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ANALYSIS OF ACADEMIC KNOWLEDGE ABOUT THE CODE OF ETHICS FOR MEDICINE STUDENTS DEVELOPED BY THE FEDERAL MEDICINE COUNCIL OF BRAZIL

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Abstract: In August 2018, the Federal Council of Medicine (CFM), the body responsible for the supervision and standardization of medical professional practice in Brazil, published a national code of ethics for medical students (CEMS), which standardizes and suggests behaviors, based on the best moral and ethical values, for medical students, supporting the humanization of medicine and indirectly helping teachers and managers of medical courses. The purpose of the study was to evaluate the dissemination and awareness of scientific publications on the Brazilian CEMS code, and consisted of an integrative literature review of all publications related to the Brazilian CEMS published from 2005 to the present. We found 4 studies related to regional and university codes of ethics for medical students published from 2005 to 2022, and regarding the CEMS elaborated by the FCM, we found a single study from its launch in 2018 to 2022. A CEMS has universal importance, facilitating the ethical and human development of future physicians, and despite its importance in the training of physicians, there is a lack of published research on the subject in Brazil.

Keywords: Bioethics, Medical Ethics Code, Ethic, motivation, Code of Ethics for Medical Students, Teaching

Análisis del conocimiento académico sobre el código de ética para estudiantes de medicina elaborado por el Consejo Federal de Medicina de Brasil

Resumen: En agosto de 2018, el Consejo Federal de Medicina (CFM), órgano responsable de la supervisión y normalización de la práctica profesional médica en Brasil, publicó un código nacional de ética para estudiantes de medicina (CEMS), que normaliza y sugiere conductas, basadas en los mejores valores morales y éticos, para los estudiantes de medicina, apoyando la humanización de la medicina y ayudando indirectamente a los profesores y gestores de los cursos de medicina. El propósito del estudio fue evaluar la difusión y el conocimiento de las publicaciones científicas sobre el código de la CEMS brasileña, y consistió en una revisión bibliográfica integradora de todas las publicaciones relacionadas con la CEMS brasileña publicadas desde 2005 hasta la actualidad. Encontramos 4 estudios relacionados con códigos de ética regionales y universitarios para estudiantes de medicina publicados desde 2005 hasta 2022, y con respecto a los CEMS elaborados por la FCM, encontramos un único estudio desde su lanzamiento en 2018 hasta 2022. Un CEMS tiene importancia universal, facilitando el desarrollo ético y humano de los futuros médicos, y, a pesar de su importancia en la formación de los médicos, falta investigación publicada sobre el tema en Brasil.

Palabras clave: bioética, código ético médico, ética, motivación, código ético para estudiantes de medicina, enseñanza

Análise do conhecimento acadêmico sobre o código de ética para estudantes de medicina desenvolvido pelo Conselho Federal de Medicina do Brasil

Resumo: Em agosto de 2018, o Conselho Federal de Medicina (CFM), órgão responsável pela fiscalização e normatização do exercício profissional médico no Brasil, publicou um código nacional de ética do estudante de medicina (CEMS), que padroniza e sugere condutas, com base nos melhores valores morais e éticos, para os estudantes de medicina, apoiando a humanização da medicina e auxiliando indiretamente os professores e gestores dos cursos de medicina. O objetivo do estudo foi avaliar a disseminação e a conscientização das publicações científicas sobre o código CEMS brasileiro, e consistiu em uma revisão integrativa da literatura de todas as publicações relacionadas ao CEMS brasileiro publicadas de 2005 até o presente. Encontramos 4 estudos relacionados a códigos de ética regionais e universitários para estudantes de medicina publicados de 2005 a 2022 e, com relação ao CEMS elaborado pela FCM, encontramos um único estudo desde seu lançamento em 2018 até 2022. Um CEMS tem importância universal, facilitando o desenvolvimento ético e humano dos futuros médicos, e, apesar de sua importância na formação dos médicos, há uma carência de pesquisas publicadas sobre o assunto no Brasil.

Palavras-chave: bioética, código de ética médica, ética médica, motivação, estudantes de medicina, ensino

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Introduction

Different authors defend the idea that a medical course integrated with humanities subjects would result in a professional trained based on respect and compassion for others. Andin a similar context, in Brazil, at the end of the 19th century, the teaching of ethics was introduced, associated with the existing discipline of legal medicine and deontology*(1-4)*.

Since the mid-twentieth century, medical treatments have become more effective, and approaches to treatment have become more aggressive, placing the ethical conduct of professionals as a focus of international attention*(1)*. Currently, supported by the biotechnological revolution in recent years, physicians often deal with moral and bioethical dilemmas, situations that require good clinical and ethical judgment. These demands have led many countries to teach bioethics, in addition to medical ethics, in medical courses to provide future physicians with the skills and competencies to manage such situations*(2)*.

The medical profession requires a high degree of responsibility in their acts and in the training phase, both practical and theoretical training, are carried out over years of sacrifice, where the medical student, often still a teenager, in search of the ideal of being a doctor, exchanges the leisure time proper to the age for endless hours of studies. This phase often determines physical and psychological suffering, evidenced through depressive and anxious behaviors*(9)*, motivated by concern with the study exclusively of clinics and their updates in digital speed, making the medical course predominantly technical, distancing the academic from human values and critical thinking.

It is recognized by researchers in the field of teaching, the importance and the need for the participation of ethical and bioethical reflections in all years of medical training, for a development within the limits of legality and more humanized of the future physician*(10)*, however the approach of these themes still finds many obstacles to integrate into the curriculum of medical education and in the motivation of students' studies. The teaching of bioethics as a regular subject in its curriculum is not yet found in all countries*(11)*. The introduction of bioethics in the curriculum is a measure that minimizes even the existing conflicts in the doctor-patient relationship, also based on the knowledge of the need for clear and eficient communication and*(12-14)*. Among other facts, critics of the Flexnian teaching model consider it far from the concern of introducing transformative measures in the medical course, which come to contemplate, themes that lead to reflection on humanities*(15,16)*. And from the "Edinburgh Declaration", developed at the World Conference on Medical Education (Scotland, 1988), among other attributions, it brought recommendations regarding the need for integration of medical education with Primary Health Care and thus train a technically competent professional, taking with him, from within the community, the perception and acquisition of social values, resulting from this interaction*(17)*. In accordance with this vision, the Brazilian Curriculum Guidelines for undergraduate medical courses, approved in 2001*(18)*, also follow the Program for Improvement and Expansion of teaching- educates Brazil (PROMED), created in 1997 where the competence associated with ethical posture with humanistic vision, sense of social responsibility, commitment and citizenship with health protection and prevention of diseases is postulated*(18,19)*.

In Brazil, the organizational structure of the medical profession is determined by the Regional Councils of Medicine (RCMs) that represent and serve the different states of the federation, following a hierarchy, where the Federal Council of Medicine (FCM), with functions governed by the Federal Constitution, is the highest body of oversight and standardizes good professional practice, using a Code of Medical Ethics (CME) for this purpose*(3)*. As a rule, it is part of the curriculum of medical courses, the teaching of the Code of Medical Ethics/CME, and its importance is recognized, since they contribute to the ethical training of the doctor but usually the topics addressed, are chosen by the teachers, without the participation of the students, which it has been a reason for criticism because this practice does not motivate students to study and to reflect on moral values and the biopsychosocial dimension of the person and their social networking, in the strict sense*(15)*.

The influences of technological and pharmaceu-

tical progression in modern medicine has generated ethical dilemmas for health professionals and in academics, resulting in the need for a code of ethics for medical students (CEMS)*(4,5)*. In the national scenario, the first versions of CEMS were published at the regional level by the RCM of the State of São Paulo (RCM/SP) and the Federal District (RCM/FD)*(6,7)*, among others.

Pragmatically, medical ethics guides practices within the profession, and similarly, the CEMS developed by the Federal Council of Medicine (FCM) and published in 2018 establishes behaviors, based on the best moral and ethical values, for medical students, also serving to assist teachers and those responsible for managing medical education institutions in Brazil(4,5).

The CEM of the FCM comprises fundamental principles and is based on 6 axes that guide the technical and human aspects of the training of medical students, namely, (1) the relationship of the student with the cadaver; (2) the interpersonal relationships of the student; (3) the student's relationship with educational and health institutions; (4) the student's relationship with the professional team; (5) the student's responsibility for his or her studies and training; and (6) the student's relationship with society*(5)*.

Considering the primary objectives of physician training, an understanding of professional values and ethical conduct is essential for the complete training of physicians*(6,22,12-14)*, including the development of integrity and responsibilities in the future researcher*(24-27)*. According to Lima (2018),"The training of future doctors in undergraduate programs should provide students with incentives to improve their ability to deal with problems in the fields of morals and ethics in synergy with activities related to teaching and professional practice"*(20)*.

The 21st century challenges physicians to present ethical answers to current dilemmas and the Code of Ethics of Medical Students is a trigger to bioethical discussions, allowing reflection beyond deontology and professional ethics*(28)*. The subject of this study is the dissemination of and knowledge regarding the Medical Student Code of Ethics (MSCE) prepared by the RCMs, the FCM and some Brazilian universities*(20,22,29)*. This research is justified by the fact that the importance given to physicians maintaining their ethical conduct should also be the same during physician training, familiarizing students with ethical relationships and their obstacles because learning precedes professional behavior. In the context of an accelerated globalization process, social networks on the internet drive the behavior of young people around the world. This approach to medical students, i.e., providing knowledge of the bioethical and ethical principles of the medical profession, is important because it stimulates the development of and reflection on humanized values*(28,29)*, fundamental for empathy, and thus contributes to complete structural training of physicians, familiarizing them with professional dilemmas for which clinical decisions can be based on a moral, ethical and human basis*(5)*.

In recent years, in addition to the known adversities that involve the formation of a physician, the absenteeism of students has occupied a place in the discussions between teachers and researchers 30 because it is a deviation from the behavior that has potentiated the entire problem that already exists and this will reflect on the relationship of the doctor with the patient. And the teaching and/or practice of bioethics in medical education has been proposed as a tool for coping with situations involving conflicting moral aspects such as the one mentioned*(22)*. The objective of this study is to evaluate the dissemination of CEMSs in scientific media, such as newspapers and magazines, accessible to medical students, their professors and course directors through an integrative literature review.

Methods

This was a descriptive study, from a literature review, characterizing an integrative review, with a qualitative approach in which the selected studies were analyzed based on the authors' interpretation.

An integrative literature review of CEMSs of different regional institutions and Brazilian universities and the CEMS of the FCM (2018)*(21)* was conducted in 2 simultaneous stages. The decision to conduct an integrative literature review was ba-

sed on the fact that it enabled the combination of data from the theoretical and empirical literature and allowed the incorporation of a wide repertoire of topics: definitions of concepts; review of theories and evidence; and analyses of methodological problems of a particular topic. It was thus possible to generate a consistent and understandable overview of the complex concepts, theories and health problems relevant to the present study*(31)*.

Data collection consisted of 2 searches, mechanical and computerized, of virtual databases, i.e., the BIREME, Latin American Literature in Health Sciences (LILACS) and Scientific Electronic Library Online (SCIELO) databases and scientific articles from CAPES Journals were also reviewed, excluding repeated studies.

The following DeCS descriptors were used in this study as keywords for the searches: bioethics, medical student, code of ethics, medical ethics, motivation and teaching. In searches conducted in the virtual databases, the period from 2005 to 2022 was established for the publication of articles on regional and Brazilian university CEMSs, and the period from 2018 to 2022 was established for the CEMS of the FCM.

The inclusion criteria for the selection of articles were as follows: (a) address the CEMS of the FCM or regional and Brazilian university CEMSs; and (b) make reference to students' interest in studying CEMSs. The exclusion criteria were as follows: publications that addressed only CMEs at the professional level. We also excluded articles that did not provide the research setting, those pertaining to a field other than medicine, and those that were graduate theses, letters to the editor, comments, editorial, communications, congresses and symposia.

The results are presented in a descriptive manner, i.e., based on the objectives and results of the selected studies, in chronological order of publication.

Results

The integrative literature review, with the application of the inclusion and exclusion criteria presented in the methodology, included 4 publications related to regional and university CEMSs.

The oldest publication from this period dated to 2005, and the most recent dated to 2017. Studies on CEMSs were developed in the Federal District (RCM-FD) and in the following states of the Brazilian Federation: Bahia, São Paulo (RCM-SP) and Minas Gerais*(21,32)*.

One study addressed the CEMS of the FCM, and there were no studies identified that investigated the knowledge of students regarding CEMSs.

The following provides a description of the studies that investigated regional and Brazilian university CEMSs, identifying the authors, year of publication, location where it was conducted, title, objectives and different methodologies.

Lemos et al. (2005) presented a CEMS proposal for students in the Brazilian state of Bahia titled "Proposed code of ethics for medical students in Bahia", with the objective of developing a code to guide the conduct of medical students in their daily lives. This was a qualitative, cross-sectional, exploratory study. A random sample of 106 undergraduate medical students was studied*(32)*.

Ract and Maia (2012) conducted a study in São Paulo titled "Reflection on four versions of the medical student's code of ethics", with the objective of analyzing 4 versions of CEMSs namely, the CEMS of RCM-SP; the CEMS published by RCM-FD; a proposed code of ethics for medical students from Bahia; and the CEMS of the Academic Center of the State University of Maringá (UEM). This was a comparative document analysis that investigated how ethics are integrated into medical school*(23)*.

Lisboa and Lins (2014) conducted a study in the state of Bahia titled "Code of ethics of medical students: a qualitative analysis", with the objective of comparing the codes of ethics for medical students existing in Brazil at the time of the study*(33)*. The codes analyzed were the CEMS of the CRM-FD; the CEMS of the Federal University of Bahia (UFB); the CEMS of the University of the Extreme South of Santa Catarina; and the CEMS of the RCM-SP. This was a qualitative study with an exploratory and descriptive character*(32)*. The

analyzed material consisted of all Brazilian CEMSs available in Google Scholar, LILACS, and BIREME.

Menezes et al. (2017) conducted a study in the state of Minas Gerais with the objective of developing a collective code of ethics for medical students. They addressed CEMSs and compared their process of preparing the code with that described in the literature*(29)*.

The searches in the digital databases to identify studies for the integrative literature review resulted in 4 studies that addressed regional and university CEMSs. Regarding the CEMS of the FCM, the searches yielded 1 study that met the proposed criteria. The selected studies addressed CEMSs published by the Brazilian Regional Medical School of the Federal District and Brazilian universities; importantly, we did not identify any studies that investigated students' knowledge about CEMSs. Among the selected studies*(1)*, ("Medical students in the confrontation of the COVID-19 pandemic in Brazil: ethical reflections") addressed the CEMS of the FCM; however, the students' knowledge about the existence or importance of the CEMS*(34)* was not addressed.

Discussion

The introduction of a complementary ethical theme, such as the study of CEMSs, in medical school programs would allow physicians to better understand the needs of patients and provide a balance in the attention given to academics, which are almost exclusively directed to the study of physical clinical and surgical aspects*(5)*. Even if slow and progressive, the incorporation of an ethical context in the teaching of and learning by medical students encourages ethical discourse in this field*(6)*. Thus, CEMSs fill an important gap, not only for students but also for teachers and for the disciplines of ethics and bioethics themselves*(5)*.

Lemos et al. (2005) addressed a CEMS proposal for scholars from the Brazilian state of Bahia, and the authors' argument for developing a CEMS was the need to guide medical students in everyday situations, aiming to prepare these students for the future of medical practice*(32)*.

The aforementioned assertion is implicit in the studies by Lemos et al. (2005) and Menezes et al. (2017), and both highlighted the importance of the contribution of students to the elaboration of CEMSs, as well as that of professors and RCMs*(10,11)*.

The selected studies (Lemos et al., 2005; Ract; Maia, 2012; Lisboa; Lins, 2014; Menezes et al., 2017) only analyzed regional CEMSs and did not address students' knowledge about CEMs.

Ract and Maia (2012) and Lisboa and Lins (2014) conducted documentary analyses of 4 CEMSs from different RCMs and Brazilian universities and warned that the codes mirror codes of professional ethics, inducing to a trend toward the professionalization of medical students*(23,33)*; however, punishments for ethical infractions are not discussed. Therefore, there is a risk of professionalization, which stimulates the concern of exclusively technical training, stifling the existence of ethics in medical practice. The authors highlighted the importance and the need to develop a specific CEMS for the demands of medical students, that is independent of codes of professional ethics. They warned about the difficulty that medical councils have with regard to participating in academia in the context of ethical education as collaborators in sparking interest in the study and application of this human science*(23,33)*.

The study by Freitas et al., published in 2021, analyzed proposals by the Federal Government of Brazil for the inclusion of medical students in the fight against COVID-1935. The study addressed Ordinance 492/2020 enacted by the Ministry of Health as a temporary strategic measure through the program "Brazil Counts with Me" to fight the pandemic, which arrived in Brazil in March 2020; the ordinance allowed medical students to act in the fight against the disease(35).

The aforementioned government program, which allowed the participation of medical students in combating the COVID-19 pandemic, was analyzed by the authors from the perspective of the CEMS of the FCM*(21)*, the Universal Declaration of Human Rights (UDHR)*(36)* and Universal Declaration on Bioethics and Human Rights (UDBDH)*(37)* and the main regulatory

frameworks of research on human beings*(37-39)* the authors concluded that the decision to include medical students in the strategy for coping with COVID-19 was guided by utilitarian ethics aimed at a greater number of collaborators*(34)*. However, this was not a simplistic decision based on a cost-benefit analysis but rather a decision based on ethical principles anchored in risk mitigation measures. Notably, the study by Freitas et al.*(34)*, despite being the only article published to date (2018-2022) on the CEMS of the FCM, did not address students' knowledge of the aforementioned code.

Reiser (1994), as already mentioned, stated that the same attention to physicians' conduct should also be given to guidance in academic training, which precedes professional practice*(15)*. The pedagogical role of the CEMS published by the FCM and its possible greater capillarity is evident because the influence of the responsible body has a national scope(3).

Conclusion

Despite the importance of CEMSs in the training of physicians, the search in digital databases to identify studies for the integrative literature review yielded only 4 publications that addressed the CEMSs of RCMs and Brazilian universities and only 1 study that addressed with the CEMS of the FCM*(35)*. However, none of the studies addressed students' knowledge about CEMSs, and despite leading to important ethical reflection*(34)*, there is a dearth of national publications about CEMSs.

The absence of the literature on the CEMS of the FCM is probably partly because the code was recently published*(21)* in August 2018, just prior to the COVID-19 pandemic; the disease led to high morbidity and mortality, and there was very little knowledge regarding its natural history. For these reasons, with the purpose of reducing the impacts of the pandemic on humanity, studies and research involving COVID-19 were prioritized, to the detriment of other topics*(40)*, so that, according to Esquivel-Guadarrama, ideas could be transformed into concrete actions and alleviate damage*(41)*.

We emphasize the didactic importance of the CEMS theme, which strengthens the use of new concepts for the teaching of ethics and bioethics associated with the life of medical students. The CEMS of the FCM fills a gap in the training of Brazilian physicians; that is, it provides medical students with a code of ethics that focuses on their specific demands. It is not a code of professional ethics but a code of ethical conduct for medical students, with a pedagogical role, providing a stimulus for the humanization of medicine through a document of national scope, with broad involvement, encompassing relationships with life and death*(21)*.

Some of the current ethical problems are universal, with common characteristics on all continents*(42-45)*, and cause, as the case may be, the need to develop or improve CEMSs because of their transformative potential nationally, not just in Brazil. This study contributes to stimulating researchers to reflect on the subject of CEMSs, for which wide dissemination will enable medical students to engage in more flexible thinking, focusing on the meaning of moral and ethical values, favoring the formation of ethical behavior in students and facilitating awareness in their current and future roles in society through the doctor-patient relationship and with the other members of the team, contributing to personal maturation in addition to supporting, as we mentioned, more humanized training for new physicians.

The results from this study also contribute to broadening the framework of publications on the CEMS of the FCM and on the CEMSs of RMCs and universities. In addition, it can serve as a source of reference for future studies and as a source of reading for people who are interested in the topic. In future studies, qualitative studies should include interviews with medical students about the importance that they attribute to CEMSs, the results of which would open a channel for the study of human relationships and their consequent interferences in the doctor-patient relationship, supporting the centralization of the human being in the care consequently the humanization of medical care.

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