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CHARACTERISTICS OF SCIENTIFIC PRODUCTION ON HEALTH EDUCATION IN THE UFAL MEDICAL COLLEGE

CARACTERÍSTICAS DA PRODUÇÃO CIENTÍFICA SOBRE A TEMÁTICA ENSINO NA SAÚDE NA FACULDADE DE MEDICINA DA UFAL

CARACTERÍSTICAS DE LA PRODUCCIÓN CIENTÍFICA SOBRE LA EDUCACIÓN EN SALUD EN LA FACULTAD DE MEDICINA DE LA UFAL

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RESUMO

Objetivo: identificar a produção científica em Ensino na Saúde gerada pelos docentes em um curso de Medicina de uma instituição pública, na região Nordeste do país, no período de 2009 a 2014. **Método:** trata-se de uma pesquisa documental, exploratória, com abordagem quantitativa. Utilizou-se a produção científica dos docentes registrada na plataforma Lattes, na coleta de dados, seguida por organização e qualificação da produção científica buscada na biblioteca virtual SciELO e *Google* Acadêmico associadas ao site de busca *Google*. Foram utilizadas as variáveis subtema ou área de concentração e tipo de produção e abordagem. **Resultados:** foram encontrados 190 currículos dos docentes de Medicina na plataforma Lattes, dos quais 22% apresentavam produção na área. Os principais aspectos (subtemas) abordados foram currículo e processo de ensino-aprendizagem e saúde do docente e discente. O tipo de produção mais frequente foi o resumo expandido, seguido por trabalhos acadêmicos de conclusão de mestrado. A abordagem quantitativa predominou no período estudado. **Conclusão:** a produção científica em Ensino na Saúde do curso de Medicina é crescente e incentivada, principalmente, pelas Diretrizes Curriculares Nacionais e pelo Mestrado Profissional em Ensino na Saúde, mas ainda se confronta com o desafio do formato de publicização.

Palavras-chave: Pesquisa; Saúde; Medicina.

ABSTRACT

Objective: to identify the scientific production in Health Education, generated by teachers, in a medical course of a public institution in the northeast of the country, from 2009 to 2014. **Method:** this is a documentary, exploratory research with quantitative approach. It was used the scientific production of the teachers, registered in the Lattes Platform in the data collection, followed by organization and qualification of the scientific

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production searched in virtual library Scielo and Google Scholar, associated with the Google search site. The following variables were used: sub-theme or concentration area and type of production and approach. **Results:** 190 curricula of medical teachers in the Lattes platform were found, of which 22% had production in the area. The main aspects (sub-themes) addressed were: curriculum and teaching-learning process, and teacher and student health. The most frequent type of production was the expanded abstract, followed by master's degree academic papers. The quantitative approach predominated in the studied period. **Conclusion:** the scientific production in Health Education in medical school is growing and encouraged mainly by the National Curriculum Guidelines and the Professional Master in Health Education, but still, it faces the challenge of the format of publicity.

Keywords: Research; Health; Medicine.

RESUMEN

Objetivo: identificar la producción científica en Educación para la Salud, generada por profesores de un curso de Medicina de una institución pública, en el Noreste del país, de 2009 a 2014. **Método**: esta es una investigación exploratoria documental con enfoque cuantitativo. Se utilizó la producción científica de los profesores, registrada en la Plataforma Lattes, en la recopilación de datos, seguida de la organización y calificación de la producción científica buscada en la biblioteca virtual SciELO y *Google* Académico, asociadas con el sitio de búsqueda *Google*. Se utilizaron las siguientes variables: subtema o área de concentración y tipo de producción y enfoque. **Resultados:** encontramos 190 currículos de profesores de Medicina en la plataforma Lattes, de los cuales el 22% tenía producción en el área. Los principales aspectos (subtemas) abordados fueron: currículum y proceso de enseñanza-aprendizaje, y la salud de los profesores y estudiantes. El tipo de producción más frecuente fue el resumen ampliado, seguido de trabajos académicos de maestría. El enfoque cuantitativo predominó en el período estudiado. **Conclusión:** la producción científica en Educación para la Salud del curso de Medicina es creciente y alentada, principalmente por las Directrices Curriculares Nacionales y por el Máster Profesional en Educación en Salud, pero aún enfrenta el desafío del formato de publicidad.

Palabras clave: Investigación; Salud; Medicina.

INTRODUCTION

The dizzying transformations of contemporary societies have increasingly challenged the aspects of vocational training. This debate has its own contours in health work. In

reflecting on these transformations, the National Curriculum Guidelines (NCG) for undergraduate health courses assume that the changes required in services depend on the development of competencies and skills of professionals and the adoption of ethical, social and cultural values. For this, it is necessary a professional formation that allows a new model to interpret and act in health.[1]

Historically, the training of health professionals still has a strong influence on conservative teaching-learning methodologies under the strong intervention of the fragmented and reductionist Cartesian-Newtonian-inspired mechanism.

"The dualism between matter and mind, body and soul, had profound repercussions on Western thought, with implications in the most different areas of human knowledge".[2:36]

"The training of health professionals implies the triangulation between knowledge, skills and attitudes, embodied in the spaces of teaching, work, research and extension that involve the conditions related to the institutional mission of the university and health services".[3:14]

The central axis of training for comprehensive care, articulating curriculum, assessment, management and integration with services, reflects the understanding that health practice requires work that transcends the individualized work of each profession, assuming the importance of the team.[3] It seeks to train a health professional who, not giving up specific training, can be aware of the differences, the movements of inclusion, the interprofessionalism present in their actions. Therefore, the training of this professional cannot do without information related to their area, their context.

The analysis of knowledge production has been a study modality with significant presence and reiterated in the literature focused on knowledge production. This is due to the need, by the researchers, for information on the sources available for the ever-relative domain of the literature in their field and the means available for the dissemination of their own research. Moreover, in its historical process, scientific publication has become an indispensable instrument not only as a means of individual promotion, but as a form of promotion and strengthening of the cycle of creation, organization and dissemination of knowledge. Therefore, its social contribution is one of the factors that most influence the pace of knowledge production.[4-5]

Health Education is a relatively new and challenging area of knowledge, and has been playing a prominent role in society, generating the need for reflections on the way of thinking and performing the teaching-learning process. This is an area of training, considered strategic for the consolidation of the Unified Health System, through the analysis of existing priorities and competencies, aiming at improving postgraduate and undergraduate health education.[6-7]

Given this, it is appropriate to state that information about the existing scientific production is necessary to estimate the concern and the performance of the teaching professors interested in the improvement of public policies related to Health Education in their various axes of action.

This research aimed to identify and characterize the scientific production in Health Education, carried out by teachers of a medical course, from 2009 to 2014, in a public institution located in the Northeast of Brazil.

METHOD

It is a bibliometric research, documentary, with quantitative approach. The survey only involved public domain data and did not identify the survey participants. In view of this, it did not require approval by the CEP-CONEP System.

The research was conducted in two stages. The first was to identify the scientific production of the course's teachers, from 2009 to 2014, from data collected with the aid of the Lattes platform. At this stage, the methodological perspective of bibliometrics[8] was adopted in the study of scientific production and its content.

The second stage consisted of the production of data performed in the Google and Google Scholar search sites in order to characterize the scientific production regarding the subtheme (area) of concentration and the type of research approach. In this study, the following were considered as scientific production: articles in journals, full articles in annals, papers for the conclusion of the graduate course (ACCP), books, chapters and Expanded Abstracts (EA).

From the title of the production, these e-mail addresses were directed to online article banks from conference proceedings and symposiums, as well as from nationally prominent journals. Thus, it is believed that the selected sample is able to represent the scientific production of the medical course, from 2009 to 2014, on Health Education.

To identify the production subtheme, the following classification was used: i) health education management; ii) curriculum and teaching-learning process in undergraduate and graduate health; iii) evaluation in health education; iv) training and teaching development in health; v) policies to encourage and integrate universities with health services, such as: Program for Encouraging Curricular Changes in Medical Courses (Promed), National Program for Reorienting Vocational Training in Health (Pro-Saúde), Education Program for Health Work (PET-Saúde), Internship-Experience in UHS Reality (See-UHS), telemedicine, national policy of continuing education in health (PEH); vi) face-to-

face and distance technologies in health education and vii) teacher and / or student health.

To identify the type of research approach, the following classification was used: quantitative; qualitative; experience report; test; literature review and document analysis.

RESULTS AND DISCUSSION

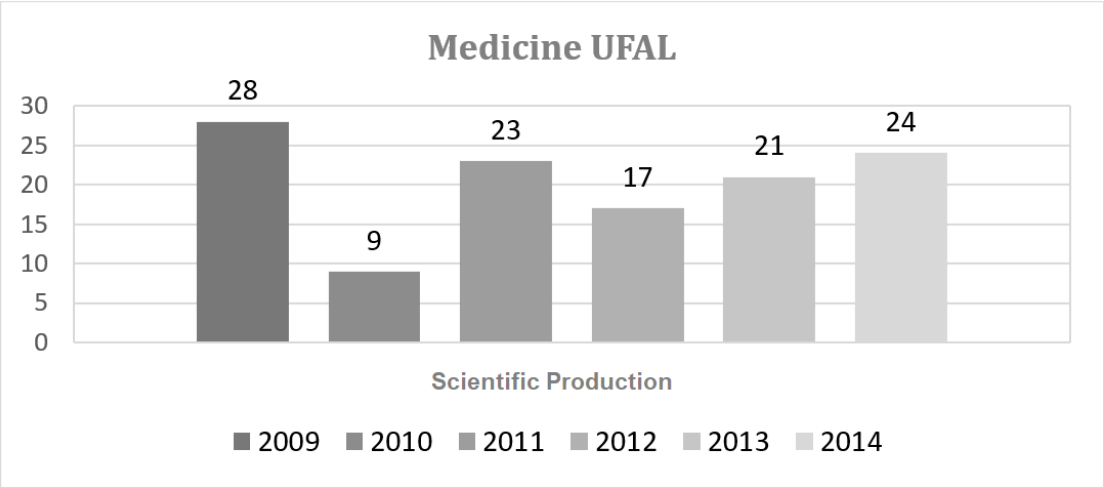
The analysis of the information about the existing scientific productions is necessary to estimate the concern and the action of the researchers and agencies interested in the improvement of the public policies related to the teaching subject in the health, as well as in its diverse subthemes or areas of action.

There is scientific production on Health Education in the studied course?

In the study, a total of 190 curricula of medical teachers in the Lattes platform were found, of which 41 had knowledge production (scientific or technical) in the area of Health Education. Of these, 58.5% (n = 24) were female and 41.4% (n = 17), male. The increase in the number of women performing scientific activities and a clear trend towards the qualification of these researchers in the national research groups were found in the literature.[9]

Analyzing figure 1, there is a peak of production in 2009 and then an oscillation, but with a recovery in productivity from 2011. This fact was associated with the implementation of the Postgraduate Program in Health Education (PPHE). The data are in accordance with the international literature in which there is a gradual trend of increasing knowledge production in this area over the years.[10]

Figure 1. Behavior Of Scientific Production Per Year In UFAL Medical School.



Source: Prepared by the authors (2019).

What are the characteristics of the production of knowledge about health teaching in the medical course studied?

The scientific production of the teachers of the course on the theme Health Education is materialized mainly in EA presented in congresses, academic papers of conclusion of the course and articles (Chart 1) mainly encouraged by the Professional Master's Degree in Health Education (MPEH), with program started in 2011.

Chart 1. Characterization of the scientific production of FAMED / UFAL medical professors on the theme Health Education, based on the Lattes curriculum.

Scientific productions					
Total	Articles	Expanded abstract	Book	Book chapter	Thesis, dissertation, ACCP.
104	21	43	03	03	34

Source: Prepared by the authors (2019).

Authors point out the qualification for the teaching of professionals who work with graduation and residency in health, as well as the production of knowledge and technological innovations, as fundamental strategies to meet these philosophical, organizational and operative principles advocated by UHS.[11-13] The professional master's degree (PM) emerges as an important strategy to

technically equip and qualify professionals to use scientific tools in the exercise of their functions.[14]

Based on these assumptions about PMs, in 2010, the Pro-Teaching in Health policy was launched, which had, as one of its axes, the induction of PMs in the Health Education area. Based on the consensus reached during the seminar, guidelines for the design of projects for new MPEH.[7,15]

For a better visualization of the results and discussion, the findings of the scientific production will be discussed separately, that is, obeying the decreasing order of the types of production.

Of the 43 EA cited in the teachers' Lattes curriculum, only ten were available for review on the Internet (online). It is believed, knowing that the short abstract is the most used in scientific events related to the medical area, that the difficulty of access was probably due to the incorrect completion of these abstracts in the Lattes platform, implying the difficulty of correctly publishing the scientific production.

It is recognized that there is a need to raise awareness and motivate researchers towards a culture of periodically updating their curricula, and that this culture must be institutional in order to demonstrate the importance of properly completing the curriculum.[16]

Among the ten EAs, 20% (n=2) addressed integration policies between health, education, technology and science; 20% (n=2) analyzed the curriculum and the teaching-learning process in undergraduate and postgraduate studies and 60% (n=6) explored the health of teachers and students. All productions found in this item contemplated the student's health.

With regard to students, it is important to understand that the university is a moment of transition. This new world of values (ethical, moral, religious and cultural), as a rule, is a source of much apprehension and anxiety for the student and can be a trigger for psychosocial difficulties or exacerbation of existing ones.[17] The university space is the main locus of the student's psychosocial development and the emergence of most of the conflicts faced by the student for the incorporation of the adult role.[18-19]

The gap in the production on the teacher's health is highlighted, pointing to the low appreciation of this character, as the physical and mental illness of teachers is a challenge and a need to understand the health-disease process of the teaching worker, as the studies point out.[20-21]

Regarding the type of research approach, of the ten EA that were found, 80% (n=8) dealt with quantitative research, 10% (n=1), experience reports and 10% (n=1), of document analysis.

The results show the hegemony of research with quantitative approach in medical school during the studied period. These data were in agreement with authors[22] who affirmed the tradition of quantitative research in the medical field. However, there are important aspects and issues, such as economic interests, decision-making by health professionals, organization of health services and policies, even behaviors and attitudes toward teaching-learning, physician-patient processes, and teaching-service integration. Which must also be investigated in their subjective aspects, situations in which qualitative methods would also be indicated.

The divergences between qualitative and quantitative approaches reflect different epistemologies, research styles and forms of theoretical construction. It should be reiterated, however, that quantitative and qualitative methods, despite their specificities, are not excluded.[23-24]

All Academic Course Completion Papers (ACCPs) came from the PPHE linked to the studied course. It is important to highlight that, in this item, all the ACCPs where the medical professors acted as advisors or authors were evaluated.

Regarding the content of the 34 productions available for analysis, several subthemes or areas of Health Education were found. The most prominent was the curriculum and teaching-learning process in undergraduate and postgraduate studies, with 34% of production (n=11), followed by the areas of teacher education and development and teacher and student health, both with 13% (n=5) each, and the teaching management area with 12% (n=4). The area with the lowest production was on-site and distance technologies in health education, with 3% (n=1).

It was found that the program fidelity with the inductive policy (Health Teaching), which provides, as one of the characteristics, the production of knowledge based on the investigation of situations related to the practice of health teaching in its interface with scientific evidence of the area and health services.[7,25] The results highlighted the mobilization of health courses towards the National Curriculum Guidelines (NCGs) for health courses. However, they showed little reflection on presential technologies and distance in MPEH, a theme of great importance in contemporary times.

About the ACCP and the type of research approach, it was observed that, among the 34 studies, 82.3% (n=28) presented the explicit analysis in the abstract. Of these, 54% (n=15) used the qualitative approach, 32% (n=9) the quantitative and 14% (n=4) the mixed.

In the health context, knowing why helps clarify the phenomena of the health-disease process, which is essential for improving the quality of the professional-patient-family-institution relationship; promote greater patient and population adherence to individually administered treatments and measures implemented collectively; understand more deeply certain feelings, ideas and behaviors of users as well as their family members and even health professionals.[24]

Regarding scientific articles, the research, based on the Lattes platform, identified 21 articles produced by the course's teachers, from 2009 to 2014. Of these, 81% (n=17) were located through the internet. Regarding the content, it was found that 58% (n=10) of the articles addressed the student's health, similar to the production of EA, where 18% (n=3) dealt with the assessment in health education; 12% (n=2) on the integration of universities and health services; 6% (n=1) on teacher education and development in health and 6% (n=1) on ethics and humanization subarea.

It is believed that the focus on student health production is due to the fact that probably the greater knowledge about the medical student's quality of life allows us to understand their anxieties, frustrations and perceptions of the world that will influence their medical practice,[18,19,26] as discussed in the item EA. Few publications propose solutions for the reduced quality of life, so it is expected that this will be a natural objective of the next studies on the subject.

Regarding the type of research, also following the trend of EA, 71% (n=12) of the articles found had a quantitative approach; 23% (n=4), qualitative and 6% (n=1), experience report. These data are consistent with the findings in the literature,[26] where works on students using the qualitative approach were minority, showing the need for papers that discuss the concept and its relationships with students' daily factors.

Finally, about the production of books and book chapters, in this study, three books and three book chapters were found with the participation of medical school teachers, from 2009 to 2014, based on their Lattes curricula. In the search for this production for its characterization, it was only possible to locate a

book. No book chapters were available online. The book is classified under the sub-theme teacher education and development in health and represents a guide for beginning researchers to enter the world of scientific research.

CONCLUSION

The analysis of the scientific production on Health Education allows a comprehensive view of the theme, which has directed studies on this very important issue today, as well as the limitations and possibilities inherent to it.

In general, it can be reiterated the complexity that involves teaching and proximity to the Health area. About 22% of the teachers of the researched course reported production in the area of Health Education in their curriculum, but half of this production was not found in the search places used.

It is noted that the scientific production on Health Education in the course researched has grown in recent years, probably associated with the curricular reform that the course underwent in 2006, the new guidelines that were implemented with the reform and the implementation of the PPHE in 2011. However, the publication also translates into poor academic visibility (expanded abstract and ACCP).

It was possible to identify, considering the material available for the evaluation, that, in these productions, the quantitative approach, especially in the researches published in the form of expanded abstract and articles, was the most used. However, ACCPs had as their main approach the qualitative type. Regarding the theme, the most used in the productions are: teacher and student health and curriculum and teaching-learning process.

The expressive number of EA and book chapters not found for analysis in this study demonstrates the institution's need for investments in the online publicizing of its faculty's scientific output.

It appears that there are still many gaps to be filled in order for the teacher to see their daily work as a space for the development of studies and research that can provide effective answers about certain problems of their practice. In other words, the theme health education requires space in the agenda of priorities of state educational, governmental and research institutions.

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