CorSalud 2018 Jul-Sep;10(3):219-229

CorSalud

Cuban Society of Cardiology

Original Article

Cardiocentro ERNESTO CHE GUEVARA SANTA CLARA CUBA

Scientiometric approach to the scientific production of CorSalud journal: Period 2009-2017

Adrian Naranjo[1]✉, MD; and Gabino Arman[2], MD

[1] Department of Cardiology, Centro de Investigaciones Médico Quirúrgico (CIMEQ). Havana, Cuba.
[2] Dirección Provincial de Salud Pública. Havana, Cuba.

Este artículo también está disponible en español

ARTICLE INFORMATION

Received: February 20, 2018
Accepted: March 29, 2018

Competing interests
The authors declare no competing interests

ABSTRACT

Introduction: Bibliometrics is a broad field of study that allows analyzing relationships, productivity and characteristics of different disciplines by reviewing the provided scientific production.

Objectives: To evaluate the scientific production of CorSalud journal during the period 2009-2017.

Method: Descriptive and retrospective bibliometric study on the scientific production of CorSalud journal since its release in 2009 to 2017. The sample consisted of a total of 422 articles. The variables included several output indicators, visibility and impact, collaboration and relational ones.

Results: The journal has received a total of 198 citations with an h-index of 6; granting 361 citations, of which 178 (49.3%) are self-citations. Original articles account for 29.4% of all published articles. A total of 67 (30.9%) authors present productivity indices compatible with average producers. Articles present indexing percentages of 61.8% in Imbiomed and 57.8% in Dialnet and EBSCO databases. The greatest growth was recorded in 2012 with 138%. The peak collaboration rate is 4.6, reached in 2014.

Conclusions: There is a trend towards an increase of the author's productivity index, productivity by gender, output growth, collaboration and co-author relationship. In general, the bibliometric indicators show great stability and improvement in the quality of the publication.

Keywords: Bibliometric indicators, Journals, Journal article, Serial publications

Acercamiento cienciométrico a la producción científica de la revista CorSalud: Período 2009-2017

RESUMEN

Introducción: La bibliometría es un amplio campo de estudio que permite analizar relaciones, productividad y características de diferentes disciplinas mediante la revisión de la producción científica generada.

Objetivo: Evaluar la producción científica de la revista CorSalud en el período comprendido entre los años 2009-2017.

Método: Estudio bibliométrico descriptivo y retrospectivo de la producción científica de la revista CorSalud desde su fundación en 2009 hasta el 2017. Conformaron la muestra un total de 422 artículos. Las variables incluyeron varios indicadores de producción, visibilidad e impacto, colaboración y relacionales.

Resultados: La revista ha recibido un total de 198 citaciones presentando un índice h de 6. Ha concedido 361 citas bibliográficas, de ellas 178 (49,3%) autocitas.

✉ *A Naranjo*
Calle 33ª Nº 6216, e/ 62 y 64.
Playa 11300. La Habana, Cuba.
E-mail address:
anaranjod90@gmail.com

Los artículos originales representan el 29,4% de todos los artículos publicados. Un total de 67 (30,9%) autores presentan índices de productividad compatibles con medianos productores. En las bases de datos Imbiomed, Dialnet, EBSCO presentan porcentajes de indexado de 61,8% para la primera y 57,8% para las dos últimas. El mayor crecimiento se registró en 2012 con un 138%. El mayor índice de colaboración es de 4,6 alcanzado en 2014.

Conclusiones: Existe una tendencia al aumento en los índices de productividad autoral, productividad por género, crecimiento de la producción e índice de colaboración y relación coautoral. Los indicadores bibliométricos en general demuestran la existencia de una gran estabilidad y ascenso en la calidad de la publicación.

Palabras clave: Indicadores bibliométricos, Revistas, Artículo de Revista, Publicaciones seriadas

INTRODUCTION

Bibliometrics is a broad field of study that allows analyzing relationships, productivity and characteristics of different disciplines by reviewing the provided scientific production. It is an important tool for the evaluation of scientific activity, both for diagnosis and for decision making. Bibliometrics allows for practical uses. Hence it is a supportive tool for the evaluation of the scientific production of any country, region, institution or individual[1,2].

Bibliometrics provides quantitative analysis of written communication, a tangible product of research, and comes from the need to quantify certain aspects of science in order to compare, measure and objectify scientific activity[3,4]. On the other hand, scientometrics is nothing more than the application of bibliometric techniques to the study of scientific activity. Scientometrics goes beyond bibliometric techniques since it can be used to assess development and scientific policies[5-7].

Scientific papers published in peer-reviewed journals continues to be the main way to formally communicate the results of scientific research and a broad group of academic disciplines agree on its key role[8]. Therefore, the objective of this study is to evaluate the scientific production of CorSalud journal.

METHOD

Design

Descriptive and retrospective bibliometric study on the scientific production of CorSalud journal since its release in 2009 to 2017. All journal volumes and issues were included except for the Supplement 1 - 2014 referring to articles presented in a scientific event of the specialty. The sample consisted of a total of 422 articles distributed in 9 volumes and 34 issues published by the journal until October 20, 2017.

Variables studied

Production indicators[9,10]: Number of publications, documentary typology[11]. Percentage of works indexed in repositories or databases, production growth, author's productivity, index productivity by gender, countries of origin of contributions and delay in the editorial process of the articles.

Indicators of visibility or impact[12-14]: Number of citations, average number of citations per year, per article and per author, average of articles per author, average of authors per article, h-index, g-index, contemporary h-index, Individual h-index (Ih), hI normalized index, AWCR index, AW index, AWCRpA index, e-index, hm-index, annual hI index, amplitude H and amplitude G.

Collaboration indicators[15]: Collaboration index.

Relational indicators[15]: Spatial representation of co-authorship relationship.

Procedures, data collection and statistical analysis

The articles were searched by accessing the Journal websites (http://www.corsalud.sld.cu and http://www.revcorsalud.sld.cu), where we obtained the

information of all the articles included in the study (title of the article, authors, number of authors per article, section of the journal, date of receipt, date of acceptance, country of origin of the article and number of bibliographic citations for each article). This information was collected in a MS Excel software (Microsoft Corp., USA) database and then exported to be processed with the statistical analysis package SPSS 15.0 for Windows. We used basic descriptive statistics: mean and standard deviation, as well as absolute and relative frequency distribution. The scientometric indicators were calculated through the Harzing's Publish or Perish 6 software, based on the Google Scholar. Co-authorship networks were mapped using the VOS viewer software[16,17] (http://www.vosviewer.com/). We also reviewed catalogs, repositories and databases where the journal is indexed[16,17].

Ethical considerations

The present study does not contain confidential information about the authors, editors and reviewers of CorSalud journal. The information obtained was not used or will be used for profit.

RESULTS

We studied 422 articles from the study period with an average of 47±12.1 articles per year. The journal has received a total of 198 citations with an average of 24.75, 0.3 and 98.76 citations per year, article and authors, respectively. It has an h-index of 6 and an g-index of 7. The journal has granted 361 citations with an average of 22.6±15.5, of which 178 (49.3%) are self-citations (**Table 1**).

The journal is indexed in Dialnet[18], Imbiomed[19], Latindex[20], DOAJ[21], EBSCO[22] as well as other institutional repositories. Imbiomed had 21 issues and 6 volumes indexed when our investigation was carried out. The last corresponded to January-March 2014, which accounts for a 61.8% of the articles in this repository. In the case of Dialnet, the virtual database, the first 5 volumes and their respective issues are indexed, with 57.8% presence of their articles. Concerning the powerful EBSCO system, the journal records its presence with articles issued from 2011 to date with a total of 244 articles for a 57.8% full-text presence in the MedicLatina database. The Latindex catalog includes the journal from 2009 to date.

Table 1. Bibliometric indicators of CorSalud. Period 2009-2017.

Indicator (Date of analysis 2010-2017)	Results
Citations	198
Years	9
Cites/Year	24.75
Cites/Article	0.3
Cites/Author	98.76
Articles/Author	287.15
Author/Articles	3.01
h-Index	6
g-Index	7
hc Index	7
hl Index	2.57
hl normalized	3
AWCR	53.28
AW Index	7.3
AWCRpA	25.36
e-Index	3.61
hm Index	4.75
Cites/Author/Years	12.34
Annual hl index	0.38
Amplitude h	25
Amplitude g	27

Source: *Harzing's Publish or Perish*

Original articles, case reports, and scientific letters/editor predominate, according to the documentary typology, with an annual average of 13.8±5; 8±3 and 6.2±3.1, respectively. Original articles represent the 29.4% of all published articles (**Table 2**).

Table 2. Documentary typology of articles published by CorSalud. 2009-2017.

Typology	2009		2010		2011		2012		2013		2014		2015		2016		2017		Total	
	Nº	%	Nº	%	Nº	%	Nº	%	Nº	%	Nº	%	Nº	%	Nº	%	Nº	%	Nº	%
Editorial	4	9.3	7	16	4	9.5	5	9.6	13	21	3	5.6	4	6.8	4	9.1	1	4.8	**45**	10.7
Original article	7	**16.3**	14	**31**	13	**31**	17	**33**	18	**29**	20	**37**	17	**29**	13	**30**	5	**24**	**124**	**29.4**
Brief article	3	7	3	6.7	1	2.4	4	7.7	4	6.5	4	7.4	2	3.4	4	9.1	1	4.8	**26**	6.2
Review article	4	9.3	3	6.7	1	2.4	5	9.6	4	6.5	5	9.3	3	5.1	3	6.8	2	9.5	**30**	7.1
Special article	4	9.3	5	11	3	7.1	3	5.8	3	4.8	2	3.7	5	8.5	2	4.5	2	9.5	**29**	6.9
Case reports	7	16.3	3	6.7	6	14	7	14	11	18	11	20	12	20	9	21	6	29	**72**	**17.1**
Images in Cardiology	3	7	4	8.9	6	14	4	7.7	2	3.2	3	5.6	4	6.8	4	9.1	2	9.5	**32**	7.6
Letter to the Editor/Scientific	11	25.6	5	11	4	9.5	7	14	7	11	5	9.3	11	19	4	9.1	2	9.5	**56**	**13.3**
Others *	0	0	1	2.2	4	9.5	0	0	0	0	1	1.9	1	1.7	1	2.3	0	0	**8**	1.9
Total	**43**	**100**	**45**	**100**	**42**	**100**	**52**	**100**	**62**	**100**	**54**	**100**	**59**	**100**	**44**	**100**	**21**	**100**	**422**	**100**

*Messages from the Cuban Society of Cardiology, Responses to Editorial, Scientific Letters, or both, and Editor's Page

The time it takes for the journal to receive the articles and accept them is 62.4±59.4 days ranging from 5 to 521 days. This maximum range only for an article entitled "Risk stratification in acute coronary syndrome with ST-segment elevation" by Luis Alberto Rodríguez.

Table 3 shows the behavior of author's productivity in the study period. A total of 217 first authors were counted. Note that 3 of them exhibit productivity indices equivalent to large producers followed by 67 authors (30.9%) with indices compatible with medium producers. Of the latter, the 7 with highest productivity index are shown. In the analysis of productivity by gender it is worth noting an index increase from 0.2 to 1.1 women per men between 2009 and 2017.

The most-cited articles are those of the authors Amelia Carro, Niurelkis Suárez and Luis A. Ochoa. They have reached a total of 10 citations since the journal release in 2012 with an average of 2 citations per year (**Table 4**).

Regarding the country of origin of the authors, Cuba (89.81%), Spain (2.37%), the United Kingdom (1.66%) and Mexico (1.18%) exhibited the highest percentage. The rest is held by countries such as the United States, Venezuela, Uruguay, Russia, Romania, Nicaragua, Honduras, El Salvador, Egypt, Colombia and Argentina.

The highest percentage growth in production was recorded in 2012 with 138%. This indicator remains relatively stable displaying a slightly upward trend since then (**Figure 1**).

Of the 217 signer authors there is an average of 3.0±2.8 authors per article, with a difference between 22 and 1 author per article. The highest collaboration rate is of 4.6 reached in 2014. However, from 2009 to 2017, there is an obvious tendency to evolve positively (**Figure 2**).

Figure 3 shows a scientific map of co-authorship density ratio. It should be noted that the co-authorship networks intensely connect authors Moreno-Martínez, Puertas RC and Rosa YH. Furthermore, there is a visibly stronger co-authorship network in the articles published in 2013.

Table 3. Authors with higher productivity. CorSalud 2009-2017.

Main author	Nº of contributions	Productivity Index
Elibet Chávez González	14	1.15
Raimundo Carmona Puerta	14	1.15
Arnaldo Rodríguez León	11	1.04
Yurima Hernández de la Rosa	10	1.00
Suilbert Rodríguez	9	0.95
Francisco L. Moreno Martínez	7	0.85
Margarita Dorantes Sánchez	7	0.85
Antonio de Arazoza Hernández	6	0.78
Guillermo A. Pérez Fernández	6	0.78
Pedro Hidalgo Menéndez	6	0.78

Table 4. Contributions with the highest number of citations.

Nº Cites	Article *Typology. Year; Volume(number)*	Main Author
10	Cardiovascular risk factors: a preventable epidemic? *Editorial. 2012; 4(1)*	Amelia Carro
10	Determinants of overweight and obesity in infants of a day nursery. *Brief Article. 2012; 4(3)*	Niurelkis Suárez
10	The global challenge of sudden cardiac death in the new millennium. Summary of a Cuban study. *Brief Article. 2012; 4(4)*	Luis A. Ochoa
7	Almanac 2012: Cardiovascular risk scores. The National Society Journals present selected research… *Editorial. 2013; 5(1)*	Jill P. Pell
6	Behavior of cardiovascular risk factors in the elderly of "La Ciénaga" Medical Center. *Original Article. 2012; 4(1)*	Virginia Concepción
5	Atherogenic index as a risk factor for preeclampsia syndrome. *Original Article. 2012; 4(4)*	Javier E. Herrera
5	The QT interval, its origin and importance of the knowledge of formulas for its measurement in different clinical circumstances. *Special Article. 2014; 6(1)*	Elibet Chávez
4	Ventricular arrhythmias and new acute coronary syndrome in patients with infarction and prolonged QT dispersion. *Brief Article. 2013; 5(1)*	Fernando Rodríguez
4	Characterization of non-ST elevation acute coronary syndrome at the Integral Diagnostic Center "José Gregorio Hernández" in Venezuela. *Original Article. 2012; 4(2)*	Leonor Ratia
4	Results of percutaneous mitral valvuloplasty. Experiences at the Cardiology and Cardiovascular Surgery Institute in Cuba (1998-2004). *Original Article. 2010; 2(1)*	Julio C Echarte
4	Progressive development of giant J wave and extreme prolongation of QT interval in induced hypothermia. *Case Report. 2014; 5(3)*	Raimundo Carmona
4	Hospitalization phase of cardiac rehabilitation: protocol for acute coronary syndrome. *Review Article. 2014; 6(1)*	Susana Hernández

DISCUSSION

CorSalud is one of the two free access, peer/expert-reviewed journals that are devoted to cardiovascular diseases in Cuba. The journal belongs to the Cuban Society of Cardiology. This quarterly journal provides full-text articles published in Spanish and English on all aspects related to cardiovascular health and disease; as well as scientific-technological achievements and advances in the field. CorSalud started back in May 2009 and ascribed to the International Committee of Medical Jour-Journal Editors (ICMJE) in 2014 [11,23]. The assessment of scientific publications is both important and controversial within the overall context of sciences. The emergence of new scientometric indicators such as the Eigen factor score, SCImago journal rank and Source Normalized Impact per Paper have heightened the interest in this area of research [24,25].

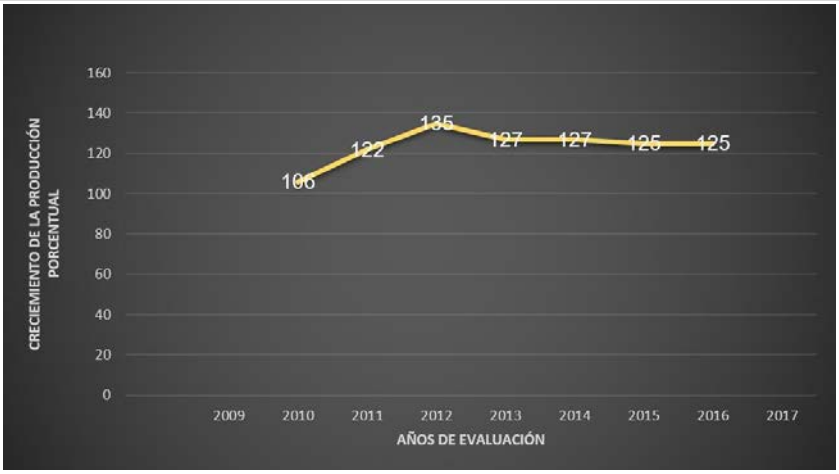

Figure 1. Percentage growth of scientific production 2009-2017.

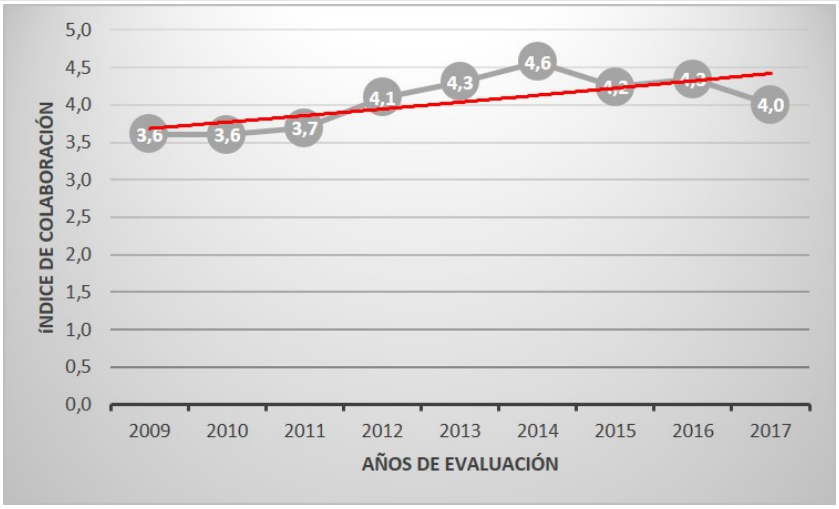

Figure 2. Collaboration Index. 2009-2017.

The h-index is a system proposed by Jorge Hirsch (UC-San Diego) that evaluates an individual, journal or institution scientific research output. The main disadvantage of old bibliometric indicators, like the total number of articles or the number of citations, is that the first measurement does not reveal the quality of scientific publications and the second is disproportionately affected by groups with few publications but a large number of citations. The h-index attempts to measure both quality and quantity of scientific production[26]. Despite its few years of existence, CorSalud displays a higher h-index than journals such as *Emergencias*, *Revista Médica Electrónica*, *Revista Cubana de Cirugía*, *Revista Cubana de Neurología y Neurocirugía*, *Revista Colombiana de Obstetricia y Ginecología*, *Revista Colombiana de Cardiología,* Iatreia and *Revista de Salud Pública*[27-29]. The journal has attracted an increasing number of citations over the years for a total of 198 citations, at a rate of 24.75 citations per year; although almost 50% of them are self-citations. However, the indexing in different databases and repositories such as Dialnet, Imbiomed, EBSCO, Latindex and SeCimed has allowed this ongoing upgrading even though the first two repositories do not include all of its articles. CorSalud's admission to the prestigious SciELO database has been recently known, which will undoubtedly contribute to increase the visibility and impact of the articles published by the journal.

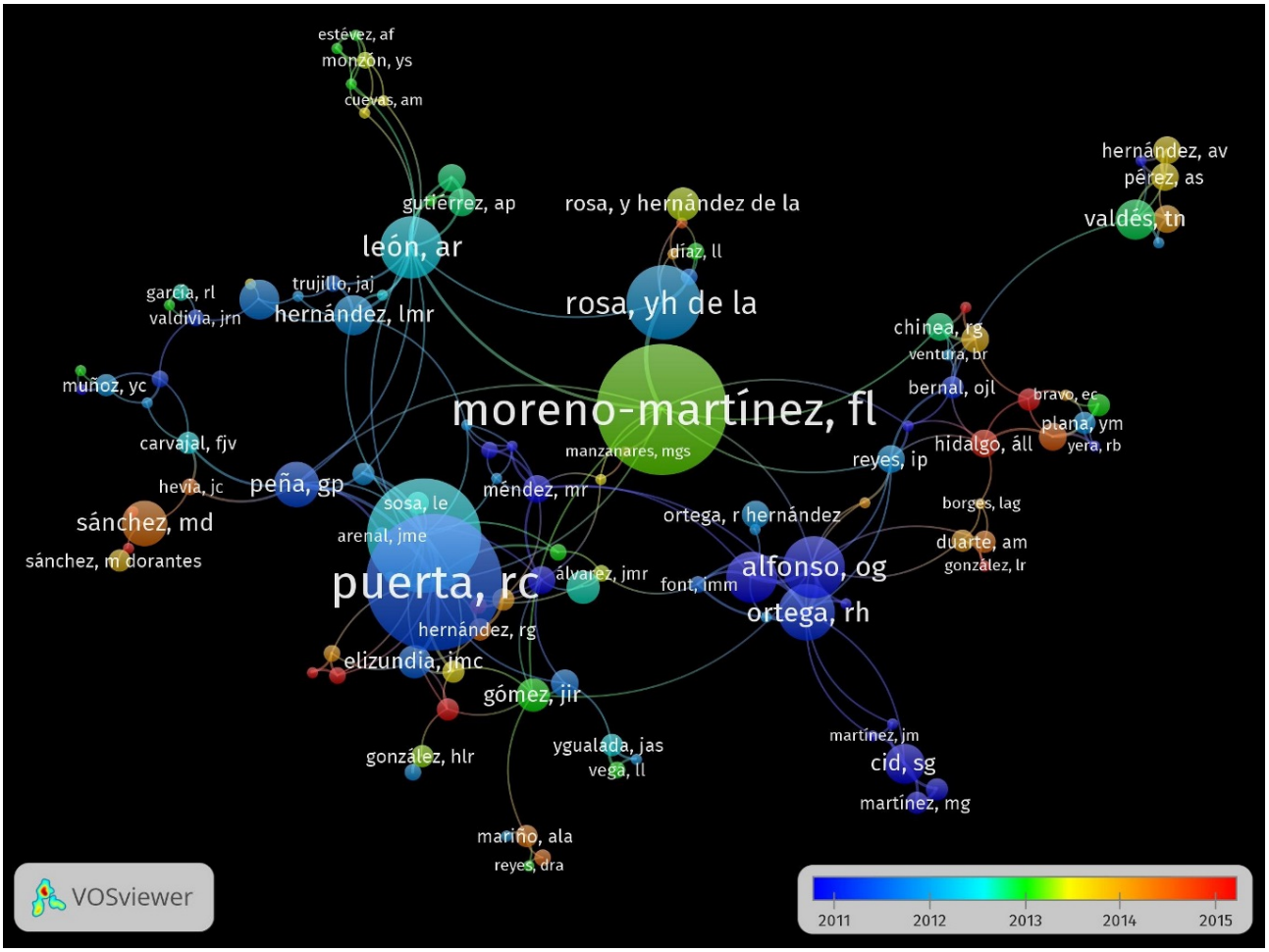

Figure 3. Scientific map of co-author relationship.

The highest percentage of documentary typology corresponds to the original articles that along with Case Reports, Scientific Letters or Letters to the Editor are more than half of the production issued; which coincides with *Revista Habanera de Ciencias Médicas*[13], *Emergencias*[27], *Investigación Médica Superior*[13], *Panorama Cuba y Salud*[30] y Medicc Review[31]. Since its creation, the publication of original articles has experienced a steady growth. While this study was conducted, the journal with only two issues out of the 4 to be published in 2017 almost reached the number of this typology issued in 2016. Such behavior is different in all periodical publications, taking into account that in the documentary typology the original articles are in fact the most difficult to plan, execute and write. Likewise, they are the most frequently rejected by the editorial teams. A striking example is the *Revista de Ciencias Médicas de Pinar del Río*[32] which records a decrease in the publication of original articles and argues that this is due to rejection decisions or renewal application dismissed by authors.

In terms of author's productivity, only 3 authors were major producers. None of them belongs to the editorial or scientific team of the journal and two of them are among the most cited. We identified a high number of transient authors, which shows a low specialization in the contributors. This coincides with that reported by other publications[33,34]. The productivity by gender reveals the proportion of female authors with respect to male. This indicator has shown a steady increase in the scientific production of the journal and has been a bibliometric indicator rarely used by other studies[35].

Predictably, the largest number of published authors belong to Cuba. However, foreign authors are

increasingly interested in choosing CorSalud to disseminate their scientific findings. The joint publication of journal editorials with a high scientific impact such as Heart[36], agreements with The New England Journal of Medicine[23] as well as broad visualization on all continents according to Google Analytics[37] is a decisive factor.

The highest scientific production was achieved in 2012. This indicator remains stable, which coincides with the reports of Anales Médicos[38] and VacciMonitor[39].

Collaboration indicators measure the relationships established between producers in the elaboration of results emerging from cooperative efforts. The importance of institutional collaboration is related to the very nature of scientific research, which requires collaboration for the creation of knowledge. CorSalud's co-authorship network is quite dense if we consider that it is mostly of national origin. More research is required to reveal the institutional co-authorship of different national and foreign institutions. Currently, the analysis of research networks allows us to ask and answer complex questions, thanks to tools such as the sociological study, the research of scientific networks and the use of tools from different fields of study for the visualization of co-citation and co-authorships networks. The analysis of these networks is infrequent in Cuban and foreign scientometric studies[13-15,27,28,31-34].

CorSalud is present in social networks such as Facebook, Twitter and Linkedin. The journal profile in Twitter displays its best indicators.

However, at the time of this article, it was updated until late 2016. Other academic networks such as ResearchGate, Academia, ResearchID, and Mendeley have almost no contributions from the journal. The number of authors who receive citations and the improvement of the journal's metrics could be increased as the journal or author uploads their articles to social networks[40,41].

There was a former article on the bibliometric study of the first 199 articles of CorSalud[42], which found rising collaboration rates in correspondence with international standards. It also showed a Price´s index of obsolescence slightly declining over the years but upholding internationally comparable levels. However, taking into account the current situation and being this the first bibliometric research on all the articles of CorSalud, we make the following recommendations: a) to promote the use of conventional social networks and include it in academic networks; b) to continue with the insertion in databases and repositories such as Pubmed, Scopus and Redalyc, having the advantage of publishing 100% of its articles in English; and c) to keep the profiles in the indexed databases and updated social networks, especially those depending on the editorial team.

CONCLUSIONS

Original articles constitute the most published documentary typology. There is a tendency towards an increase in the indices of author's productivity, productivity by gender, production growth, collaboration index and co-author relationship. In general, the bibliometric indicators prove high stability and improvement in the quality of the publication, reflecting the hard work of the editorial team that has taken steps beyond their own purposes. It will be necessary to increase the editorial work in order to promote the visibility and impact of CorSalud.

REFERENCES

1. Bienert IRC, de Oliveira RC, de Andrade PB, Caramori CA. Bibliometric indexes, databases and impact factors in cardiology. Rev Bras Cir Cardiovasc. 2015;30(2):254-9.
2. Moed HF. New developments in the use of citation analysis in research evaluation. Arch Immunol Ther Exp (Warsz). 2009;57(1):13-8.
3. Dávila M, Guzmán R, Arroyo HM, Piñeres D, de la Rosa D, Caballero-Uribe CV. Bibliometría: conceptos y utilidades para el estudio médico y la formación profesional. Salud (Barranquilla). 2009;25(2):319-330.
4. Araújo JA, Arencibia R. Informetría, bibliometría y cienciometría: aspectos teórico-prácticos. ACIMED. 2002;10(4):5-6.
5. Rueda-Clausen Gómez CF, Villa-Roel Gutiérrez C, Rueda-Clausen Pinzón CE. Indicadores bibliométricos: Origen, aplicación, contradicción y nuevas propuestas. MedUNAB. 2005;8(1):29-36.
6. Michán L, Muñoz-Velasco I. Cienciometría para ciencias médicas: Definiciones, aplicaciones y perspectivas. Inv Ed Med. 2013;2(6):100-6.
7. Jiménez-Contreras E, de Moya-Anegón F, Delga

do-López-Cózar E. The evolution of research activity in Spain. The impact of the National Commission for the Evaluation of Research Activity (CNEAI). Research Policy. 2003;32(1), 123-42.
8. Owen JM. The scientific article in the age of digitization. Dordrecht: Spinger; 2010.
9. Málaga Sabogal L. Indicadores bibliométricos en medicina de las instituciones peruanas (2009 - 2011) [Tesis]. Lima: Universidad Nacional Mayor de San Marcos [Internet]; 2014 [citado 20 Ene 2018]. Disponible en: http://cybertesis.unmsm.edu.pe/handle/cybertesis/3773
10. Castro-Rodríguez Y, Grados-Pomarino S. Productividad científica de revistas odontológicas peruanas. Evaluación de los últimos 10 años. Educ Med. 2017;18(3):174-8.
11. CorSalud. Instrucciones a los autores y normas de publicación en CorSalud: actualización de 2016. CorSalud [Internet]. 2016 [citado 12 Feb 2018];8(3):203-8. Disponible en: http://www.revcorsalud.sld.cu/index.php/cors/article/view/144/339
12. Harzing AW. The Publish or Perish Book. HTML edition [Internet]. Melbourne: Tarma Software Research; 2013 [Consultado 14 Ene 2018]. Disponible en: https://harzing.com/popbook/toc.htm
13. Valdés Balbín R, Fundora-Mirabal JA, Cárdenas-de Baños L, Bencomo-Díaz D, González-Losada C, Pacheco-Mendoza J, *et al*. Revista Habanera de Ciencias Médicas: una mirada desde la cienciometría. Rev Haban Cienc Méd [Internet]. 2017 [citado 20 Oct 2017];16(1). Disponible en: http://scieloprueba.sld.cu/pdf/rhcm/v16n1/rhcm06117.pdf
14. Corrales-Reyes IE, Fornaris-Cedeno Y, Reyes-Pérez JJ. Análisis bibliométrico de la revista Investigación en Educación Médica. Período 2012-2016. Inv Ed Med. 2018;7(25):8-26.
15. Peralta MJ, Frías M, Gregorio O. Criterios, clasificaciones y tendencias de los indicadores bibliométricos en la evaluación de la ciencia. Rev Cuba Inf Cienc Salud [Internet]. 2015 [citado 30 Mar 2017];26(3):290-309. Disponible en: http://scielo.sld.cu/pdf/ics/v26n3/rci09315.pdf
16. van Eck NJ, Waltman L. VOSviewer Manual. Manual for VOSviewer version 1.6.6 [Internet]. Leiden: Leiden University [citado 13 Feb 2018]; 2017. Disponible en: http://www.vosviewer.com/documentation/Manual_VOSviewer_1.6.6.pdf
17. Perianes-Rodriguez A, Waltman L, van Eck NJ. Constructing bibliometric networks: A comparison between full and fractional counting. J Informetr. 2016;10(4):1178-95.
18. Dialnet [Internet]. Perfil CorSalud en Dialnet. Fundación Dialnet. Universidad de La Rioja [citado 13 Dic 2018] Disponible en: http://dialnet.unirioja.es/servlet/revista?codigo=15833
19. Imbiomed [Internet]. Perfil CorSalud en Imbiomed. Índice Mexicano de Revistas Biomédicas Latinoamericanas [citado 13 Dic 2018] Disponible en: http://www.imbiomed.com.mx/1/1/articulos.php?method=showIndex&id_revista=267
20. Latindex [Internet]. Perfil del CorSalud en Latindex. Universidad Nacional Autónoma de México [citado 14 Dic 2018] Disponible en: http://www.latindex.unam.mx/latindex/ficha?folio=20131
21. DOAJ [Internet]. Perfil de CorSalud en DOAJ. Directory of Open Access Journals [citado 14 Dic 2018] Disponible en: http://doaj.org/search?source={%22query%22:{%22query_string%22:{%22query%22:%22CorSalud%22,%22default_operator%22:%22AND%22}}}
22. EBSCO [Internet]. Perfil de CorSalud en EBSCO. EBSCO Industries [citado 15 Dic 2018] Disponible en: http://web.a.ebscohost.com/ehost/resultsadvanced?sid=a0fbb138-88e0-4a5e-8e95-744e18f6f07b%40sessionmgr4002&vid=1&hid=4204&bquery=corsalud&bdata=JmRiPWx0aCZsYW5nPWVzJnR5cGU9MSZzaXRlPWVob3N0LWxpdmU%3d
23. Moreno-Martínez FL. CorSalud, The New England Journal of Medicine y el Comité Internacional de Editores de Revistas Médicas. CorSalud [Internet]. 2016 [citado 17 Ene 2018];8(2):92-3. Disponible en: http://www.revcorsalud.sld.cu/index.php/cors/article/view/104/247
24. Torres-Salinas D, Jiménez-Contreras E. Introducción y estudio comparativo de los nuevos indicadores de citación sobre revistas científicas en Journal Citation Reports y Scopus. Prof Inf. 2010; 19(2):201-7.
25. Cañedo Andalia R, Cruz Font J. Tendencias, limitaciones y perspectivas en la evaluación de las publicaciones científicas y académicas mediante indicadores cienciométricos. En: Cañedo Andalia

R, Rodríguez Labrada R, Fernández Valdés MM, Zayas Mujica R, Nodarse Rodríguez M, Sánchez Tarragó N, *et al*. Lecturas avanzadas para la alfabetización informacional en salud. Holguín: Centro Provincial de Información de Ciencias Médicas; 2011. [citado 17 Ene 2018]. Disponible en: http://www.hlg.sld.cu/sitios/CPICM/index.php?option=com_jdownloads&Itemid=87&view=viewcategory&catid=5

26. Silva Ayçaguer LC. El índice-H y Google académico: una simbiosis cienciométrica inclusiva. Rev Cub Inf Cienc Salud [Internet]. 2012 [citado 18 Feb 2018];23(2):308-22. Disponible en: http://acimed.sld.cu/index.php/acimed/article/view/384/252
27. Rolo Mantilla M, Ojeda Cabrera A, Collado Martínez R, Fuentes García S, Ferreiro García B, Martínez Vasallo H. La producción científica de la Revista Médica Electrónica durante los años 2012-2014. Rev Med Electrón [Internet]. 2015;37(4):313-22. [citado 17 Feb 2018]. Disponible en: http://www.revmedicaelectronica.sld.cu/index.php/rme/article/view/1483/pdf_29
28. Miró O, Burrillo-Putze G, Tomás Vecina S, Pacheco A, Sánchez M. Estimación del impacto bibliométrico de EMERGENCIAS durante los últimos 10 años (1997-2006). Emergencias. 2007;19(4):187-94.
29. Romero-Torres M, Acosta-Moreno LA, Tejada-Gómez MA. Ranking de revistas científicas en Latinoamérica mediante el índice h: estudio de caso Colombia. Rev Esp Doc Cient [Internet]. 2013 [citado 10 Feb 2018];36(1):e003. Disponible en: http://redc.revistas.csic.es/index.php/redc/article/view/773/861
30. Espino Hernández M, Baños Benítez A, Víctores ME, Valdés Roque Y. Análisis métrico de la producción científica de la revista "Panorama Cuba y Salud" en el período 2006-2011. Rev Cub Inf Cienc Salud [Internet]. 2013 [citado 30 Mar 2018];24(3):229-42. Disponible en: http://scielo.sld.cu/pdf/ics/v24n3/rci02313.pdf
31. Corrales-Reyes IE, Acosta-Batista C, Reyes-Pérez JJ, Fornaris-Cedeño Y. Análisis bibliométrico de Medicc Review. Período 2010-2015. Educ Med [Internet]. 2017 [citado 31 Oct 2017]:[10 p.]. En Prensa. Disponible en: http://dx.doi.org/10.1016/j.edumed.2017.04.015
32. González Rodríguez R, Cardentey García J, Izquierdo Almora Y. Estudio bibliométrico de la Revista de Ciencias Médicas de Pinar del Río. 2013-2015. Rev Cienc Méd Pinar Río [Internet]. 2017 [citado 15 Feb 2018];21(1):79-86. Disponible en: http://www.revcmpinar.sld.cu/index.php/publicaciones/article/view/2762/pdf
33. Restrepo Arango C, Urbizagástegui Alvarado R. La productividad de los autores en la ciencia de la información colombiana. Ci Inf. 2010;39(3):9-22.
34. Morales Fernández T, Martínez Ramos AT, Rivas Corrías B, Diago Gómez A, Clavero Fleites L, Martínez Bernal S. Producción científica de la revista EDUMECENTRO y su visibilidad a través de Google Académico. Edumecentro [Internet]. 2017 [citado 19 Feb 2018];9(4):162-79. Disponible en: http://revedumecentro.sld.cu/index.php/edumc/article/view/1031/pdf_278
35. Alhuay-Quispe J, Pacheco-Mendoza J. Escaso uso de indicadores de productividad científica en estudios bibliométricos. Educ Med. 2018;19(2):128-30.
36. Bridgewater B. Anuario 2012: Cirugía cardíaca en adultos. Las revistas de las Sociedades Nacionales presentan una selección de las investigaciones que han impulsado avances recientes en Cardiología Clínica. CorSalud [Internet]. 2013 [citado 20 Feb 2018];5(1):17-29. Disponible en: http://www.corsalud.sld.cu/sumario/2013/v5n1a13/almanac-cirugia.html
37. Moreno-Martínez FL. Más preguntas que respuestas. Respuesta del Editor. CorSalud [Internet]. 2014 [citado 20 Feb 2018];6(4):362-4. Disponible en: http://www.corsalud.sld.cu/sumario/2014/v6n4a14/cartasv6n4.html#preguntas3
38. Ayala Picazo M. Estudio bibliométrico de la revista *Anales Médicos* (1955-2015). Parte 1, análisis de la producción científica. An Med (Mex). 2016;61(4):246-50.
39. Arencibia-Arrebola DF, Betancourt-López V, González-Alfalla N, Puig-Fernández Y, Biart-La Rosa O, Fernández-Sanguinety DF, *et al*. Estudio bibliométrico de la producción científica de VacciMonitor (2000-2013). Vaccimonitor. 2014;23(2):41-8.
40. Allen HG, Stanton TR, Di Pietro F, Moseley GL. Social media release increases dissemination of original articles in the clinical pain sciences. PLoS One [Internet]. 2013 [citado 20 Feb 2018];8(7):e68914. Diponible en: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3714259/pdf/pone.0068914.pdf
41. Alonso Arévalo J, Cordón-Garcia JA, Maltrás Barba B. Altmetrics: medición de la influencia de los medios en el impacto social de la investigación.

Cuad Doc Multimed [Internet]. 2016 [citado 8 Oct 2017];27(1):75-101. Disponible en: http://dx.doi.org/10.5209/rev_CDMU.2016.v27.n1.52870

42. López G, González O. Estudio bibliométrico de la Revista CorSalud. Biblios. 2013;52:16-26.