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Original article

A look at scientific publications in the Cuban Medical Mission in Venezuela

An overview of scientific publications in the Cuban Medical Mission in Venezuela

A look at the scientific publications of the Cuban Medical Missão in Venezuela

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SUMMARY

Scientific publications allow researchers to disseminate results and experiences in a given

field of knowledge within the research community and serve as a measure of intellectual activity. This research aims to characterize the scientific publications of collaborators of the Cuban Medical Mission in Venezuela during the period January 2023 to March 2025. A descriptive, cross-sectional, and bibliometric observational study was conducted on the scientific publications of collaborators of the Cuban Medical Mission in Venezuela during the specified period. All scientific articles (N=37) were included. The variables used were: age and sex of the authors, publications according to document type, types of study, main databases and directories in which they are indexed, and bibliometric indicators. The predominant age group among authors was 40-59 years, and females were the majority. Original articles, descriptive observational studies, and articles indexed in the Scientific Electronic Library Online and Latindex were the most prevalent. The average number of bibliographic references per article was 35.9, and the Price index was 0.43. It is concluded that the characterization of the scientific publications of the collaborators of the Cuban Medical Mission in Venezuela offers an encouraging perspective related to scientific knowledge and its dissemination within the medical sciences. Indexing in databases and recognized directories, as well as the use of bibliometric indicators, demonstrates their quality.

Keywords: Scientific publication; Medical mission; Scientific article; Bibliometric indicators; Quality.

SUMMARY

Scientific publications allow the dissemination of results and experiences within the research community in a specific field of knowledge and serve as a measure of intellectual activity. The present study aims to characterize the scientific publications of collaborators of the Cuban Medical Mission in Venezuela during the period from January 2023 to March 2025. An observational, descriptive, cross-sectional, and bibliometric study was conducted on the scientific publications produced by these collaborators during the mentioned period.

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All scientific articles were included (N=37). The variables analyzed were: age and gender of the authors, publications by document type, study types, main databases and directories in which they are indexed, and bibliometric indicators. The predominant age group among authors was 40–59 years, and most were female. Original articles and descriptive observational studies indexed in Scientific Electronic Library Online and Latindex predominated. The average number of bibliographic references per article was 35.9, with a Price index of 0.43. It is concluded that the characterization of scientific publications by collaborators of the Cuban Medical Mission in Venezuela offers an encouraging perspective associated with scientific knowledge and its dissemination in Medical Sciences. Indexing in recognized databases and directories, along with the use of bibliometric indicators, reflects their quality.

Keywords:scientific publication; medical mission; Scientific article; Bibliometric indicators; Quality.

SUMMARY

Scientific publications allow the results and experiences in a certain area of knowledge to be disseminated among the community of researchers and represent an indicator of intellectual activity. The objective of this study is to characterize the scientific publications of the Cuban Medical Missão in Venezuela in the period from January 2023 to March 2025. An observational, descriptive, transversal and bibliometric study was carried out on the scientific publications of the Cuban Medical Missão in Venezuela in the aforementioned period. Includes total scientific articles (N=37). As variáveis used foram: identity and sex of authors, publications second documentary typology, types of studies, main databases and directories in which they are indexed and bibliometric indicators. Predominant among the authors are those aged between 40 and 59 years of age and female. Most of the work was composed of original articles, descriptive observational studies and those indexed in the Scientific Electronic Library Online and not Latindex. The average of bibliographical

references per article was 35.9 and the Price index was 0.43. It is concluded that the characterization of scientific publications by the collaborators of the Cuban Medical Missão in Venezuela offers a promising perspective associated with scientific knowledge and its socialization in Medical Sciences. Indexing based on databases and reconstructed directories, such as the use of bibliometric indicators, demonstrates their quality.

Key words: Scientific publication; Medical Missão; Scientific artifact; bibliometric indicators; Quality.

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Introduction

Scientific research helps solve many of the problems that arise in the practice of medicine, but it is a process that requires ongoing preparation. Its results are disseminated through presentations at conferences or publications in the form of scientific articles, which demonstrate the impact of universities and health institutions as generators of science and knowledge. (1)

Scientific publications allow the dissemination of results and experiences in a specific area of medical knowledge among the research community and become formal, solid, and accredited channels of dissemination. They represent a measure of scientific activity with high value for the development and improvement of healthcare and teaching. (2)

Specialized journals play a crucial role in disseminating results, thus overturning the old paradigm of the limited sharing of solutions. (3,4) In this respect, one of the limitations in the academic world is productivity, both quantitative and qualitative. (5,6) Furthermore, inadequate training in research methodology and a lack of qualified instructors also

contribute to this phenomenon. (7) Latin America is one of the regions with the lowest scientific output, with the exception of Brazil. (1,2)

This problem has been addressed from different perspectives. Currently, the trend is focused on conducting studies on the evaluation of scientific output, the activity of researchers, and the visibility of results. (5)

With the beginning of the Cuban Medical Mission in Venezuela (MMCVEN) in 2003, thousands of doctors, technicians, and other health professionals began providing comprehensive medical care in each of the states that make up this country. Since then, through scientific publications, the human talent has demonstrated countless achievements in the development attained in various dimensions. (8)

Given that scientific publications represent an essential element in knowledge management, the objective is to characterize the scientific publications of the collaborators of the Cuban Medical Mission in Venezuela in the period January 2023 to March 2025.

Methods

A descriptive, cross-sectional, and bibliometric observational study was conducted on the scientific publications of collaborators of the Cuban Medical Mission in Venezuela during the period January 2023 to March 2025. A search and analysis was performed on all articles (N=37) published in scientific journals, regardless of nationality. The variables used were: age and sex of the authors, publications according to document type, types of study, main databases and directories in which they are indexed, and bibliometric indicators (average number of bibliographic references per work and Price index).

The following databases and directories were taken into account:

- Scopus: a database of bibliographic references and citations, provided by the company Elsevier.

- *Web of Science*: bibliographic database provided by Clarivate Analytics.
- SciELO: Scientific Electronic Library Online.
- DOAJ: Directory of Open Access Journals or list of open access, scientific and academic journals that meet high quality standards.
- Redalyc: Network of Scientific Journals of Latin America and the Caribbean, Spain and Portugal.
- Latindex: Regional Online Information System for the dissemination of electronic journals of scientific, technical-professional and cultural dissemination published in the countries of Latin America, the Caribbean, Spain and Portugal.
- Lilacs: Database of Latin American literature in health sciences.

Bibliometric indicators:

- Average number of bibliographic references per work: the total number of references for all articles was divided by the number of works.
- Price Index: This index allowed for determining the currency of bibliographies, as it refers to the last five years. Its calculation is based on dividing the number of references less than five years old by the total number of references.

An Excel database was used for data processing. Absolute frequency and percentage were the statistical summary measures employed.

A working session was organized with the participation of members of the Scientific Council of the Cuban Medical Mission in Venezuela. The characteristics of the study were explained in detail, and it was ultimately approved.

Results

The 40-59 age group predominated among the authors, 63.6% (n=103), and the female sex,

51.2% (n=83). (Table 1)

Table 1. Distribution of authors according to age and sex.

Age (years)	Male		Female		Total	
	No	%	No	%	No	%
25-39	26	16.0	17	10.5	43	26.5
40-59	44	27.2	59	36.4	103	63.6
≥ 60	9	5.6	7	4.3	16	9.9
Total	**79**	**48.8**	**83**	**51.2**	**162**	**100**

Fountain: Publication Registry. National Directorate of Teaching 2025.

Original articles made up the majority, 67.6% (n=25), followed by those of a pedagogical nature, 21.6% (n=8). (table 2)

Table 2. Distribution of scientific publications according to document type.

Document typology	No	%
Original article	25	67.6
Article of a pedagogical nature	8	21.6
Review article	2	5.4
Case presentation	1	2.7
Letter	1	2.7
Total	**37**	**100**

Fountain: Publication Registry. National Directorate of Teaching 2025.

The most prevalent study type in the reviewed articles was descriptive observational, at 94.6% (n=35), while quasi-experimental (interventional) studies were very underrepresented, at 5.4% (n=2). (Table 3)

Table 3. Distribution of scientific publications according to the type of study.

Type of study	No	%
Descriptive observational	35	94.6

Quasi-experimental (intervention)	2	5.4
Total	**37**	**100**

Fountain: Publication Registry. National Directorate of Teaching 2025.

Scientific publications indexed in SciELO predominated, at 21.6% (n=8), followed by those contained in the Latindex system, at 16.2% (n=6). Also, 16.2% (n=6) of the publications were not indexed. (Table 4)

Table 4. Distribution of scientific publications according to indexed databases.

Databases	No	%
SciELO	8	21.6
DOAJ	5	13.5
Scopus	2	5.4
Web of Science	2	5.4
Redalyc	3	8.1
Latindex	6	16.2
Lilacs	5	13.5
Not indexed	6	16.2

Fountain: Publication Registry. National Directorate of Teaching 2025.

The average number of bibliographic references per article reached a value of 35.9; considering that the total number of references was 1327. A Price index of 0.43 was obtained. (table 5)

Table 5. Bibliometric indicators.

Bibliometric indicators	Worth
Average number of bibliographic references per work	35.9
Price Index	0.43

Fountain: Original work.

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RPNS-1853

Discussion

Regarding age, no articles were found in the scientific literature that considered this variable. However, this is not the case for sex, since in a study on the scientific output published by nursing program directors at Peruvian universities, women showed greater productivity. (7) Sex does not represent a determining factor in scientific output, which shows that both men and women who teach have the same tendency to publish scientific articles. (2)

It is from the fourth decade of life onward that healthcare professionals possess the full maturity and experience necessary to conduct research, unlike most junior professionals who do not yet have publishing among their career aspirations. Despite the predominance of women in this field, the authors also believe that the publication of scientific articles is not determined by gender.

The predominance of original articles is analogous to other studies. This is the case in the analysis of Cuban scientific production in Medicine in Scopus during the period 2012-2017, where 83.4% are original articles while 7.4% correspond to review articles. (9) The results are also similar to those of Carranza Esteban, et al, (7) who show that 89% correspond to original articles.

Similarly, they agree with the results found by Guerra Domínguez, et al, (6) who state that the scientific production at the Jimmy Hirzel Teaching Polyclinic in Bayamo, Cuba, during 1997-2020, has an influx of original articles, 79.7%. Vitón Castillo, et al, (1) report that 46.2% of the articles included in their study correspond to this type of document.

The authors agree with Estrada Lorenzo et al. (10), who argue that original articles are more lucrative for authors because they contribute greater value to science. They also believe that their prevalence in the publications of MMCVEN collaborators is explained by the requests and intentions of journals that prioritize the acquisition of this type of work.

Regarding the type of study, we agree with the results of Carranza Esteban, et al, (7) who highlight descriptive studies with 69%. A similar situation occurs with Guerra Domínguez, et

al, (6) who show the supremacy of these with 65.5%.

The series was dominated by descriptive observational studies, as they constitute the basis or starting point for other research, analytical or interventional, and generally only require simple methods and techniques, typical of descriptive statistics.

The indexing of scientific publications is interpreted as an impact factor, as it indicates that they have been listed in globally consulted and therefore high-quality databases. (11) The results for this variable partially coincide with those of Delgado Arenas, et al., (2) who observed that the majority of faculty members (60.7%) do not have publications in the Scopus and/or Web of Science databases, which may indicate difficulties in producing relevant research. Carranza Esteban, et al., (7) found that 9.5% of the publications by nursing management staff working in Peruvian universities were published in journals indexed in Scopus. They further noted that only one was published in Web of Science.

The predominance of articles in databases such as SciELO and DOAJ is considered to indicate that most of the research by MMCVEN collaborators is reliable and of high quality, and that the results in the theoretical order can be applicable and generalizable in concrete situations.

The use of bibliometric indicators is limited as a basis for the development of new knowledge in a given domain and is not appreciated by the scientific community. (3) However, one of the ways to evaluate the impact and quality of a publication is through citation-based indicators. (12)

The average number of bibliographic references is higher than that determined at the Jimmy Hirzel Teaching Polyclinic in Bayamo during the years 1997-2020, which was 19.6. However, the Price index is lower than that of this institution, at 0.49. (6)

According to Santana Ibarra, et al, (13) the average number of references per article is 21.8 and the Price index is 0.34. They consider that the latter is modified taking into account the number of authors, the content and the type of article, so that it is higher when the number of authors does not exceed five, when they are of material or instruments and in the original

typology and clinical cases.

The determination of bibliometric indicators, and therefore the impact of a publication, depends on multiple factors such as the journal in which it is published, the type of article and its scope, as well as the publication frequency, all of which contribute to variations in the average number of references. The higher the average number of bibliographic references per article and the Price index, the greater the likelihood that other researchers will cite, compare, and justify their own research.

Conclusions

The characterization of the scientific publications of the collaborators of the Cuban Medical Mission in Venezuela offers an encouraging perspective related to scientific knowledge and its dissemination within the medical sciences. Indexing in databases and recognized directories, along with the use of bibliometric indicators, demonstrates their quality.

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Conflict of interest

The authors declare no conflict of interest.

Authorship contribution

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