

Prioritization to ensure care in COVID-19 pandemic

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Abstract

Objectives: to develop a flow to ensure care for all people with severe acute respiratory syndrome coronavirus 2, offering from intensive care to palliative care, in an equitable and fair manner.

Methods: the modified Delphi methodology was used to reach consensus on a flow and a prioritization index among specialists, the regional council of medicine, members of the healthcare system and the local judicial sector.

Results: the score was incorporated into the flow as the final phase for building the list of patients who will be referred to intensive care, whenever a ventilator is available. Patients with lower scores should have priority access to the ICU. Patients with higher scores should receive palliative care associated with available curative measures. However, curative measures must be proportionate to the severity of the overall clinical situation and the prognosis.

Conclusions: this tool could and will prevent patients from being excluded from access to the necessary health care so that their demands are assessed, their suffering is reduced, and their illnesses are cured, when possible.

Key words SARS-CoV-2, COVID-19, Respiratory insufficiency, Principle-based ethics, Critical care, Palliative care



Introduction

The great increase in number of Severe Acute Respiratory Syndrome (SRAS) cases, due to SARS-CoV2 pandemic, had been promoting an imbalance between clinical needs of the population and the availability of advanced resources of life support in various places of the world.^{1,2} This lead us to consider which clinical and ethical aspects should be considered to guide decision-making process, being necessary to integrate various criteria within a single tool to prioritize which patients should have previous access to intensive care and mechanic ventilators, particularly.³⁻⁵ In addition, there was the ethical imperative to assure dignified attendance to all sick people that could not be prioritized due to scarcity of resources during pandemic, as well as those who had no indication or did not aspire to have artificial life support.⁶⁻⁸

The screening should be avoided whenever it is possible, however, when necessary, it is mandatory to respect human rights and humanitarian laws, especially concerning the First Geneva Convention in 1864 and the Universal Declaration of Human Rights in 1948.⁵ When scarcity of resources occur, the principles of biomedical ethics and the international right determine that screening protocols be used to guide the allocation of resources.⁹ The international right also demands a screening plan that equitably grants to every people the “opportunity” to survive.⁸ However, this law does not ensure survival or type of treatment.⁹

Besides that, studies demonstrate that the screening process is not usually official, and its practical aspects are implemented in different manners, without clear, concise and explicit guidelines, being the screening perceived many times, by the patients, as inadequate or poorly organized, raising specific ethical challenges to the healthcare providers.¹⁰ The screening planning can be defined as the process of establishing criteria for the prioritization of healthcare and should allow the society to see, clearly, the cases in the context of various perspectives, the reality of limited resources and high demands of healthcare.^{8,11}

A review study grouped factors identified in the prioritization of patients in two categories: medical (clinical needs, probability of benefit and capability of survival) and non-medical (saving more lives, the younger first, preserve the society function, protect vulnerable groups, necessary resources and impartiality in selection).¹⁰ Some authors agree that the screening should always follow already established medical criteria, being not able to be based in any

other principle.⁵ In addition to this, the screening implies in a constant re-evaluation of patients, considering that their clinical conditions and available resources change continuously.^{5,8}

Thus, the aim of this study was to develop collaboratively a flow to ensure care to people with SRAS, in an equitable and fair manner, optimizing the usage of all available resources in the local healthcare network.

Methods

To elaborate the Decision- Making Practical Flowchart (DMPF), modified Delphi method was used, which is a strategy to establish validation of instrument content, allowing to know and assess, in systematic manner, opinions from specialists aiming to obtain a consensus regarding a particular instrument or criterion.¹² Questionnaires applied by means of an interactive process known as “rounds” are used.¹²

Initially (1st phase), a group of four physicians specialized in intensive care, geriatrics, oncology, and palliative medicine established the pilot DMPF from a literature review.

In the 2nd phase (1st Delphi round), 15 physicians members from the Technical/Thematic Assemblies of Intensive Medicine, Geriatrics, Oncology, Nephrology, Palliative Care and Bioethics from the Regional Medicine Council of Pernambuco (CREMEPE – Portuguese acronym) were invited to participate in the consensus, via email. It was considered a consensus when the flow phases had concordance level above 50%. The non-consensus areas were assessed by the researchers and adjustments suggested in this stage were implemented.

In the 3rd phase (2nd Delphi round), the flow with alterations suggested in the previous stage was resent, being considered consensus when the flow phases had a level of concordance above 80%. In this stage, the experts were also questioned about the format in which this material should come to physicians in urgency care services.

During the cycles of questionnaire application, the experts did not have access to their peers’ identification.

The approved DMPF was brought to analysis by the Counselors of CREMEPE (4th phase), as well as by the managers of the health system (5th phase) and the local judicial sector (6th phase).

Results

First phase

After broad literature review, considering scientific articles, as well as guidelines from organizations, the pilot DMPF recommended to assess fragility in elderly, as well as searching for severe comorbidities that indicated palliative care for patients with advanced illnesses.¹³⁻²⁰

Second phase

In the 1st Delphi round, DMPF was presented to the 15 experts in digital poster format, followed by questions with a gap to mark “agree” or “disagree” in each stage of the tool, as well as suggestions and comments. Each stage was answered by 12 physicians (80.00%). Although positive comments about the assessed aspects in decision-making, there was no level of concordance above 50% in crucial aspects. The main one was the criticism of age analysis as first parameter, as it characterizes ageism, although the comprehension of the objective is to guide the physician to assess fragility in elderly patients.

In sequence, it was suggested search for severe comorbidities with short-term survival, based on Supportive and Palliative Care Indicators Tool (SPICT), which is an instrument based on clinical indicators of advanced disease for Palliative Care integration in health.²¹ The presence of fragility or severe comorbidity lead the patient to exclusive palliative care, even without previous discussion with the physician that assisted the patient. The criticism in this step was that the decision became dichotomic, without considering severity of comorbidities and fragility, understanding that there is a spectrum of severity in sickening, which implies directly in different prognosis.

In addition to this, it was questioned why there was not a score to prioritize patients for ventilatory artificial assistance that could coordinate the access in a fair manner. In the format that it was set, the first to come in the healthcare service would be the first to be in the list, and consequently, the first to access an ICU bed. A new literature review evidenced that, according to the bioethical principles of assistance in catastrophes, such as a pandemic, criteria such as “first to come, first to be assisted” and “the sicker first” should be avoided, given that society resources as a whole can be wasted, and it is not fair to proceed in such manner. Thus, some authors suggest valorizing the unquestionable principle of maximizing the “number of lives saved” associating to “years of life gained”, besides the “accomplishment

of life cycle”.^{1,2,5}

In order to unite these three principles in a single strategy action, the *Sociedad Española De Anestesiología, Reanimación Y Terapéutica Del Dolor* recommended a scale adapted from the White *et al.*⁴ scale. Taking this orientation as a basis, an Unified Score of ICU Prioritization (USP – ICU) was developed by the main researcher, in order to grade patients under many aspects, aiming to offer care in the most adequate way that is possible in the technical, bioethical and legal point of view.

Aiming to predict short-term survival in order to maximize the “number of lives saved”, the item 01 of the USP – ICU should determine the Sequential Organ Failure Assessment (SOFA).^{9,22} In the prioritization score recommended by CREMEPE for utilization in the state of Pernambuco, SOFA was simplified based on literature and clinical experience of the ICU experts from CREMEPE, allowing its application in emergency environment, where many times laboratory tests such as gasometry and bilirubin are not available.

In order to assess chances of long-term survival to maximize “years of life gained”, White *et al.*⁴ suggested to evaluate comorbidities, although not offering objective criteria. Another recent study suggested to evaluate survival between 5 and 1 year, depending on comorbidities. (1) On the other hand, the Charlson Comorbidity Index (CCI) was used by researchers of this study in a geriatrics oncology cohort, being of easy application and had demonstrated being a prognostic factor for infection, hospitalization and death between elderly patients with cancer.²³⁻²⁵

However, CCI lacks evaluation of fragility presence. It is known that it represents a status of physiological vulnerability related to age, frequent amongst elderly patients, caused by homeostatic reserve diminish, which leads the organism to being not able to overcome adverse events, increase of death probability, even in the absence of any other disease.²⁶ And that amongst diagnostic tools available, the Clinical Frailty Scale (CFS),²⁷ is validated for usage in Brazilian elderly patients and is of quick application and can be used in the urgency context.

In this way, the USP – ICU should determine CCI and CFS, considering the one that obtains higher severity score, in order to evaluate chances of long-term survival, aiming to maximize “years of life gained”. To allow the “accomplishment of life cycle”, White *et al.*⁴ pointed age ranges in a different manner. Thus, item 3 of USP–ICU maintained this recommendation. The USP–ICU had 3 items (1: SOFA, 2: Comorbidities by CCI and CFS; 3: Age

ranges). Each item from the USP-ICU has 4 categories that score from 1 to 4. The final score is given by the sum obtained from 1, 2 and 3 items. In this way, patients will have scores varying from 3 to 12.

It was suggested that this system of scoring was applied to all patients, with COVID-19 or not, with clinical indications for admission in an intensive care unit. Patients with lower scores should receive higher priority to access advanced life support and/or admission in intensive care. Patients with higher scores should receive palliative care associated with available healing measures, given that COVID-19 is an acute disease and potentially reversible, but the care provided should be proportional once patients with high score is equivalent to a severely ill person, chronically and acutely.

The USP-ICU was incorporated to DMPF as the final stage for building a list of patients that will be considered to intensive care admission, with orotracheal intubation and mechanical ventilation, whenever the availability of the healthcare network permits. The tool also oriented to not applying the USP-ICU to all patients with advanced chronic diseases that had already spoken to their assistant physicians and agreed with their indication to palliative care.²⁰ The will and autonomy of patients should also be respected, when deciding not receiving artificial life support.²⁸

Third phase

In the 2nd Delphi round, the restructured DMPF considering USP-ICU was resent to the 12 experts that answered the previous phase. Eleven participants (92%) answered to this stage. The level of concordance was higher than 80% in the entire instrument. Besides that, over 80% of participants answered that they wished that this study was presented to the local network professional, both by CREMEPE and SES/PE, besides being made available via smartphones applications. Over than half indicated the necessity of posters in the urgency services and a little more than 30% suggested online classes.

Fourth phase

The instrument, validated by the experts, was presented to CREMEPE directorship as well as to most of the counselors. There was as consideration that the adoption of the “accomplishment of life cycle” principle is not consensual within all bio-ethical strands, being suggested to attempt to substitute it. Besides, it was suggested that in case of a tie, pregnant women had priority, and amongst them, those with higher gestational age. The necessity to

explain why DMPF and USP-ICU should not be applied to children was highlighted. Finally, there was the decision to present it to the State Health Secretariat, to the Federal Medicine Council and to Brazilian Ministry of Health.

As the use of age in item 3 of USP-ICU was not consensual within counselors, a new literature analysis evidenced that people of the same age affected by the same disease can present completely distinct functionalities and to determine functionality is a decisive prognostic factor for clinical decision-making and adjustment of therapeutic proportionality. Thus, in the item 3 of USP-ICU, age was excluded and the evaluation of the patient’s functionality was included, which independently of his/her age range, should be verified, being Karnofsky performance status (KPS),²⁹ one of the most diffused tools and can be adapted to simple questions that make easier to use in the proposed context. That said, age should be used only as tiebreaker criteria.

Fifth phase

In this stage, an external validation of applicability was searched by managing members of the healthcare system, being the study presented to the State Secretary of Health and his advisors. In this meeting, a new meeting was defined with other managers already in cooperation with judiciary members.

Sixth phase

In this last stage, four members from CREMEPE, 3 from the State Secretariat of Health of Pernambuco – SES/PE (being 1 of them of the Central Department of Bed Regulation – CRL Portuguese – acronym), 2 from the Municipal Secretariat of Health of Recife – SMS/Recife (being 1 from the Mobile Emergency Care Service – SAMU Portuguese acronym), as well as representatives of state judiciary staff with 3 members from the Public Ministry of Pernambuco – MPPE (Portuguese acronym), 1 from the Court of Justice of Pernambuco – TJPE (Portuguese acronym) and 1 from State Attorney General Office – PGE (Portuguese acronym).

After presentation of DMPF with the USP-ICU, considerations was taken by nearly all present participants. There was a consensus that the instrument was adequate for usage in the state of Pernambuco during COVID-19 pandemic, as it allowed that all SRAS patients received care in a clear manner. In this moment, there were no criticism or adjustments suggestions.

Finally, it was discussed how this material should be sent for usage, with an agreement that CREMEPE would execute an Ethical Recommendation, and in sequence, SES/PE would implement in its Clinical Protocols. Judiciary members compromised to promote opportunities of discussion, in which all this rationale was presented, aiming to mitigate unnecessary judicialization.

The DMPF with USP-ICU is presented in Portuguese in Figure 1 and in English in Figure 2. This image with better graphic quality will be available in the website (www.cremepe.org.br) in English and Portuguese, and can be translated to other languages with consent of the researchers.

Discussion

By means of a collaborative work, it was possible to build a Decision-Making Practical Flowchart (DMPF), supported by a Unified Score of Prioritization for ICU (USP-ICU), in order to assist patients with SRAS during COVID-19 pandemic. It is possible that the referrals given by CREMEPE, SES/PE and state judiciary departments assured the assistance of all of the people, providing as much possible care as possible, in a fair and equitable manner, making better use of all resources available in the local healthcare network.

All hospitalizations in intensive care units should be reconsidered and being subject to a daily reevaluation of adequacy, objectives and proportionality of treatments, by means of the daily application of SOFA, which is a score broadly used in intensive care to assess prognosis.²² If a patient admitted in intensive care unit with limited criteria do not respond to prolonged treatment and present clinical worsening, the adequacy of therapeutic effort and the referral from intensive care to palliative care can be reevaluated. The decision of limiting intensive care should be discussed and shared by the team assisting the patient and, as far as possible, with the patient and/or relatives.

Concerning patients to which the access to an intensive care unit is considered absent of benefits or even futile, the decision of adapting the therapeutic conduct must be agreed, informed to the patient and/or family and registered in the clinical records.⁶ This is not an obstacle to offer other types of therapy, such as palliative care with rigorous control of symptoms.^{17,19} Any instruction of “not intubating” or “not resuscitating” must be adequately registered in the medical record, in order to be used as a guide if clinical deterioration occurs hastily and in presence of caregivers that do not know the

patient.⁶ Palliative sedation in patients with hypoxia and progression of disease that do not respond to treatment should be considered as an expression of good clinical practices and must follow preexisting recommendations. If short-term death is predicted, referral to a non-intensive environment must be provided.^{6,15,19}

This planning was in accord to the World Health Organization, which indicates that governments and healthcare systems are obliged to assure, the best way possible, the adequate provision of healthcare for everyone.³⁰ Nevertheless, this may not be possible during the pandemic, which leads to the necessity of defining priorities and ration resources.³⁰

Some studies have been recommending that, in order to establish state and local prioritization plans to allocate resources during this pandemic, ethical principles such as: distributive justice, obligation to plan, obligation to manage resources, to maximize the benefits produced by scarce resources, transparency, to treat people equally, to maintain equity and obligation to provide care should be considered.^{3,5,8} Others affirm that the ethical obligation of physicians to prioritize the well-being of patients individually may be nullified by public healthcare policies aiming the general well-being to a higher number of patients, higher number of lives saved, with more years and quality of life.¹

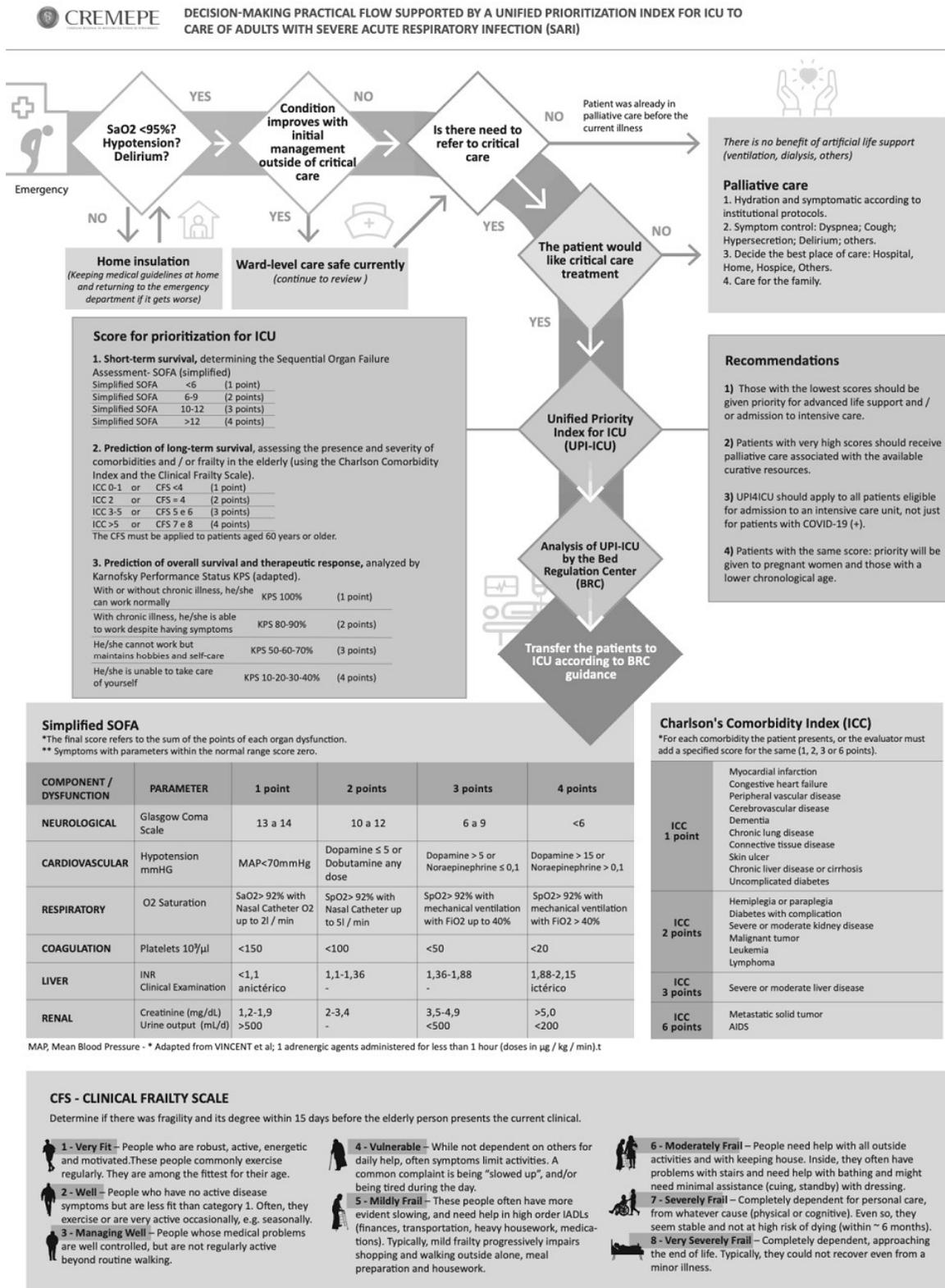
In the face of this dilemma, this study proposed a structure of evaluation of sick people, without excluding them from opportunities of receiving worthy and quality assistance embedded both in ethical principles for decision-making in crisis situations and preserving well-being of each individual. In this way, it was recommended, in the state of Pernambuco/Brazil during COVID-19 pandemic the usage of DMPF supported by USP-ICU as a mean of organization of access to ICU beds and mechanical ventilators, in situations of scarcity to attend the existing demand in the fairest way possible. As well as it was oriented the offer of palliative care to all severe and potentially fatal patients as brief as possible.

Author's contribution

Bezerra MR: Idea, literature review, building of the project, Delphi stages, building of the article. Mello MJG and Lima JTO: Co-orientation of the project and article review. Cavalcanti ZR and Bezerra GMP: Delphi stages, building of the article. Dias LM and Oliveira Sá PK: discussion of idea, literature review, discussion of the article. Nunes R: Orientation of

Figure 2

Decision-Making Practical Flowchart (DMPF), supported by a Unified Score of Prioritization for ICU (USP-ICU), in English.



project and review of the article. All authors approved the final version of the article.

References

- White DB, Lo B. A Framework for Rationing Ventilators and Critical Care Beds during the COVID-19 Pandemic. *JAMA*. 2020; 323 (18): 1773-4.
- Espinosa E, Galan J, Aldecoa C, Ramasco F, Llamas E. Marco Ético Pandemia Covid 19. *Soc Española Anestesiol Reanim y Ter del dolor*. 2020; 10.
- Gostin LO, Friedman EA, Wetter SA. Responding to COVID-19: How to Navigate a Public Health Emergency Legally and Ethically. *Hastings Cent Rep* [Internet]. 2020 [citado 2 de abril de 2020];n/a(n/a). Available at: <https://doi.org/10.1002/hast.1090>
- White DB, Katz MH, Luce JM, Lo B. Who should receive life support during a public health emergency? Using ethical principles to improve allocation decisions. *Ann Intern Med*. 2009; 150 (2): 13-8.
- Emanuel EJ, Persad G, Upshur R, Thome B, Parker M, Glickman A, et al. Fair Allocation of Scarce Medical Resources in the Time of Covid-19. *N Engl J Med*. 2020; 382 (21): 2049-55.
- Hendin A, Rivière CG La, Willisroft DM, Connor EO, Hughes J, Fisher LM. End-of-life care in the emergency department for the patient imminently dying of a highly transmissible acute respiratory infection (such as COVID-19). *CJEM*. 2020; 22 (4): 414-7.
- CFM (Conselho Federal de Medicina). Resolução nº 2.217, de 27 de setembro de 2018 - Imprensa Nacional [Internet]. [acesso 23 abr 2020]. Available at: http://www.in.gov.br/materia/-/asset_publisher/Kujrw0TZC2Mb/content/id/48226289/dol-2018-11-01-resolucao-n-2-217-de-27-de-setembro-de-2018-48226042
- Koonin LM, Pillai S, Kahn EB, Moulia D, Patel A. Strategies to Inform Allocation of Stockpiled Ventilators to Healthcare Facilities During a Pandemic. *Heal Secur*. 2020; 18 (2): 69-74.
- Christian MD, Hawryluck L, Wax RS, Cook T, Lazar NM, Herridge MS, et al. Development of a triage protocol for critical care during an influenza pandemic. *CMAJ*. 2006; 175 (11): 1377-81.
- Ghanbari V, Ardalan A, Zareiyan A, Nejati A, Hanfling D, Bagheri A. Ethical prioritization of patients during disaster triage: a systematic review of current evidence. *Int Emerg Nurs*. 2019; 43: 126-32.
- Burkle FM. Mass casualty management of a large-scale bioterrorist event: An epidemiological approach that shapes triage decisions. *Emerg Med Clin North Am*. 2002; 20 (2): 409-36.
- McMillan SS, King M, Tully MP. How to use the nominal group and Delphi techniques. *Int J Clin Pharm*. 2016; 38 (3): 655-62.
- AMIB (Associação de Medicina Intensiva Brasileira). Princípios de triagem em situações de catástrofes e as particularidades da pandemia COVID-19. 2020; Available at: [2603-PRINCIPIOS_DE_TRIAGEM_EM_SITUACOES_DE_CATASTROFES_E_AS_PARTICULARIDADES_DA_PANDEMIA_COVID-19_10_11.pdf](https://www.amib.org.br/2603-PRINCIPIOS_DE_TRIAGEM_EM_SITUACOES_DE_CATASTROFES_E_AS_PARTICULARIDADES_DA_PANDEMIA_COVID-19_10_11.pdf)
- CFM (Conselho Federal de Medicina). Resolução CFM no 2.156/2016. Cons Fed Med [Internet]. 2016 [citado 10 de abril de 2020]; seção I(D):138-9. Available at: https://www.editorarocarati.com.br/v2/phocadownload/CFM_resolucao_2156_2016.pdf
- COVID-19 rapid guideline: critical care in adults NICE guideline [NG159] [Internet]. 2020 [acesso 10 abr 2020]. Available at: <https://www.nice.org.uk/guidance/ng159/resources/critical-care-admission-algorithm-pdf-8708948893>
- Com I, Grippa S. Manejo do idoso com infecção grave pelo COVID-19 em ambiente hospitalar: IVCF-20 on-line. 2020; (Ms): 2020.
- Guidance PI, Clinical S. The Gold Standards Framework Proactive Identification Guidance (PIG); 2016;
- OPAS (Organização Pan Americana de Saúde). Fluxo de manejo clínico do adulto e idoso na Atenção Especializada [Internet]. 2020. Available at: <https://portal.arquivos.saude.gov.br/images/pdf/2020/marco/25/Fluxo-de-Manejo-cl-nico-do-adulto-e-idoso.pdf>
- Academia Nacional de Cuidados Paliativos. Posicionamento da Academia Nacional de Cuidados Paliativos sobre COVID-19 - Academia Nacional de Cuidados Paliativos [Internet]. 2020 [acesso 23 abr 2020]. p. 12. Available at: https://www.dropbox.com/s/g77qi6xk2jc8rky/FINAL_05_ANCP_Ebook_cuidados_COVID-19.pdf?dl=0
- CFM (Conselho Federal de Medicina). Resolução CFM no 1.805 [Internet]. Diário Oficial da União. 2006 Nov 28: Seção I, p. 169. 2006 nov [citado 24 de abril de 2020]. Available at: http://www.portalmedico.org.br/resolucoes/cfm/2006/1805_2006.htm
- Highet G, Crawford D, Murray SA, Boyd K. Development and evaluation of the supportive and palliative care indicators tool (SPICT): A mixed-methods study. *BMJ Support Palliat Care*. 2014; 4 (3): 285-90.
- Minne L, Abu-Hanna A, de Jonge E. Evaluation of SOFA-based models for predicting mortality in the ICU: A systematic review. *Crit Care*. 2008; 12 (6): R161.
- Martins M, Blais R, De Miranda NN. Avaliação do índice de comorbidade de Charlson em internações da região de Ribeirão Preto, São Paulo, Brasil. *Cad Saúde Pública*. 2008; 24 (3): 643-52.
- Bannay A, Chaignot C, Blotiere PO, Basson M, Weill A, Ricordeau P, et al. The best use of the charlson comorbidity index with electronic health care database to predict mortality. *Med Care*. 2016; 54 (2): 188-94.

25. Lima J, Viana R, Rebello M, Mello MJ, Sales L, Bergmann A, et al. The comprehensive geriatric assessment in malignancies and prognostic factors: Description of a prospective cohort of 889 Brazilian elderly cancer patients. *J Clin Oncol*. 2019; 37: e23035.
26. Lourenço RA, Moreira VG, Mello RGB de, Santos I de S, Lin SM, Pinto ALF, et al. Consenso brasileiro de fragilidade em idosos: conceitos, epidemiologia e instrumentos de avaliação. *Geriatr Gerontol Aging*. 2018; 12 (2): 121-35.
27. Rodrigues MK, Rodrigues IN, Silva DJVG da, Pinto JM de S, Oliveira MF. Clinical Frailty Scale: Translation and Cultural Adaptation Into the Brazilian Portuguese Language. *J Frailty Aging*. 2021; 10 (1): 38-43.
28. CFM (Conselho Federal de Medicina). Resolução CFM nº 1.995/2012. Dispõe sobre as diretivas antecipadas de vontade dos pacientes. *Diário Oficial da União* de 31 de agosto de 2012; Seção I (170): 269-70. Available at: <https://sistemas.cfm.org.br/normas/visualizar/resolucoes/BR/2012/1995>.
29. Péus D, Newcomb N, Hofer S. Appraisal of the Karnofsky Performance Status and proposal of a simple algorithmic system for its evaluation. *BMC Med Inform Decis Mak*. 2013; 13: 72.
30. WHO (World Health Organization). Ethics and COVID-19 : resource allocation and priority-setting. *World Health Organ* [Internet]. 2020; 1–5. Available at: <https://www.who.int/ethics/publications/ethics-covid-19-resource-allocation.pdf?ua=1>

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