

# Covid-19: what do the codes of professional ethics say?

Tiago Pereira de Souza<sup>1</sup>, Cibele Gulartt Avendano<sup>1</sup>, Erissandra Gomes<sup>1</sup>

1. Universidade Federal do Rio Grande do Sul, Porto Alegre/RS, Brazil.

#### **Abstract**

The new coronavirus arrived in Brazil in February 2020, with a high rate of transmissibility and lethality. In view of this situation, the Ministry of Health issued Ordinance 639/2020, legitimizing the action "Brazil counts on me – health professionals," to train and register professionals. In order to identify which professions, listed by the Ordinance, have in their Codes of Professional Ethics guidelines for the current situation and analyze the content found, this documentary research has an exploratory, descriptive nature and qualitative and quantitative character, presenting statistical and content analysis. The data were processed using specificity and similarity analysis techniques, using the Iramuteq software. Of the professions analyzed, presented in their code of ethics content related to covid-19: nursing, pharmacy, speech therapy, physiotherapy, psychology, social services and occupational therapy. The existing guidelines have little connection with the text of the committees, indicating deontological insufficiency.

Keywords: Ethic. Bioethics. Codes of ethics. Health occupations. Epidemics. Pandemics.

#### Resumo

#### Covid-19: o que dizem os códigos de ética profissional?

O novo coronavírus (Sars-CoV-2) chegou ao Brasil em fevereiro de 2020, com alta taxa de transmissibilidade e letalidade. Diante de tal situação, o Ministério da Saúde emitiu a Portaria 639/2020, que instituiu a ação "O Brasil Conta Comigo: Profissionais da Saúde", com o fim de cadastrar e capacitar profissionais para o combate à pandemia. Esta pesquisa visa identificar, dentre as profissões elencadas pela mencionada portaria, aquelas que trazem orientações aplicáveis à atual situação em seus códigos de ética. Trata-se de pesquisa documental, exploratória, descritiva e qualiquantitativa, que utiliza como método a análise estatística e de conteúdo. Os textos dos códigos de ética foram processados pelo software Iramuteq e passaram por análises de especificidades e similitudes. Das profissões analisadas, sete apresentaram em seu código de ética conteúdo que pode ser relacionado à pandemia de covid-19: enfermagem, farmácia, fonoaudiologia, fisioterapia, psicologia, serviço social e terapia ocupacional. As orientações, no entanto, apresentaram pouca conexão com o código como um todo, o que indica limitações nos documentos deontológicos analisados.

Palavras-chave: Ética. Bioética. Códigos de ética. Ocupações em saúde. Epidemias. Pandemias.

### Resumen

## Covid-19: ¿qué dicen los códigos de ética profesional?

El nuevo coronavirus (Sars-CoV-2) se identificó en Brasil en febrero de 2020, con una alta tasa de transmisibilidad y letalidad. Ante esta situación, el Ministerio de Salud emitió la Ordenanza 639/2020, legitimando la acción "Brasil Cuenta Conmigo: Profesionales de la Salud", para formar y registrar profesionales en la pandemia. Esta investigación tuvo como objetivo identificar qué profesiones, enumeradas por la Ordenanza, tienen en sus Códigos de Ética Profesional directrices para afrontar la situación actual. Esta es una investigación documental, con carácter exploratorio, descriptivo y cualicuantitativo, que utilizó como método el análisis estadístico y de contenido. Los datos de los mencionados códigos se procesaron mediante técnicas de análisis de especificidad y similitud, utilizando el software Iramuteq. De las profesiones analizadas, siete presentaron en su código de ética contenidos que pueden estar relacionados con la covid-19: enfermería, farmacia, logopedia, fisioterapia, psicología, trabajo social y terapia ocupacional. Las directrices, sin embargo, mostraron poca conexión con el código en su conjunto, lo que indica limitaciones en los documentos deontológicos analizados.

Palabras clave: Ética. Bioética. Códigos de ética. Empleos en salud. Epidemias. Pandemias.

The authors declare no conflict of interest.

The new coronavirus, called SARS-CoV-2, which causes covid-19, was detected in late December 2019 in Wuhan, China. The World Health Organization (WHO) confirmed the circulation of the virus in early January, and later that month declared the epidemic an international emergency <sup>1,2</sup>. The first imported case of covid-19 was confirmed in Brazil in February 2020, in the city of São Paulo, two months after the alert issued by China. Since then, the virus has been circulating in the country in successive waves <sup>3</sup>.

In this context, the WHO has determined measures such as: use of personal protective equipment by health professionals; identification of symptomatic and asymptomatic individuals; testing and implantation of a laboratory structure to ensure a quick offer of results, and creation of new units with adequate equipment and social isolation. The effectiveness of these actions, as was already clear at the beginning of the pandemic, would depend mainly on intense social mobilization, since the virus has very high rates of transmissibility and high lethality <sup>1,4</sup>.

In March 2020, the Ministry of Health (MS) issued Ordinance 639, in which the then minister Luiz Henrique Mandetta, in the use of his legal attributions, legitimized the strategic action "O Brasil Conta Comigo: Profissionais da Saúde" [Brazil Counts on Me: Health Professionals], aimed at registering and training personnel to face the pandemic. The ordinance considers as belonging to the health area the professionals subordinate to the corresponding supervisory board of the following categories: social services, biology, biomedicine, physical education, nursing, pharmacy, physiotherapy and occupational therapy, speech therapy, medicine, veterinary medicine, nutrition, dentistry, psychology and radiology technicians<sup>5</sup>.

The Ministry of Health's measure, supported by Law 13.979/2020 6, relates health professionals to their respective professional councils, entities of a public nature but functionally disconnected from the Executive Branch. Called "autarchies," these councils have their own legal personality, assets and revenue to carry out typical activities of the public administration, which require decentralized administrative and financial management for their best functioning <sup>7,8</sup>.

Among other functions, professional councils are responsible for establishing the Code of

Professional Ethics (CEP), which regulates the relationship between professionals in the same profession and between them and society. The objective is to provide guidance on ethical and moral conflicts that may arise in the exercise of activities relevant to the public interest <sup>9</sup>.

The normative dimension of ethics, which gives rise to its prescriptive meaning, is related to the systematic agglutination of values and duties, such as religious dogmatism or the CEP itself. This sense can be considered the embryo of the "theory of duty and obligation," which contemporary moral philosophy calls "deontology" 10. The importance of this theme in Brazil's current situation - mostly due to the need to reflect on the guiding documents of professional health practice - comes from the social conflicts attributed to the relationship "rights versus duties." It is generally forgotten that the Code of Professional Ethics is developed by professional peers, that is, human beings susceptible to error and partiality. Despite the idealization of these documents as having absolute truths, the codes are unable to cope with the complexity of care. The most common, then, is to indicate the insufficiency of inspection acts as responsible for this, or to think of elaborating more articles, ordinances, laws and resolutions 11.

Considering the conjuncture presented, this study, with a quali-quantitative approach, aims to identify which CEPs in the health field <sup>12-25</sup> bring ethical guidelines applicable to the current pandemic situation.

# Method

This documentary, descriptive, quali-quantitative study makes a lexical analysis of the codes of ethics of the professions of higher education listed in Ordinance MS 639/2020. The objective is not to address the content of the aforementioned ordinance or the government's strategy to face the pandemic. The reference to the document served only to establish which professions would be included in the research.

The theoretical assumption for quantitative analysis was Zipf's law, which refers to the frequency of words in a given text, generating an ordered list of terms for a given discipline or topic <sup>26</sup>. For the lexical analysis, the content

of the 14 CEPs in force was processed by the Iramuteq software, which uses R language in the statistical analysis of textual corpus <sup>27-30</sup>. The data were then submitted to specificity analysis by hypergeometric law <sup>27</sup>, and similarity analysis by Pearson's chi-square scores, through application in grammatical classes: nouns, verbs and adjectives.

Since the research uses exclusively secondary data from consultations on the portals of the Federal Councils of the respective professions listed in Ordinance MS 639/2020, approval of the project by the Research Ethics Committee was not necessary.

## Results and discussion

According to the analysis of the 14 CEPs performed using Iramuteq software, the corpus has a total of 54,099 occurrences (total words). Of these, 3,325 are different from each other, with 1,166 hapaxes (words that appear only once), equivalent to 2.16% of the total occurrences and 35.07% of the words in the textual corpus. The average word count for each text was 3,864.

The specificity analysis associates texts with chosen variables, allowing to study the texts according to categories. Words that the researcher wants to analyze are associated with the corpus, and the database is divided according to the selected variable <sup>29</sup>. Following this method, after extensive reading, semantic identification, establishment of synonyms and characterization of the theme, the following terms that can be related to covid-19 were listed: "epidemic," "catastrophe" and "calamity."

The words "epidemic" and "catastrophe" appear six times each, and "calamity" twice, totaling 14 occurrences throughout the textual corpus. These terms showed a positive correlation with the professions, according to the hypergeometric analysis scores (n), indicating that the terms are addressed in the respective CEP: nursing (n = 1.7673), pharmacy (n = 0.8906), physiotherapy (n = 0.5202), speech therapy (n = 0.4118), social services (n = 0.2814), psychology (n = 0.39045), and occupational therapy (n = 0.4496). On the other hand, the negative data point to CEPs that do not address the subject in question:

biology (n = -0.2243), biomedicine (n = -0.6063), physical education (n = -0.2453), medicine (n = -0.6183), nutrition (n = -0.5569), dentistry (n = -0.6789), and veterinary medicine (n = -0.4412).

Deontology traces a pattern of behavior and posture before the demands of work, acting as the health professional's main ethical framework<sup>31</sup>. Thus, professionals resort to these documents in search of support and guidance in situations of, for example, "epidemic," "calamity" and "catastrophe."

The data lead to thinking about the meaning of ethics in the professional context. Does the fact that a situation is or is not prescribed in the guiding documents interfere with the professional's behavior? In situations of doubt, when we do not know the most correct way to act, it is ethics in its philosophical meaning that we turn to. In such cases, the reflection goes beyond the simplistic act of seeking CEP laws or articles. Being ethical means being able to understand the situation and the values that surround it and then decide what to do. For this reason, CEPs are unlikely to be able to contemplate all the nuances of professional practice; hence the need for continuous updates and the transversality of ethics (in its reflective character) <sup>32</sup>.

Considering this specificity, it is worth mentioning that professional codes - generally called "codes of ethics" - do not concern ethics per se, but the regulation of behaviors and attitudes 31. When the deontological concept, and only it, guides the conduct, the act of caring and professional ethics deteriorate 33. The ethical conception, on the other hand, is related to a critical attitude, for moments of crisis, through which one thinks in a singular way, questioning the homogenization of the relations proposed in the codes 34. Thus, healthcare professionals must be prepared for situations where the code fails. Such is the case of the current pandemic context, which requires professionals to be able to relate to each other while dealing with internal confrontations and preestablished truths 11.

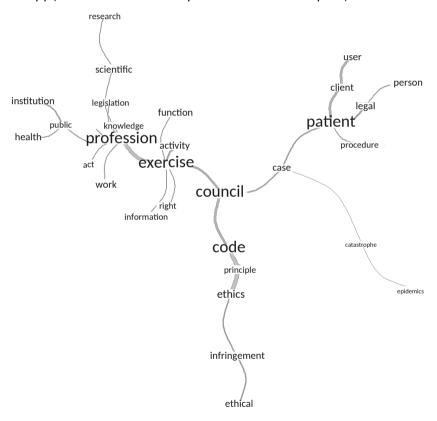
Before proceeding with the analysis, it should also be noted that just because a CEP contemplates the categories studied ("epidemic," "catastrophe" and "calamity"), this does not guarantee that the guidance is in line with the other guidelines of the document and sufficient to support the practice. To verify the existence of a possible distance from the terms "epidemic" and

"catastrophe" in the lexicographic representation structure of the CEPs that contain the two terms, a co-occurrence analysis was carried out based on the variables and their relationship with the most frequent words in the corpus (≥90). Thirty words with frequency index and thematic relevance were used, varying between 94 and 25 occurrences in the corpus. The words included, "epidemic" and "catastrophe," had six occurrences each. For the graphic configurations, the following parameters were used: a) presentation: co-occurrence; b) algorithm: Fruchterman-Reingold; c) type of graph: statistical; and d) score: chi-square. The word "calamity" (two occurrences), present in the

CEP of social services and psychology, could not be included, since the program analyzes terms with frequency  $\geq 3$ .

The similarity analysis method applied allowed identifying the connection between elements of the representation (Figure 1). The most highlighted words showed relevance to the connected elements <sup>26</sup>. The similarity analysis also enabled the graphic representation of the data, facilitating the understanding of the information <sup>35</sup>. Such analysis, anchored in the graph theory, identifies occurrences of the terms and connections between them, enabling the visual observation of the textual corpus structure <sup>26,35,36</sup>.

**Figure 1.** Similarity analysis of codes of ethics in nursing, pharmacy, physiotherapy, speech therapy and occupational therapy (correlation between "epidemic" and "catastrophe")



It is worth remembering that the graph compared infrequent variables ("epidemic" and "catastrophe") with the center of the corpus (that is, more recurrent words) precisely so we could identify the distance from the terms. The applied proportion needs to be considered in the interpretation, since it would be impossible to reproduce a direct relation

of size between frequencies so distant without compromising the visibility of the figure. In other words, if the graph had been made following a direct proportionality between the number of occurrences and the length of the terms, "epidemic" and "catastrophe" would be practically invisible in the representation.

In Figure 1, it is possible to notice the great distance between the terms studied and the semantic-lexical center of the CEPs. This representation of the statistical probability that the codes contain the terms "epidemic" and "catastrophe" leads to conclude that, even in the texts that mention the two words, the approach and the amount of content is insufficient to establish meaningful connections. Such conclusion is possible thanks to the thickness of the lines that connect the terms and numbers (referring to the number of simultaneous occurrences). Another important point, considering the adaptations of visual observations, is the word size: the larger the font, the greater the frequency of the term in the corpus <sup>26,28</sup>.

Codes of ethics prescribe important principles for professional practice and establish rules for

health care, but they are restricted with respect to complex ethical dilemmas that have not yet been foreseen. This limitation is even more evident in situations such as the current pandemic, when conflicts arise from the disorganization of relationships between subjects, who seek a moral judgment on actions that violate fundamental values of care <sup>37</sup>. Thus, studies should identify necessary updates in the codes of ethics, interpreting norms more broadly or proposing changes in content, form and language <sup>38</sup>. Such need is urgent in the case of covid-19, which has required vigilance, common sense, and scientific research worldwide <sup>39</sup>.

To better analyze how CEPs approach the topics studied, the "agreement" tool of Iramuteq software was used to locate the terms in their original context (Chart 1).

Chart 1. Context in which the terms "epidemic," "calamity" and "catastrophe" appear in CEPs

Code of Professional Ethics	Chapter	Article	Item	Text
Nursisng <sup>25</sup>	II and III	Articles 49 and 76		When summoned, provide nursing assistance to the community in cases of emergency, epidemic, catastrophe and disaster, without claiming personal advantages.  Deny nursing care in urgent, emergency, epidemic, disaster and catastrophe situations, as long as it does not pose a risk to the professional's physical integrity.
Pharmacy <sup>15</sup>	II	Art. 11 - Pharmacists, during the time that they remain enrolled in a Regional Pharmacy Council, regardless of whether or not they are in the effective exercise of the profession, must:	II	Make their professional services available to the constituted authorities, if requested, in the event of internal social conflict, catastrophe or epidemic, regardless of whether or not there is remuneration or personal advantage.
Physical therapy <sup>16</sup>	II	Art. 9 - The fundamental duties of the physiotherapists, according to their area and specific assignment, are:	V	Make their professional services available to the community in the event of war, catastrophe, epidemic or social crisis, without claiming personal advantage incompatible with the principle of bioethics of justice.
Speech Therapy 17	IV	Art. 7 - General ethical infractions of the speech therapists consist of:	XIV	Demanding personal and professional advantages when making their speech therapy services available to the community in cases of emergency, epidemic and catastrophe.

continues...

Chart 1. Continuation

Code of Professional Ethics	Chapter	Article	Item	Text
Psychology <sup>20</sup>	I	Article 1 - The fundamental duties of psychologists are:	d)	Provide professional services in situations of public calamity or emergency, without seeking personal benefit.
Social Services 21	II	Art. 3 The duties of the social worker are:	d)	Participate in programs to help the population in a situation of public calamity, in the care and defense of their interests and needs.
Occupational Therapy <sup>24</sup>	II	Art. 9 - The fundamental duties of the occupational therapists, according to their area and specific assignment, are:	V	Make their professional services available to the community in the event of war, catastrophe, epidemic or social crisis, without claiming personal advantage incompatible with the principle of bioethics of justice.

Chart 1 shows that most codes attribute to professionals the duty and responsibility for making their services available to society in the event of an epidemic, catastrophe or calamity. The exception is the speech therapy code that, when dealing with the topic, highlights the infraction regarding the possible advantage obtained by the professional in these situations (a similar infraction appears in the nursing code, with emphasis on the act of denying assistance).

To guide conduct and responsibilities, each category has its own code of ethics – or, in other words, each profession has its own deontology <sup>40</sup>. Behaviors are considered "ethical" according to preestablished standards, so that compliance can be enforced by supervisory bodies <sup>31</sup>. Used in this sense – reinforced by professionals and institutions – ethics is reduced to a merely deontological conception <sup>41</sup>. It is necessary, therefore, to continually reflect on CEPs, thinking of revisions that consider recent legal changes, conflicts caused by the advent of new practices and professions and the current sociohistorical context, marked by the redemocratization of the country and the hegemony of neoliberal capitalism, with its effects on subjects <sup>29,30</sup>.

## Final considerations

With this study, we identified which professions listed by Ordinance 639/2020 mention in their CEP terms related to the current pandemic situation. Regarding the professions analyzed, the following presented in their code of ethics content that can be related to covid-19: nursing, pharmacy, speech therapy, physiotherapy, psychology, social services and occupational therapy. In the texts, the professional's duty and responsibility for offering their work to society without requiring their own benefit stand out. More specifically, the speech therapy and nursing codes define as an infraction, respectively, the requirement of personal advantages and the denial of care in these situations.

We conclude that the existing guidelines have little connection with the full text of the CEPs, which shows the limitation of these documents and the need to revise their content. By discussing the literature, we problematized the concepts of ethics and deontology, and proposed a reflection that privileges a critical-reflexive ethical practice instead of merely deontological prescriptions.

## References

 World Health Organization. IHR Procedures concerning public health emergencies of international concern (PHEIC) [Internet]. Geneva: World Health Organization; 2013 [acesso 15 abr 2021]. Disponível: https://bit.ly/3gBccWV

- 2. Lana RM, Coelho FC, Gomes MFC, Cruz OG, Bastos LS, Villela DAM et al. Emergência do novo coronavírus (SARS-CoV-2) e o papel de uma vigilância nacional em saúde oportuna e efetiva. Cad Saúde Pública [Internet]. 2020 [acesso 3 abr 2020];36(3). DOI: 10.1590/0102-311x00019620
- 3. Brasil. Ministério da Saúde. Painel Coronavírus [Internet]. Brasília: Ministério da Saúde; 2020 [acesso 3 abr 2020]. Disponível: https://bit.ly/3sOPKvY
- 4. Fauci AS, Lane HC, Redfield RR. Covid-19: navigating the uncharted. N Engl J Med [Internet]. 2020 [acesso 3 abr 2020];382:1268-9. DOI: 10.1056/NEJMe2002387
- 5. Brasil. Ministério da Saúde. Portaria nº 639, de 31 de março de 2020. Dispõe sobre a Ação Estratégica "O Brasil Conta Comigo Profissionais da Saúde", voltada à capacitação e ao cadastramento de profissionais da área de saúde, para o enfrentamento à pandemia do coronavírus (covid-19). Diário Oficial da União [Internet]. Brasília, 2 abr 2020 [acesso 3 abr 2020]. Disponível: https://bit.ly/3aESxSh
- **6.** Brasil. Lei nº 13.979, de 6 de fevereiro de 2020. Dispõe sobre as medidas para enfrentamento da emergência de saúde pública de importância internacional decorrente do coronavírus responsável pelo surto de 2019. Diário Oficial da União [Internet]. Brasília, 7 fev 2020 [acesso 3 abr 2020]. Disponível: https://bit.ly/3vfMECF
- 7. Brasil. Decreto-lei nº 200, de 25 de fevereiro de 1967. Dispõe sobre a organização da Administração Federal, estabelece diretrizes para a Reforma Administrativa e dá outras providências. Diário Oficial da União [Internet]. Brasília, 27 mar 1967 [acesso 5 ago 2019]. Disponível: https://bit.ly/3xpXSGW
- **8.** Quintino EA. A verdadeira natureza jurídica dos conselhos de fiscalização profissional e seus aspectos polêmicos: aprofundamento e reflexões. Rio de Janeiro: Fernão Juris; 2008.
- 9. Alves FJS, Lisboa NP, Weffort EFJ, Antunes MTP. Um estudo empírico sobre a importância do código de ética profissional para o contabilista. Rev Contab Finanç [Internet]. 2007 [acesso 3 abr 2020];18:58-68. DOI: 10.1590/S1519-70772007000300006
- 10. Marcondes D. Textos básicos de ética: de Platão a Foucault. Rio de Janeiro: Zahar; 2007.
- **11.** Andrade EO, Givigi LRP, Abrahão AL. A ética do cuidado de si como criação de possíveis no trabalho em saúde. Interface (Botucatu) [Internet]. 2017 [acesso 25 mar 2021]. DOI: 10.1590/1807-57622016.0643
- 12. Conselho Federal de Biologia. Código de Ética do Biólogo [Internet]. Brasília: Conselho Federal de Biologia; 2002 [acesso 10 jan 2020]. Disponível: https://bit.ly/3sMvlYf
- 13. Conselho Federal de Biomedicina. Código de Ética do Profissional Biomédico [Internet]. Brasília: Conselho Federal de Biomedicina; 2020 [acesso 10 jan 2020]. Disponível: https://bit.ly/3espkLj
- 14. Conselho Federal de Educação Física. Resolução CONFEF nº 307/2015. Dispõe sobre o Código de Ética dos Profissionais de Educação Física registrados no Sistema CONFEF/CREFs [Internet]. Rio de Janeiro: Conselho Federal de Educação Física; 2015 [acesso 10 jan 2020]. Disponível: https://bit.ly/32MNlao
- **15.** Conselho Federal de Farmácia. Código de Ética da Profissão Farmacêutica [Internet]. Brasília: Conselho Federal de Farmácia; 2004 [acesso 10 jan 2020]. Disponível: https://bit.ly/3vi5pFC
- **16.** Conselho Federal de Fisioterapia e Terapia Ocupacional. Resolução nº 424, de 08 de julho de 2013. Estabelece o Código de Ética e Deontologia da Fisioterapia [Internet]. Brasília: Conselho Federal de Fisioterapia e Terapia Ocupacional; 2013 [acesso 10 jan 2020]. Disponível: https://bit.ly/3viiOOc
- 17. Conselho Federal de Fonoaudiologia. Código de Ética da Fonoaudiologia [Internet]. Brasília: Conselho Federal de Fonoaudiologia; 2016 [acesso 10 jan 2020]. Disponível: https://bit.ly/3gClLF5
- 18. Conselho Federal de Nutrição. Código de Ética e de Conduta do Nutricionista [Internet]. Brasília: Conselho Federal de Nutrição; 2018 [acesso 10 jan 2020]. Disponível: https://bit.ly/3xovNiY
- 19. Conselho Federal de Medicina. Código de Ética Médica: Resolução CFM n° 2.217, de 27 de setembro de 2018, modificada pelas Resoluções CFM n° 2.222/2018 e 2.226/2019 [Internet]. Brasília: Conselho Federal de Medicina; 2019 [acesso 10 jan 2020]. Disponível: https://bit.ly/3emzo8s
- **20.** Conselho Federal de Psicologia. Código de Ética Profissional do Psicólogo [Internet]. Brasília: Conselho Federal de Psicologia; 2005 [acesso 10 jan 2020]. Disponível: https://bit.ly/3vkJI7N
- 21. Conselho Federal de Serviço Social. Código de Ética do/a Assistente Social: Lei 8.662/93 de regulamentação da profissão [Internet]. 10ª ed. Brasília: Conselho Federal de Serviço Social; 2012 [acesso 10 jan 2020]. Disponível: https://bit.ly/2Pjbe6n

- **22.** Conselho Federal de Medicina Veterinária. Código de Ética do Médico-Veterinário [Internet]. Brasília: Conselho Federal de Medicina Veterinária; 2016 [acesso 10 jan 2020]. Disponível: https://bit.ly/3aLmuQo
- **23.** Conselho Federal de Odontologia. Código de Ética Odontológica [Internet]. Brasília: Conselho Federal de Odontologia; 2013 [acesso 10 jan 2020]. Disponível: https://bit.ly/3xoOrYf
- **24.** Conselho Federal de Fisioterapia e de Terapia Ocupacional. Código de Ética [Internet]. Brasília: Conselho Federal de Fisioterapia e de Terapia Ocupacional; 2013 [acesso 10 jan 2020]. Disponível: https://bit.ly/3sPL1tK
- **25.** Conselho Federal de Enfermagem. Resolução Cofen nº 564/2017 [Internet]. Brasília: Conselho Federal de Enfermagem; 2017 [acesso 10 jan 2020]. Disponível: https://bit.ly/2QsWZwt
- 26. Carrapato P, Correia P, Garcia B. Determinante da saúde no Brasil: a procura da equidade na saúde. Saúde Soc [Internet]. 2017 [acesso 30 mar 2021];26(3):676-89. DOI: 10.1590/S0104-12902017170304
- **27.** Camargo BV, Justo AM. IRAMUTEQ: um software gratuito para análise de dados textuais. Temas Psicol [Internet]. 2013 [acesso 17 mar 2020];21(2):513-8. DOI: 10.9788/TP2013.2-16
- 28. Sousa AFL, Queiroz AAFLN, Oliveira LB, Valle ARMC, Moura MEB. Representações sociais da infecção comunitária por profissionais da atenção primária. Acta Paul Enferm [Internet]. 2015 [acesso 20 mar 2020];28(5):454-9. DOI: 10.1590/1982-0194201500076
- 29. Camargo BV, Justo AM. Tutorial para uso do software de análise textual IRAMUTEQ. Florianópolis: Universidade Federal de Santa Catarina; 2013.
- **30.** Lahlou S. Text mining methods: an answer to Chartier and Meunier. Pap Soc Represent [Internet]. 2001 [acesso 20 mar 2020];20(38):1-7. Disponível: https://bit.ly/3sQjkB4
- **31.** Lopes-Júnior C, Silva RHA, Sales-Peres A. Comparação entre Códigos de Ética da Odontologia iberoamericanos, ibéricos e o brasileiro. Rev Odontol UNESP [Internet]. 2009 [acesso 20 mar 2020];38(5):267-72. Disponível: https://bit.ly/3sMXAGn
- **32.** Gracia D. Teoría y práctica de la deliberación moral. In: Grandes LF, Gracia D, Sánchez M, editores. Bioética: el estado de la cuestión. Madrid: Triacastela; 2011. p. 101-54.
- **33.** Borba KP. O estudo de anatomia no ensino de enfermagem: reflexões sobre princípios éticos. Cienc Cuid Saude [Internet]. 2017 [acesso 20 mar 2020];16(2):1-6. DOI: 10.4025/cienccuidsaude.v16i2.32021
- **34.** Foucault M. Arqueologia das ciências e história dos sistemas de pensamento. Rio de Janeiro: Forense Universitária; 2008.
- **35.** Vieira JML, Correa RF. Visualização da informação na construção de interfaces amigáveis para Sistemas de Recuperação de Informação. Encontros Bibli [Internet]. 2011 [acesso 17 mar 2020];16(32):73-93. DOI: 10.5007/1518-2924.2011v16n32p73
- 36. Marchand P, Ratinaud P. L'analyse de similitude appliquée aux corpus textuels: les primaires socialistes pour l'élection présidentielle française (septembre-octobre 2011). In: Actes des 11es Journées Internationales d'Analyse Statistique des Données Textuelles; 13-15 jun 2012; Liège. Liège: LASLA; 2012 [acesso 20 mar 2020]. Disponível: https://bit.ly/32Hghki
- 37. Marin J, Ribeiro CDM. Problemas e conflitos bioéticos da prática em equipe da Estratégia Saúde da Família. Rev. bioét. (Impr.). [Internet]. 2018 [acesso 16 abr 2021];26(2):291-301. DOI: 10.1590/1983-80422018262250
- **38.** Limentani AE. The role of ethical principles in health care and the implications for ethical codes. J Med Ethics [Internet]. 1999 [acesso 3 abr 2020];25(5):394-8. DOI: 10.1136/jme.25.5.394
- 39. Strabelli TMV, Uip DE. Covid-19 e o coração. Arq Bras Cardiol [Internet]. 2020 [acesso 7 abr 2020];114(4). DOI: 10.36660/abc.20200209
- 40. Dantas F, Sousa EG. Ensino da deontologia, ética médica e bioética nas escolas médicas brasileiras: uma revisão sistemática. Rev Bras Educ Med [Internet]. 2008 [acesso 5 ago 2019];32(4):507-17. DOI: 10.1590/S0100-55022008000400014
- **41.** Arouca R, Rego STA, Machado MH. O papel da escola na educação moral de estudantes de odontologia. Rev Bras Odontol [Internet]. 2008 [acesso 24 abr 2021];65(2):211-5. DOI: 10.18363/rbo.v65n2.p.211

Tiago Pereira de Souza - Doctoral student - tiago.ps.fono@gmail.com

D 0000-0001-6614-0047

**Cibele Gulartt Avendano** – Master's student – cibeleavendano@gmail.com

D 0000-0002-4928-0344

Erissandra Gomes - Doctor - erifono@hotmail.com

**(D)** 0000-0002-2379-7345

# Correspondence

Tiago Pereira de Souza - Rua Avaí, 119, torre 3, apt. 1003, Vila Rosa CEP 93315-090. Novo Hamburgo/RS, Brazil.

# **Authors' participation**

Tiago Pereira de Souza collected and analyzed the data. Cibele Gulartt Avendano revised the article and adapted it to the norms of the journal and performed the bibliographic survey for the discussion. Erissandra Gomes guided the research in all its phases. All authors participated in the discussion about the results.

**Received:** 4.17.2020 Revised: 2.9.2021

**Approved:** 4.19.2021