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Original article

Bioethics education in Cuban health journals indexed in Scielo

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Education in bioethics in Cuban health magazines indexed in Scielo

Monica Garcia Raga I*  <https://orcid.org/0000-0002-5453-8821>Carlos Manuel Rodríguez Suárez II  <https://orcid.org/0000-0002-3606-9099>Ramón Fernández Leiva I  <https://orcid.org/0000-0002-9449-9249>Marjories Mirabal Naples III  <https://orcid.org/0000-0001-5081-588X>

^{Yo}Granma University of Medical Sciences. Bayamo Faculty of Medical Sciences. Granma, Cuba.

^{II}Carlos Manuel de Céspedes Provincial University Hospital. Bayamo, Granma, Cuba.

^{III}University of Medical Sciences of Camagüey. Camagüey, Cuba.

* Corresponding author E-mail: monicagara.grm@infomed.sld.cu

SUMMARY

Bioethics education emerges as an unavoidable issue in the field of health sciences in the face of advances in technoscience and human development. A cross-sectional descriptive study was conducted to analyze the scientific dissemination of bioethics education provided by Cuban health journals indexed in Scielo during the period 2020-2022. The Scielo and Google Scholar sites were consulted, using the following search terms: bioethics, bioethics education, bioethics teaching. The analysis included the variables title, year, number of articles, production by journal, country of origin, type, number of



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authors, distribution by thematic axes, and number of citations. The sample consisted of 21 works. The contribution of articles on the topic showed a modest trend. The highest production occurred in 2022. Works by Cuban authors predominated, in the review article category (28.5%) and co-authored. The thematic focus on bioethical principles, patient rights, and informed consent was the most addressed (38.1%), followed by bioethical education in the face of the challenges posed by COVID-19, which received the greatest number of citations. The results reveal a research challenge that requires expanding the coverage of the topic with enriching experiences that can transcend the scientific community.

Keywords:Bioethics; Bioethics Education; Bioethics Teaching.

ABSTRACT

Bioethical education stands as an unavoidable issue in the field of health sciences in the face of advances in technoscience and human development. A cross-sectional descriptive research was carried out with the purpose of analyzing the scientific dissemination on bioethics education provided by the Cuban health magazines indexed in Scielo in the period 2020-2022. The Scielo and Google academic sites were consulted, the search terms were considered: bioethics, bioethics education, bioethics teaching. The variables title, year, number of articles, production by journals, country of origin, typology, number of authors, distribution by thematic axes and number of citations were included in the analysis. The sample consisted of 21 works. The contribution of articles on the topic showed a discreet behavior. The highest production was in 2022. The works carried out by Cuban authors predominated, in the typology of review articles (28.5%) and developed in co-authorship. The thematic axis focused on attention to bioethical principles, patient rights and informed consent was the most addressed (38.1%) followed by bioethical education in the face of the challenges generated by COVID-19, which concentrated the largest number. of citations. The results reveal a research challenge that requires



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expanding the treatment of the topic with enriching experiences that can transcend the scientific community.

Keywords:Bioethics; Bioethics education; Bioethics teaching.

SUMMARY

Education in bioethics is positioned as an uncontorted quest in the field of health sciences in the face of advances in technology and human development. A transversal descriptive research was carried out with the objective of analyzing the scientific dissemination on bioethical education provided by Cuban journals in the health area indexed in Science in the period 2020-2022. Foram consulted the Scielo and Google Academic sites, considered the search terms: bioethics, education in bioethics, teaching in bioethics.

The following variables are included in the analysis: title, year, number of articles, production by periodicals, country of origin, typology, number of authors, distribution by subject matter and number of citations. The sample consists of 21 jobs. The contribution of articles on the topic showed a discreet behavior. The highest production was in 2022. Works by authors predominate. urban, in the typology of review articles (28.5%) and developed in co-authorship. The thematic focus focused on attention to bioethical principles, patient rights and informed consent was the most addressed (38.1%), followed by bioethics education in the face of challenges posed by Covid-19, which concentrated the greatest number of citations. The results reveal a research challenge that requires expanding the treatment of the topic with enriching experiences that can transcend the scientific community.

Keywords:Bioethics; Education in bioethics; I teach bioethics.

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Introduction

Bioethical education is an unavoidable issue in the field of health in the face of advances in technology and human development. (1,2) In this sense, the need for bioethics in educational work is noted in the context of the network of processes related to the management of life, the environment, human dignity, and human rights, among others. (3)

The purposes and challenges of bioethics in the field of health run through the complexities that emanate from the health-disease binomial, conditioned by social and individual components that affect the frequency of risk factors to which human beings are exposed, issues that require a carefully conceived bioethics, which brings it closer to the subsisting social problems, in accordance with what has been addressed by authors such as Cantú-Martínez. (4)

Recent foreign research advocates for the inclusion of bioethics in the curricula of health science programs. In this regard, bioethics is credited with promoting appropriate changes in behavior and attitudes, fostering a healthier doctor-patient relationship, and improving the quality of health care. It is also emphasized that it fosters an interdisciplinary approach in the face of the growing complexity of problems related to medical practice. (5)

For his part, Marín and collaborators ⁽⁶⁾They mean the presence of deficiencies at the international level in the formation of bioethical competencies in health students, and also point out the emphasis assigned to professional ethics training by International Career Accreditation Organizations.

The need to train and prepare future professionals, academics, researchers and decision-makers in bioethics is based on the aim of promoting teaching and research in biomedical sciences, which contributes to solving the bioethical challenges of the present century. (2) Other studies published in Cuba (7) warn of the need to redesign the curriculum in order to consider bioethical training with a systemic and transversal character. Education is



considered as a broad process that involves the development of culture, values, individual and collective relationships, according to the needs of society. In this perspective, Bioethics is recognized among the new transdisciplinary knowledge that allows us to rethink the way we understand reality. (8)

Portal and collaborators (9) identify competence in bioethics as the axis that should support decisions in clinical practice, which in fact should not be limited to training acquired through a training course.

Bioethical education is conceived as oriented towards developing critical and reflective thinking that enables the professional and human improvement of health workers. (10) Recent studies emphasize bioethical training in medical schools through proposals that take into account virtual environments, and consider the advantages offered by information and communication technologies in providing spaces for interactivity, communication, deliberation and debate, which enhance collaborative learning, required in the teaching of bioethics. (3)

Regarding postgraduate education, it is proposed to broaden the perspective of teaching Bioethics, towards a comprehensive education or training in Bioethics, with a solid foundation in anthropology and ethics, which is capable of connecting not only with the purposes of professional activity but also with all human life. (11)

In general, the review of the scientific literature broadly reveals the need for bioethical education in the health sciences. However, studies such as those by Sánchez et al. (12) identified that the scientific production on ethics and bioethics in several national journals did not show a broad contribution.

In order to investigate the recent performance of a larger sample of journals belonging to the sector, this research aimed to analyze the scientific dissemination on bioethics education provided by Cuban health journals indexed in Scielo during the period 2020-2022.

The results of the study will contribute to scientific dissemination regarding the trends evident in the three-year production and variables analyzed, in order to promote the



improvement of action guidelines for institutions, publishers, decision-makers, and researchers to continue advancing the attention and visibility of the topic.

Development

Chart 1 represents the scientific publications on bioethics education contributed by Cuban health journals during the period analyzed. The results show a modest number of works, with an upward trend that places 2022 as the year of highest production (n=8; 38.1%).

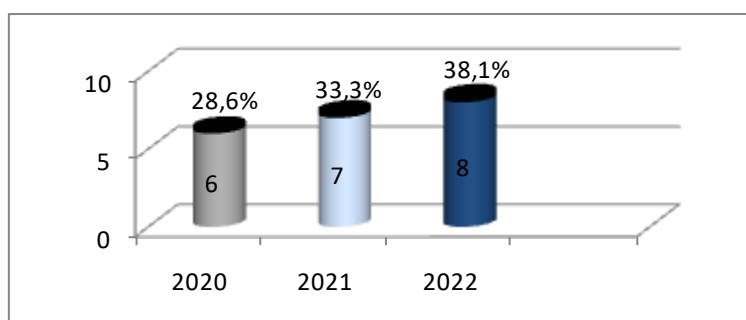


Chart 1.Scientific dissemination on bioethics education according to number of articles per year.

Currently, the value of publications in scientific journals inserted in the virtual space is measured by the role they assume as vehicles for the communication of science. (13) In particular, authors such as Arencibia-Parada and collaborators recognize the value of health-related journals for the development of teaching-care practice. (14)

The topic was covered in 13 journals, with the largest number of articles published by Revista Multimed (19%) and Revista Cubana de Salud Pública (14.3%). The Cuban Journal of Military Medicine, Revista Cubana de Pediatría, and EDUMECENTRO followed with an equal contribution of works (9.5%). The remaining journals contributed 4.7%, each with one article (Chart 2).



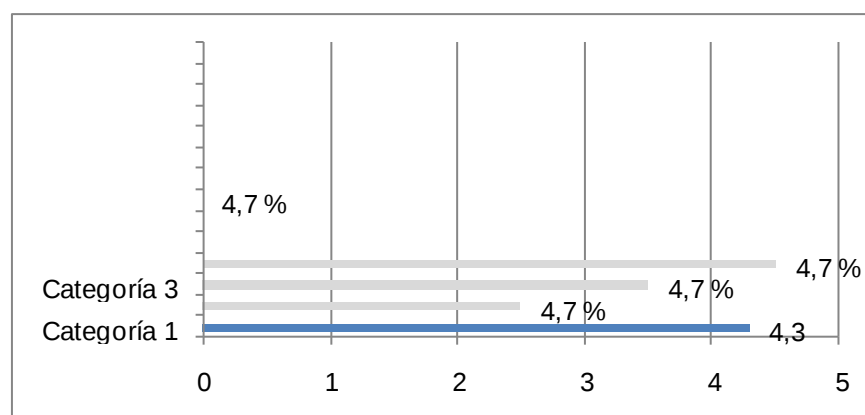


Chart 2.Scientific production on bioethical education in Cuban health journals.

The scientific production on bioethical education during the three-year period analyzed shows similarity with that reported by previous research, which reports a discrete behavior with 49 articles derived from the study of all scientific production on ethics and bioethics generated by five Cuban journals in the five-year period 2016-2020. (12)

For their part, other authors, investigating the period 2002-2016 in the context of the Havana Journal of Medical Sciences, obtained 326 works whose topics required ethical treatment, of which 47.2% did not receive it. Meanwhile, the works that developed an ethical approach showed a bioethical orientation in the majority. (8)

In the opinion of the authors of this work, the contribution of articles on the subject was very discreet, if one takes into account the current broad ethical debate that supports the bioethical need in health sciences and the strengths of the Cuban health system, by having a wide network of university institutions that extend training to the different health units, in accordance with what has been presented in published research.(15) Consequently, a research challenge is revealed, with ample possibilities of being overcome.

The contribution on the topic was concentrated in thirteen journals listed in Scielo. Regarding the number of contributed works, the Revista Multimed predominated, which according to published studies (16) reached the first quarter of a century since its foundation with continuous editorial work, transitioned to open science and increased the



annual edition in electronic format, a matter that makes its inclusion in the Scielo collection commendable. In addition, journals that share indexing in Scopus were identified with the potential for greater reach in making science visible, such as the Revista Cubana de Salud Pública, Revista de Educación Superior and Revista Cubana de Medicina Militar.

Articles contributed by Cuban health institutions predominated, totaling 18. Foreign representation consisted of three articles: one by a group of authors from Colombia and Mexico, and two from El Salvador and Colombia. The foreign articles were submitted by publishers belonging to the Journal of Higher Medical Education, the Journal of Medical Sciences of Pinar del Río, and the Cuban Journal of Public Health.

In this regard, the incidence of publications from other countries was not representative. This is consistent with previous studies on the topic, which identified 90.2% of publications derived from national research. (12) From this perspective, the authors of this research note that the power of attraction for this purpose is still low.

Chart 3 shows the scientific publications published according to the type declared by the journals. The largest number of articles were review articles (28.5%), followed by original articles (23.8%). Literature reviews and debates each accounted for 9.5%. The following types of publications were editorials, reflections and debates, reflection articles, opinion pieces, teaching support materials, and short communications accounted for a smaller percentage.



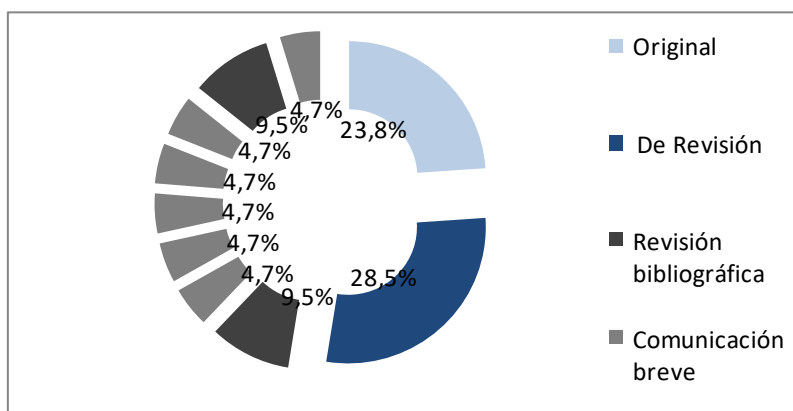


Chart 3. Typology of articles published on bioethics education.

Original research is recognized as the foundation of current science, as it concentrates on results derived from new experiments and discoveries. This influences the priority assigned by the editorial boards of various health journals. (14)

However, the study carried out showed a predominance of review article sections followed by original articles. Similar results were provided by the study by Sánchez et al. (12), which highlights bibliographic reviews, while in the study carried out by Acosta and Hernández in the Havana Journal of Medical Sciences, 31.4% of the works with ethical references were brief communications.

Another aspect that caught attention in the reviewed sample was the absence of case presentations, a finding that limits the possibilities of its use. In this regard, we agree with Villatoro (17) who highlights its value as invaluable tools in the academic development of health professionals, focused on improving patient-centered care during clinical practice and encouraging the most current search for information based on scientific evidence.

Regarding the number of authors, Figure 4 shows the trend in research conducted on the topic. Co-authorship was achieved by working teams composed of between two and four authors (71.4%), and 19.1% consisted of more than four. Only four projects were co-authored by a single author.



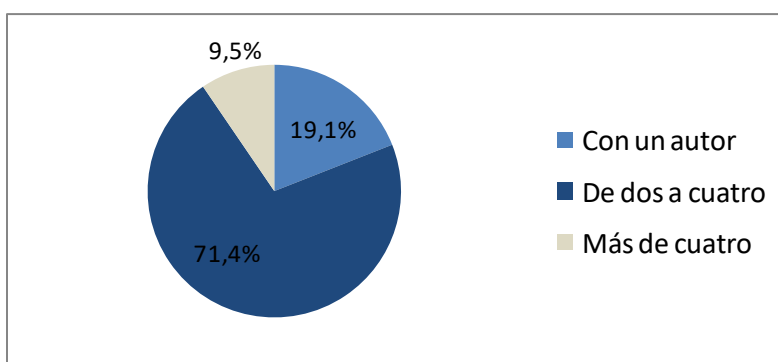


Chart 4.Scientific publications according to the number of authors per article.

The predominance of multiple authorship in articles on the subject is seen as positive, with a higher percentage concentrated in teams made up of up to four researchers. In this regard, we agree with the arguments that advocate for a greater possibility of promoting interdisciplinarity and the convergence of authors with different skills and knowledge, (14) aspects that are in fact necessary, in the opinion of the authors of this study, when considering the complexities of educational work from a bioethical perspective.

Table 1 presents the thematic axes addressed in the articles on the topic and the number of citations received. The most notable articles were those dealing with aspects related to bioethical principles, patient rights, and informed consent (38.1%), with a total of 20 citations. Bioethical education in the face of the challenges generated by COVID-19 contributed five articles (23.8%), with the highest number of citations (n=31).

The topics related to bioethics education from the perspective of perception and need in the health sciences and values from the perspective of bioethics accounted for 14.3%, respectively. The approach to bioethics education in graduate programs contributed the fewest papers and citations.

Table 1.Scientific publications on bioethics education by thematic axes and number of citations.

Thematic axes	Scientific disclosures on bioethical education		
	No	%	No



			Citations
Perception of bioethics and its necessity in health sciences	3	14.3	3
Bioethical principles, patient rights and informed consent	8	38.1	20
Values from bioethics	3	14.3	2
Bioethics in postgraduate studies	2	9.5	1
Bioethical challenges in the face of COVID-19	5	23.8	31
Total	21	100	57

The most discussed topics focused on bioethical principles, patient rights, and informed consent. The most relevant aspects focused on guiding actions with a bioethical approach, aimed at patient caregivers, and addressing the need for and quality of written informed consent forms, among others.

Molero et al. (18) when carrying out a bibliometric analysis on the treatment of ethical considerations in the field of health based on three foreign journals, highlights a favorable evolution since 2006, showing an increase in publications that took into account the Declaration of Helsinki as a fundamental document in the ethics of research with human beings and the ethical principles it conceives, aspects that coincide in part with the findings of the present study.

Rodríguez and Morales (19) recognize the evaluation of the informed consent process as the highest expression of the doctor-patient relationship. Therefore, it constitutes a delicate process that must be incorporated with the corresponding quality into the actions of the health team.

Bioethics education in the face of the challenges posed by COVID-19 was the second most popular topic. It was presented in relation to pediatric patient care, teacher and student training, medical activity, and the Cuban experience in confronting the pandemic.

Other researchers address the bioethical challenges in human research based on 21 scientific articles published between 2020 and 2022, from scientific journals, government health institutions, and bioethics societies. They highlight the role of research ethics



committees in preventing violations of the rights, dignity, and integrity of participating subjects. (20)

The exponential growth of scientific production during the Covid-19 era is highlighted in Ortíz-Nuñez's research. (21) It is highlighted that this was a global-scale event that generated multiple investigative interpretations, where bioethical aspects were involved, an issue that, in the opinion of the authors of this work, influenced the results obtained in this thematic axis in terms of the number of papers and citations received.

The number of citations represents a recognition of the importance assigned by the scientific community, as well as the quality of the work. However, it is recognized that patterns may vary according to the type of article, the field, and the findings reported. (22)

The thematic axis referring to bioethics education oriented to postgraduate studies showed the lowest representation of works and the lowest number of citations, elements that, in the opinion of the authors of this research, could be influenced by a limited research interest in the postgraduate area.

However, authors such as Abellán and Maluf (11) emphasize the challenges for teaching Bioethics in postgraduate studies and defend the need to overcome the limitations of theoretical and casuistic teaching models, in favor of comprehensive education programs.

Conclusions

The recognition of the need for bioethics education in the health sciences is notable. However, the number of articles on the topic remained modest during the three-year period.

The largest volume of production occurred in 2022. The majority of these articles were co-authored by Cuban authors, in the form of review articles. The focus was on bioethical principles, patient rights, and informed consent, followed by bioethical education in the



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face of the challenges posed by COVID-19, which received the greatest number of citations.

A research challenge is revealed that requires expanding the treatment of the topic with enriching experiences that can transcend the scientific community.

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Conflict of interest

The lead author of the research, Dr. C. Mónica García Raga, and her co-authors, declare that they have no conflicts of interest and assume responsibility for the ethical consent and legitimacy of the article, as well as for the interpretation of the information, and for the order of authorship specified.

Authorship contribution

Conceptualization: Monica Garcia Raga, Carlos Manuel Rodriguez Suarez.

Data curation: Monica Garcia Raga, Carlos Manuel Rodriguez Suarez, Ramon Fernandez Leiva, Marjories Mirabal Naples.



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Formal analysis of the data: Monica Garcia Raga, Carlos Manuel Rodriguez Suarez, Ramon Fernandez Leiva, Marjories Mirabal Naples.

Research: Monica Garcia Raga, Carlos Manuel Rodriguez Suarez, Ramon Fernandez Leiva, Marjories Mirabal Naples.

Methodology: Monica Garcia Raga, Carlos Manuel Rodriguez Suarez, Ramon Fernandez Leiva, Marjories Mirabal Naples.

Project Management: Mónica García Raga

Visualization: Monica Garcia Raga.

Writing – original draft: Mónica García Raga.

Writing – review and editing: Monica Garcia Raga, Carlos Manuel Rodriguez Suarez, Ramon Fernandez Leiva, Marjories Mirabal Naples.



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