

ORIGINAL

Mapping the structure of knowledge about Community and Home Care

Mapeo de la estructura del conocimiento sobre Atención Comunitaria y Domiciliaria

Luis Enrique Jiménez-Franco¹  

¹Facultad de Ciencias Médicas Dr. Raúl Dorticós Torrado. Universidad de Ciencias Médicas de Cienfuegos. Cienfuegos, Cuba.

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ABSTRACT

Introduction: Community and Home Care is defined as the first level of care; where the individual, by exposing their problems, finds their first contact with the health system. Provides general medical treatment, as well as prevention and health promotion actions.

Objective: analyze the behavior of research on Community and Home Care published in Scopus.

Method: a bibliometric study was carried out on the topic of Community and Home Care covered in the period 2018-2022. The SciVal tool was used to analyze the scientific production indicators. Descriptive statistics were applied. The Leg Ulcer theme stood out; Wound Healing; Exudate with a total of 665 investigations (5,46 %). The articles with national collaboration stood out with 4,479 works (36,8 %). The University of Sydney dominated with the highest number of articles with 219 (1,79 %). United States was outstanding with 2,797 investigations (22,97 %).

Results: a total of 12,172 articles were retrieved. The year 2022 stood out with 2,299 articles (18,88 %). The articles located in Q1 stood out with 3,139 articles (25,78 %).

Conclusions: scientific production on Community and Home Care showed gradual growth in terms of the number of published articles, characterized by an increasing number of citations. The largest number of investigations were located in high-impact journals, from countries with high production rates. A wide group of topics with the greatest national research impact were covered.

Keywords: Community And Home Care; Primary Health Care; Bibliometrics; Scientific Production.

RESUMEN

Introducción: la Atención Comunitaria y Domiciliaria se define como el primer nivel de atención; donde el individuo, mediante la exposición de sus problemas, encuentra el primer contacto con el sistema sanitario. Percibe un tratamiento médico general, a su vez acciones de prevención y promoción de salud.

Objetivo: analizar el comportamiento de las investigaciones sobre Atención Comunitaria y Domiciliaria publicadas en Scopus.

Método: se realizó un estudio bibliométrico sobre la temática de Atención Comunitaria y Domiciliaria comprendidos en el periodo 2018-2022. Fue utilizada la herramienta SciVal para el análisis de los indicadores de producción científica. Se aplicó la estadística descriptiva.

Resultados: se recuperaron un total de 12 172 artículos. Sobresalió el año 2022 con 2 299 artículos (18,88 %). Destacaron los artículos ubicados en el Q1 con 3 139 artículos (25,78 %). Sobresalieron la temática Leg Ulcer; Wound Healing; Exudate con un total de 665 investigaciones (5,46 %). Destacaron los artículos con colaboración nacional con 4 479 trabajos (36,8 %). Predominó la University of Sydney con el mayor número de artículos con 219 (1,79 %). United States resultó sobresaliente con 2 797 investigaciones (22,97 %).

Conclusiones: la producción científica sobre Atención Comunitaria y Domiciliaria presentó un crecimiento paulatino en cuanto al número de artículos publicados, caracterizado por un creciente índice de citas.

El mayor número de investigaciones se ubicaron en revistas de alto impacto, procedentes de países con altos índices de producción. Se abarcaron un amplio grupo de temáticas con la mayor repercusión de investigación de carácter nacional.

Palabras clave: Atención Comunitaria Y Domiciliaria; Atención Primaria De Salud; Bibliometría; Producción Científica.

INTRODUCTION

The development of healthcare assistance for individuals requires an organized process facilitated by a flowchart that enables specialized attention at each stage progressed. In this regard, Community and Home Care; also known as Primary Health Care (PHC), constitutes the foundational or initial link where a close connection is established between healthcare personnel and the patient.

Throughout history, multiple efforts have been made to enhance the development of primary care in each country. In 1978, during the International Conference on Primary Health Care in Alma-Ata, PHC was categorized as one of the strategies to achieve universal health by the year 2000. Between 1966 and the 1970's, there were discussions in the United States centered around a care model based on close contact between doctors and patients, with the former taking responsibility for monitoring the sick. Likewise, in Spain, in 1984, according to Royal Decree 137 on the General Health Law, the health zone was defined as the geographic unit for community care.⁽¹⁾

PHC or Community and Home Care, is defined as the first level of care; where the individual, by exposing their problems, finds their first contact with the health system. It involves receiving general medical treatment, along with prevention and health promotion actions.⁽²⁾

Through home-based care and assistance, an analysis of both patients and their social environment is conducted. Identifying and confronting the risk factors, based on the analysis performed, constitutes one of the actions to be developed by healthcare personnel. In turn, measures involving different implicated sectors in care are anticipated through the implementation of multiple care programs. These aspects support its community-based, intersectoral, and decentralized nature.^(1,3,4)

Within this context, the patient is placed at the center of attention, subject to the influence of numerous factors (whether external or internal), constituting a central aspect of community care, where various actions by healthcare personnel are implemented.⁽⁵⁾ In this sense, the definition of state of health is underpinned as the balance between the social environment and the organic and mental state of the patient, encompassing more than just the absence of disease. It classifies individuals as bio-psycho-social beings.⁽²⁾

The training of professionals dedicated to community care must be comprehensive. It entails a broad understanding of the main health conditions in various systems and how to guide their therapy, with a particular focus on monitoring from PHC. Additionally, these professionals are educated in different working methods tailored to each age group based on their characteristics.⁽²⁾

Previous studies yielded satisfactory outcomes regarding performance in PHC. Mendoza Molina et. al.⁽⁶⁾ conducted an analysis on the satisfaction level and knowledge acquisition from community care, where students' performance was predominantly directed towards skill acquisition; approximately 90 % of the survey respondents exhibited satisfactory results. On the other hand, Torres Peixoto et al.⁽⁷⁾, in their review, emphasized the significance of continuous training in PHC through the generation of new knowledge in community care.

In PHC and Community and Home Care, this is the basis for the sectorized care and attention of society. Its comprehensive and widespread care makes it accessible to all population groups. The importance lies in enhancing efforts to refine the knowledge generated from PHC through research, enabling better training for professionals working in the sector. Hence, the objective of this research is to analyze the behavior of research on Community and Home Care published in Scopus.

METHODS

A bibliometric study was carried out on the topic of Community and Home Care covered in the period 2018-2022.

The universe was integrated by articles that aligned with the subject, totaling 12 172 research studies. No sampling techniques were applied; thus, the entire universe was considered in the analysis.

Statistical Analysis

Descriptive statistical techniques were employed, including absolute numbers and percentages, along with inferential statistics. The results of the variables were processed using the Microsoft Excel program.

Data collection

The data collection involved accessing the SciVal platform. This process included filtering by the thematic area and selecting the Community and Home Care field. Relevant indicators aligned with the study's objective were then extracted.

Bibliometric Indicators

To analyze the scientific production on the topic of Community and Home Care, a set of bibliometric indicators were examined:

- Number of documents (Nodoc): corresponds to the total number of documents published in the area.
- Citations per publication: the quantity of citations received by articles indexed in Scopus.
- H-Index: represents the value associated with the relationship, in descending numerical order, of citations received by published articles. ⁽⁸⁾
- Field-Weighted Citation Impact (FWCI).
- Categories: refers to the category of the journal where the article is published, according to Elsevier's "All-Science Journal Classification Codes". It corresponds to a Scopus system used for the classification of scientific documents (journal articles and congress papers) in different thematic areas: life sciences, physical sciences, health sciences and social sciences and humanities, subdivided into groups and minor fields. ⁽⁹⁾
- Most productive authors.
- Number of citations.
- **International Collaboration (CInt)**: the number of documents involving authors from institutions in at least two different countries.
- **National Collaboration (CInt)**: the number of documents involving authors from at least two different institutions within the same country.
- **Institutional collaboration (NInst)**: the number of documents involving authors from at least two different departments/units within the same institution.
- Articles according to quartiles: based on the ranking defined by journal metrics in CiteScore: Q1 (equal to or less than the 25th percentile), Q2 (between the 26th and 50th percentile), Q3 (between the 51st and 75th percentile), and Q4 (between the 76th and 100th percentile). ⁽⁹⁾
- Most productive institutions and
- Most productive regions.

This study adhered to ethical standards for research in health sciences and followed the principles the Second Declaration of Helsinki.

RESULTS

A total of 12 172 articles related to Community and Home Care were retrieved. The year 2022 stood out with 2 299 articles, accounting for 18,88 %. The articles located in Q1 totaled 3 139, representing 25,78 %, followed by articles in Q4 with 3 037 (24,95 %). (figure 1).

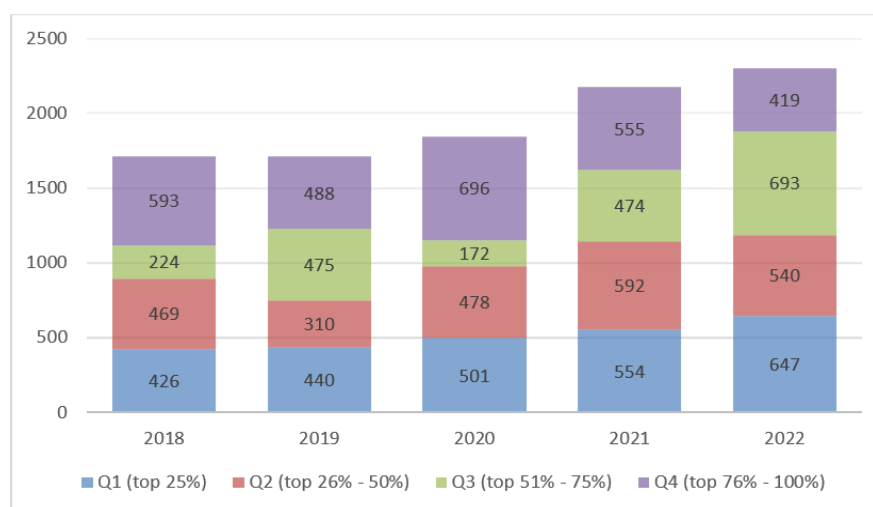


Figure 1. Distribution of articles about Community and Home Care, according to quartiles
Source: SciVal

Research articles related to *Leg Ulcer; Wound Healing; Exudate*, were prominent totaling 665 research

studies, accounting for 5,46 %. This was followed by research on *Medicaid; Long-Term Care; Community-Based and Physical Disability; Rehabilitation; Community-Based*, with 241 (1,97 %) and 183 (1,50 %) articles, respectively. The majority of articles were focused on thematic areas related to medicine (MED), healthcare professionals (HEAL) and nursing (NURS) (table 1).

Table 1. Distribution of articles about Community and Home Care by themes

Topic	Nodc	%	FWCI
Leg Ulcer; Wound Healing; Exudate	665	5,46	0,82
Medicaid; Long-Term Care; Community-Based	241	1,97	0,74
Physical Disability; Rehabilitation; Community-Based	183	1,50	0,57
Community Health Nurses; Caseload; Health Services	182	1,49	0,59
Family Nursing; Conversation; Nurses	138	1,13	1,1
Home Care Agencies; Prospective Payment System; Hospital Readmission	134	1,10	0,96
Social Workers; Nursing Homes; Patient Protection and Affordable Care Act	86	0,70	0,81
National Health Service; Wound Care; Health Economics	83	0,68	0,57
Decision Making; Cheshire; Health Act	80	0,65	0,29
Retirement Communities; Baby Boomers; Villages	63	0,51	0,81

Source: SciVal

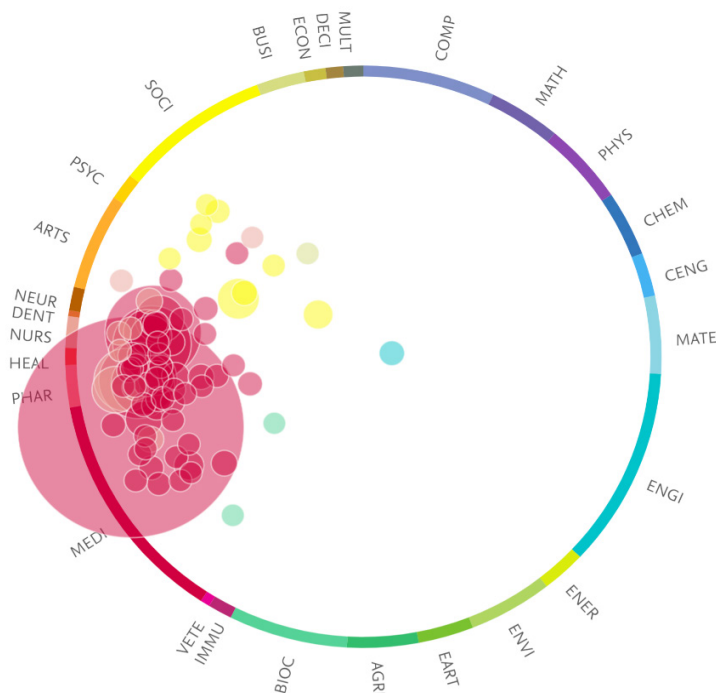


Figure 2. Areas of science to which the selected articles responded
Source: SciVal

The author While, Alison E. stood out with the highest number of published articles on Community and Home Care, totaling 86 research studies, representing 0,70 %. Additionally, this author had the highest number of citations. (table 2).

Articles with national collaboration stood out, comprising 4 479 research studies, accounting for 36,8 %. Simultaneously, they presented the highest number of citations, reaching 16 851 and representing 43,63 %. On the other hand, articles with international collaboration had the highest average citations per article. (table 3). The majority, 99,5 % (12 117), of the articles belonged to the non-academic sector.

Table 2. Distribution of articles about Community and Home Care by most productive authors

Author	Nodc	Citations	Citations per publication	FWIC	H-index
While, Alison E.	86	62	0,7	0,59	47
Nyatanga, Brian	77	52	0,7	0,37	7
Mendes, Aysha	73	16	0,2	0,29	4
Anthony, Maureen J.	36	12	0,3	0,22	11
Bades, Annette	36	3	0,1	0,02	1
Shastay, Ann D.	34	7	0,2	0,1	3
Smith, James A.	31	334	10,8	4,2	19
Hale, Deborah L.	31	22	0,7	0,6	4
Marshall, Katherine A.	31	22	0,7	0,6	4
Palmer, Sarah Jane	31	14	0,5	0,16	2

Source: SciVal

Table 3. Distribution of articles about Community and Home Care, according to collaboration level

Metric	Nodc	Citations	Citations per publication	FWCI
International collaboration	11,8 %	1440	7660	5,3
Only national collaboration	36,8 %	4479	16851	3,8
Only institutional collaboration	27,6 %	3365	10523	3,1
Single authorship (no collaboration)	23,7 %	2888	3574	1,2

Source: SciVal

The *University of Sydney* predominated with the highest number of articles, totaling 219 (1,79 %), and the highest number of citations, reaching 1 128. It was followed by the *University of New South Wales* and *Monash University* with 166 (1,36 %) and 156 (1,28 %) research studies, respectively. (table 4).

Table 4. Distribution of articles about Community and Home Care by institutions and countries

Institutions	Country	Scholarly Output	Citations	Citations per publication	FWCI
University of Sydney	Australia	219	1128	5,2	1,51
University of New South Wales	Australia	166	692	4,2	1,19
Monash University	Australia	156	660	4,2	1,09
King's College London	The United Kingdom	153	263	1,7	0,8
University of Melbourne	Australia	145	739	5,1	1,28
University of Queensland	Australia	140	456	3,3	1,08
Curtin University	Australia	119	531	4,5	1,58
University of Toronto	Canada	106	627	5,9	1,33
Generalitat de Catalunya	Spain	101	55	0,5	0,13
University of Newcastle	Australia	98	383	3,9	1,08

Source: SciVal

The *United States* stood out with a remarkable 2 797 investigations (22,97 %), followed by the *United Kingdom* (1 863; 15,30 %) and *Australia* (1,458; 11,97 %). (table 5).

Table 5. Distribution of articles about Community and Home Care, by regions

Region	Nodc
The United States	2797
The United Kingdom	1863
Australia	1458
Spain	919
Canada	685
Iran	538
South Korea	373
Indonesia	356
Malaysia	294
India	261
Source: SciVal	

DISCUSSION

Community and Home Care constitutes one of the principal components of patient care. Knowledge and actions developed in this sector must be grounded in the latest scientific advancements. Therefore, the analysis of primary indicators within this realm assumes pivotal importance.

In the present study, a gradual growth in scientific production related to Community and Home Care in the analyzed years has been observed, reaching a peak in 2022. This increase can be ascribed to the significance of the development of PHC as the initial contact of any healthcare system with the community. Furthermore, commencing in 2019, the world was deeply affected by COVID-19, prompting the implementation of a series of measures to curb the pandemic.⁽³⁾ Among these measures, the most notable was social isolation, which further determined the specialized development of Community and Home Care. These findings are consistent with those presented by López-Torres Hidalgo et al.⁽¹⁰⁾ in their analysis of investigations related to PHC in Spain from 2013 to 2017, wherein a gradual growth was documented.

Meanwhile, this aligns with the data presented by Castro Fernández⁽¹¹⁾ in her Master's Thesis, referring in her research that approximately 25 % of the analyzed articles belonged to journals classified in Q1 according to *CiteScore*.⁽⁹⁾

Rodríguez-Gómez⁽¹²⁾ in his study on the analysis of qualitative investigations in public health published in biomedical journals, states that the principal themes addressed in the analyzed studies included the care of patients with Human Immunodeficiency Virus (VIH), followed by cancer and PHC in general. However, these findings diverge from those of the present research.

This difference corresponds to the focus and purpose of the studies analyzed in each investigation. Community and Home Care, in conjunction with PHC, are founded on the general and comprehensive patient care. Physicians, in their training, must be capable of addressing diverse situations that may arise in the community. Their approach to comprehensive healthcare, prevention, and health promotion, permits research development across diverse thematic areas. This aspect aligns with the evaluation conducted on the comprehensive healthcare model analyzed by Hernández-Rincón et al.⁽¹³⁾

Physicians bear the responsibility of adhering to the main policies of primary care as defined in each state according to its specificities. They act as spokespeople for the group or work team comprising other healthcare professionals. Consequently, the prevalence of investigations in medical areas can be justified, without overlooking the scientific production related to nursing sciences. Nursing professionals practice their healing work in close contact with patients, while performing the rest of the healthcare functions, as acknowledged by Mondragón-Sánchez et al.⁽¹⁴⁾ in their observational study on the nursing work process in PHC. These findings align with those presented by Guerra Domínguez et al.⁽¹⁵⁾

The results concerning the number of articles per authors (scientific production per authors) and citations differ from those presented by Cruz Montes et al.⁽¹⁶⁾ The variance may be substantiated on the root of the discrepancies in the selection of analyzed articles, considering the methodology employed in each study. Additionally, the search strategies and selected thematic areas can be seen as additional factors justifying the discrepancy between both works.

Collaboration among authors is indispensable for the development of the research process, facilitating the implementation and execution of investigations with a larger number of participants. This collaborative approach ensures a more rigorous analysis by distributing different stages of the research process among each author and allows for multicenter collaboration, thereby increasing the availability of resources for research.

These results are in line with those presented by Alarcón-Ruiz et al.⁽¹⁷⁾

Medina La Torre et al.⁽¹⁸⁾ and Muyor Rodríguez et al.⁽¹⁹⁾ recognize Spain and the United Kingdom, respectively, as the most productive territories or countries in terms of Community and Home Care or PHC. These findings diverge from the outcomes of the present research. It is noteworthy that both the current study and the analyzed studies underscore countries with a high index of scientific production across various fields of science.
(20,21)

CONCLUSIONS

Scientific production on Community and Home Care exhibited a gradual increase in terms of the number of published articles, characterized by a concurrent rise in citation rates. The majority of these investigations were located in high-impact journals, from countries with high production rates. A wide group of topics with the greatest national research impact were covered.

REFERENCES

1. Colectivo de autores. Medicina general integral. Tomo I. Salud y medicina. Vol. 1. 4ta. La Habana: Editorial Ciencias Médicas; 2022.
2. Satué de Velasco E, Gayol Fernández M, Eyaralar Riera MT, Magallón Botaya R, Abal Ferrer F. Impacto de la pandemia en la atención primaria. Informe SESPAS 2022. Gac Sanitaria. 2022; 36(S1): 530-535. <https://doi.org/10.1016/j.gaceta.2022.05.004>
3. Martínez-Riera JR, Gras-Nieto E. Atención domiciliaria y COVID-19. Antes, durante y después del estado de alarma. Enfermería Clínica. 2021; 31(2021): 524-528. <https://doi.org/10.1016/j.enfcli.2020.05.003>
4. Canova-Barrios CJ, Lepez CO, Manzitto G, Ortigoza A. La investigación y la publicación científica en enfermería en Argentina. Data and Metadata 2022;1:27-27. <https://doi.org/10.56294/dm202235>
5. Picado Ovarés JE. Los cuidados paliativos domiciliarios reducen las consultas a urgencias y muertes en centros de salud a un menor costo. Rev. Bras. Geriatr. Gerontol. 2021; 24(5): 1-11. <https://dx.doi.org/10.1590/1981-22562021024.210112>
6. Mendoza Molina A, Estrada Fonseca RC, Águila Hernández T, Martínez Rodríguez MA, Suárez Ramírez M, Mirabal Mendoza E. Satisfacción de estudiantes y docentes con la educación en el trabajo desde la Atención Primaria. Educ Med Sup. 2019; 33(3): e1667.
7. Torres Peixoto M, Abreu de Jesus WL, Cabral de Carvalho R, Araújo Assis MM. Formación médica en la Atención Primaria de la Salud: experiencia con múltiples abordajes en las prácticas de integración enseñanza, servicio y comunidad. Interface. 2019; 23(S1): 1-14. <https://doi.org/10.1590/Interface.170794>
8. Saltos GDC, Oyarvide WV, Sánchez EA, Reyes YM. Análisis bibliométrico sobre estudios de la neurociencia, la inteligencia artificial y la robótica: énfasis en las tecnologías disruptivas en educación. Salud, Ciencia y Tecnología 2023;3:362-362. <https://doi.org/10.56294/saludcyt2023362>
9. Cisnero-Piñeiro AL, Fernández-Delgado MC, Ramírez-Mendoza JA. Trends in scientific production in the Industrial and Manufacturing Engineering area in Scopus between 2017 and 2021. Data and Metadata. 2022; 1:6. <https://doi.org/10.56294/dm20226>
10. López-Torres Hidalgo J, Párraga Martínez I, Martín Álvarez R, Tranche Iparraguirre S. Mapa bibliométrico de la investigación realizada en atención primaria en España durante el periodo 2013-2017. Aten Primaria. 2020; 52(7): 469-476. <https://doi.org/10.1016/j.aprim.2019.08.002>
11. Castro Fernández N. Análisis bibliométrico de la producción científica colombiana en administración de salud (2005-2019) [Tesis]. Santiago de Cali: Universidad del Valle; 2021. <https://bibliotecadigital.univalle.edu.co/server/api/core/bitstreams/646eb734-6dbe-436b-a38a-d2b884ce9a57/content>
12. Rodríguez-Gómez R. Investigaciones cualitativas en salud pública publicadas en revistas biomédicas colombianas entre el 2011 y el 2021. Biomedica. 2022; 43(2023): 69-82. <https://doi.org/10.7705/biomedica.6476>
13. Hernández-Rincón EH, Muñoz-Abril YC, Avella-Pérez LP. Rol del médico familiar en el nuevo modelo

integral de atención en salud en Colombia. Rev Cub Med Gen Inte. 2019; 35(3): e466. <https://revmgi.sld.cu/index.php/mgi/article/view/466/270>

14. Mondragón-Sánchez EJ, Bernal-Ordonez LK, Corpus-Quiguanás J. Proceso de trabajo de enfermería en la atención primaria de salud: estudio observacional. Rev. cienc. ciudad. 2021; 18(3):22-31. <https://doi.org/10.22463/17949831.285>

15. Castillo JIR. Identifying promising research areas in health using bibliometric analysis. Data and Metadata 2022;1:10-10. <https://doi.org/10.56294/dm202210>

16. Cruz Montes JJ, García Zabala LK, Buitrago Sánchez IA. Producción científica de la intervención de terapia ocupacional en personas con demencia periodo 2014-2019: un estudio bibliométrico [Tesis]. Cali -Valle: Universidad del Valle - Sede Cali; 2020. Producción científica: <https://bibliotecadigital.univalle.edu.co/entities/publication/82fbb34-088b-47e5-931a-1d87a5b158f5>

17. Alarcón-Ruiz, C., Cortez-Soto, A., Romero-Cerdan, A., Benites-Bullón, A., Altamirano-Farfá, E., Pino Zavaleta, D. et al. Producción científica y redes de colaboración en la Seguridad Social del Perú (EsSalud): Análisis bibliométrico 2008-2020. Rev Cuer Méd Hospital Nacional Almanzor Aguinaga Asenjo. 2021; 14(2), 145 - 154. <https://doi.org/10.35434/rcmhnaaa.2021.142.1030>

18. Silva-Nieves DS, Serrato-Cherres AG, Rojas JMS, Flores ACP, Sullca-Tapia PJ. Contrastando Estrategias Educativas en Ciencias de la Salud vs. Disciplinas No Relacionadas con la Salud: Reflexiones desde la Base de Datos Scopus. Salud, Ciencia y Tecnología 2023;3:439-439. <https://doi.org/10.56294/saludcyt2023439>

19. Ledesma F, González BEM. Bibliometric indicators and decision making. Data and Metadata 2022;1:9-9. <https://doi.org/10.56294/dm20229>

20. García MB, Acosta ND, Castro KG. Producción científica sobre el uso de las TIC como herramienta de inclusión social para personas sordas: un análisis bibliométrico. Salud, Ciencia y Tecnología 2023;3:318-318. <https://doi.org/10.56294/saludcyt2023318>

21. Muyor Rodríguez J, Fernández Prados JS. análisis bibliométrico de la producción científica en Scopus sobre políticas de cuidados en Europa de cuidados en Europa. Revista Prisma Social. 2021; 32(2021): 1-24.

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CONFLICT OF INTEREST

The authors declare that they have no conflict of interest

DECLARATION OF AUTHORSHIP

Conceptualization: Luis Enrique Jiménez Franco.

Data curation: Luis Enrique Jiménez Franco.

Formal data analysis: Luis Enrique Jimenez Franco.

Research: Luis Enrique Jimenez Franco.

Methodology: Luis Enrique Jiménez Franco.

Project Management: Luis Enrique Jiménez Franco.

Visualization: Luis Enrique Jimenez Franco.

Writing - original draft: Luis Enrique Jiménez Franco.

Writing - revision and editing: Luis Enrique Jimenez Franco.