failure Assessment (SOFA) or another similar and recognized method should be used. Since the majority of critical COVID-19 patients are likely to be older adults, it is expected that these patients will require more medical effort because they generally have more chronic diseases.

- **Constant evaluation:** Particularly in cases of ex-post *triage*, that is, in contexts where patients are using scarce vital supports and/or which are urgently required for other critically ill

[14] Recommendation of the German Interdisciplinary Association for Intensive and Emergency Medicine; *Deutsche Interdisziplinäre Vereinigung für Intensiv- und Notfallmedizin (DIVI),* made by seven German Respiratory Diseases, Epidemiology, Infectology and Intensive Medicine Societies
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patients, the medical team must constantly evaluate therapeutic improvement and/or condition of the patients.[15] In cases where the patients cannot be stabilized or where their stability is extremely fragile and with no prospect of rehabilitation, there is no medical indication to maintain vital supports.

- **Non-abandonment of the patient:** In case a patient is not prioritized in critical care, it does not mean that he will be abandoned. The patient should receive adequate care for symptomatic pain control if warranted and/or receive quality comprehensive palliative medical care according to his needs. This principle is explicitly promoted by the recommendations of the Chilean Ministry of Health (MINSAL) to the Health Care Ethics Committees.

- **Multiple interdisciplinary control**:[16] This criterion implies that the decisions made regarding the admission or rejection of patients to critical care must be supported by at least two health professionals with experience in the ICU. One of them should not be part of the medical team to promote objectivity, relieving the team members of the moral distress of the decision, and to

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[15] Recommendation of the Academie for Ethics in Medicine; *Akademie für Ethik in der Medizin (AEM)* Möglichkeiten und Grenzen von Ethikberatung im Rahmen der COVID-19-Pandemie (Stand: 31.03.2020) Possibilites and limits of institutional ethics services in response to the COVID-19 pandemic (english version)

[16] Recommendation of the German Interdisciplinary Association for Intensive and Emergency Medicine; *Deutsche Interdisziplinäre Vereinigung für Intensiv- und Notfallmedizin (DIVI),* made by seven German Respiratory Diseases, Epidemiology, Infectology and Intensive Medicine Societies
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guarantee transparency. With the aim of reducing time in decision-making, it is recommended that only in cases of discrepancies between physicians should the Ethical Care Committee of their clinical center be consulted. These, in turn, should be guided in accordance with the ethical recommendations of the Advisory Commission on Health Care Ethics of the Ministry of Health (CEAM).

Anticipate more complex cases

The current pandemic puts us in scenarios where the universe of possible cases that may require prioritization is not completely predictable. For this reason, these recommendations are by no means exhaustive and cannot anticipate all the conflicts that may arise in the distribution of resources. However, some ethical dilemmas are foreseeable and need specific guidance. Both cases challenge ethics, but require us to seek principles that allow us to maintain the goal of maximizing medical benefits to the largest number of people and to distribute them equally to the largest number of people who need it.

A) Prioritization between two or more patients who, when evaluated under the aforementioned criteria, qualify for the same or similar clinical evaluation regarding their therapeutic benefit, but not all can be treated.
B) Need for additional criteria in the face of a disproportionate and increasing saturation of the health system.

In both scenarios there are two more controversial principles that should additionally be applied:

- **Life expectancy:** As an additional criterion for prioritizing patients, several recommendations (Italy[17], Austria[18] and

[17] Società Italiana di Anestesia Analgesia Rianimazione e Terapia Intensiva (SIAARTI - Covid19 - Raccomandazioni di etica clinica:

Switzerland[19]) have incorporated the number of years of life. In cases of system saturation, it is recommended to weigh the criterion of the largest number of lives saved (implicit in the short-term benefit) along with the criterion of the greatest number of life years at a time. Thus, a person may have a good prognosis of short-term clinical benefit, but not such a good prognosis of survival after discharge, so they would not be prioritized. On the contrary, a person may have, in comparison with the previous one, a lower prognosis of clinical benefit in the short term, but a higher prognosis for life after discharge and, therefore, be prioritized.

- **"First come, first served":** According to this, and having exhausted the other allocation criteria, those who arrive earlier at the emergency room would have priority to be cared. This principle appears in recommendations from England[20] and Austria[21]. This criterion certainly has the disadvantage that

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http://www.siaarti.it/SiteAssets/News/COVID19%20-%20documenti%20SIAARTI/SIAARTI%20-%20Covid19%20-%20Raccomandazioni%20di%20etica%20clinica.pdf

[18] Austrian Society for Anestesiology, Reanimation and Intensive Medicine; *Österreichische Gesellschaft für Anästhesiologie, Reanimation und Intensivmedizin (ÖGARI)*
Allokation intensivmedizinischer Ressourcen aus Anlass der Covid-19-Pandemie. Klinisch-ethische Empfehlungen für Beginn, Durchführung und Beendigung von Intensivtherapie bei Covid-19-PatientInnen

[19] Schweizerische Akademie der Medizinischen Wissenschaften (SAMW)
Covid-19-Pandemie: Triage von intensivmedizinischen Behandlungen bei Ressourcenknappheit

[20] British medical Association: COVID-19 – ethical issues. A guidance note:

https://www.bma.org.uk/media/2226/bma-covid-19-ethics-guidance.pdf

[21] Austrian Society for Anestesiology, Reanimation and Intensive Medicine; *Österreichische Gesellschaft für Anästhesiologie, Reanimation und Intensivmedizin (ÖGARI)*
Allokation intensivmedizinischer Ressourcen aus Anlass der Covid-19-Pandemie.

people who are or live closer to the emergency centers will have priority care.

FINAL COMMENTS

The criteria and reflections presented in this text, as stated, are not intended to be exhaustive, neither in relation to the possible criteria that should be considered acceptable in the context of a pandemic, nor in the context of what is ethically desirable. The *triage* situation refers to a tragic situation, where the best of all worlds, the best of options (save all or treat all) is not possible. For this reason, these guidelines aim to generate an acceptable, consistent, and reasonable ethical framework to support the difficult work that health professionals will have in emergency rooms.

In addition to maintaining a focus on *minima moralia*, these guidelines seek to enrich the national public debate, complementing in order to adapt them, if relevant, to the national reality. For this reason, this document does not intend to carry out a detailed comparative analysis of international ethical recommendations, but rather tries to consider them insofar as they constitute, in many of the aforementioned aspects, a contribution to ethical debate and reflection, complementing the reflection that national civil organizations (such as the COVID-19 Social Roundtable) and the sanitary authority (Advisory Commission of the MINSAL) have carried out. In situations of extreme complexity, as experienced in the current pandemic, the difficulties involved in agreeing on points of view regarding ethically acceptable decisions on the prioritization of patients should be part of a broad public debate. For only through transparent dialogue with the community is it possible to maintain trust and establish procedures that safeguard it.

Klinisch-ethische Empfehlungen für Beginn, Durchführung und Beendigung von Intensivtherapie bei Covid-19-PatientInnen

Finally, and as stated, this proposal is a collective effort to bring together the comparative experience of various international ethical recommendations, adapting them, if pertinent, to national reality. That is why the present does not aim to make a detailed comparative analysis, but rather tries to consider them insofar as they constitute, in many of the aforementioned aspects, a contribution to the national ethical debate and reflection.

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