ODOVTOS
International Journal of Dental Sciences

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BASIC RESEARCH:

Scientometric Analysis of the Scientific Productivity of "Odovtos-International Journal of Dental Sciences": Collaborative Networks, Trends and Dynamicity
Análisis cienciométrico de la productividad científica de "Odovtos-Revista Internacional de Ciencias Dentales": Redes colaborativas, tendencias y dinámica

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ABSTRACT: This study aim to analyze the scientific productivity of the journal "Odovtos-International Journal of Dental Sciences" during the period from 2019 to 2023. Manuscripts were selected from the Scopus database using the search criterion `SRCTITLE ("Odovtos-International Journal of Dental Sciences") AND PUBYEAR > 2019 AND PUBYEAR < 2024`. During the evaluated period, 164 manuscripts were identified in the journal. Of these, 36 articles, 14 reviews, 7 editorials, and 7 letters to the editor were evaluated. The selected manuscripts were analyzed in terms of their content, authors, institutions, countries of origin, keywords provided by the authors, and citations received. Amaury De Jesús Pozos-Guillen, from the Universidad Autónoma de San Luis Potosí in Mexico, had the highest academic production with a total of 10 publications. Adrián Gómez-Fernández, from the University of Costa Rica, showed a high Field-Weighted Citation Impact (Field-Weighted Citation Impact) with a value of 0.45, having received 43 citations in total. The University of Costa Rica led in terms of academic production with 44 publications. The Universidad Científica del Sur in Peru produced 15 publications. Despite having only 5 publications, the Universidad Arturo Prat in Chile achieved a high citation impact weighted by field of 0.86. The results of the analysis provided valuable insight into scholarly production and collaboration among authors in the journal. The findings of this study may be useful for researchers, journal editors, and policy makers to better understand the dynamics and trends in the field of dental sciences.

KEYWORDS: Bibliometrics; Scholarly output; Scientific productivity.

RESUMEN: Este estudio analizó la productividad científica de la revista "Odovtos-International Journal of Dental Sciences" durante el período de 2019 a 2023. Los manuscritos fueron seleccionados de la base de datos Scopus utilizando el criterio de búsqueda `SRCTITLE ("Odovtos-International Journal of Dental Sciences") Y AÑO PUBLIC > 2019 Y AÑO PUBLIC < 2024`. Durante el período evaluado, se identificaron 164 manuscritos en la revista. De ellos se evaluaron 36 artículos, 14 revisiones, 7 editoriales y 7 cartas al editor. Los manuscritos seleccionados fueron analizados en cuanto a su contenido, autores, instituciones, países de origen, palabras clave proporcionadas por los autores y citas recibidas. Amaury De Jesús Pozos-Guillen, de la Universidad Autónoma de San Luis Potosí en México, tuvo la mayor producción académica con un total de 10 publicaciones. Adrián Gómez-Fernández, de la Universidad de Costa Rica, mostró un alto Field-Weighted Citation Impact (Impacto de citación ponderado por campo) con un valor de 0,45; recibiendo 43 citaciones en total. La Universidad de Costa Rica lideró en términos de producción académica con 44 publicaciones. La Universidad Científica del Sur de Perú produjo 15 publicaciones. A pesar de tener solo 5 publicaciones, la Universidad Arturo Prat de Chile logró un alto impacto de citación ponderado por campo de 0,86. Los resultados del análisis proporcionaron información valiosa sobre la producción académica y la colaboración entre los autores de la revista. Los hallazgos de este estudio pueden ser útiles para que investigadores, editores de revistas y formuladores de políticas comprendan mejor la dinámica y las tendencias en el campo de las ciencias odontológicas.

PALABRAS CLAVE: Bibliometría; Producción académica; Productividad científica.

INTRODUCTION

The process of editing scientific journals is one of the most significant challenges for universities, entities, and editorial offices worldwide. Managing a journal entails a variety of responsibilities, including the publication and dissemination of original and transcendental research, as well as the maintenance of ethical standards in academic and scientific publishing.

A journal's editorial process validates the scientific publication supported by the reviewers' and editorial committee's experience and knowledge in the field. Thus, the source of information and the methods for their evaluation or their use are critical for serious scientific research (1). A journal is required to ensure that the articles published can be accessible worldwide to obtain a scientific output in the community (2). Thus, bibliometric indicators can be analyzed by impact factor, immediacy index, total citations per year, and citation half-life (3).

Odovtos-International Journal of Dental Sciences was first published by the Faculty of Dentistry of the University of Costa Rica in 1999. Over the years, this journal has risen in reputation and visibility to become the leading journal in the field in Central America and recognized among the Latin-American dental community. Odovtos has achieved a notable accomplishment by earning a position on the prestigious 2022 JCR Impact Factor list published by Clarivate Analytics. Within the Dentistry, Oral Surgery & Medicine category, the journal ranks 133rd out of 156, placing it in Quartile Q4. This ranking is reflected by an Impact Factor of 0.5 and a Journal Citation Indicator of

0.19. There are just four additional Latin American periodicals on the list, with ODOVTOS being the only one specific to Central America. Currently, a renovated Editorial team aspires to acquire international recognition based on the exponential growth of their bibliometric indicators (4).

A scientometric analysis is the quantitative evaluation of science and scientific research results. It entails examining many elements of scientific productivity, including publications, citations, cooperation patterns, impact variables, and trends within or across scientific disciplines (5). Overall, scientometric analysis offers insightful information on the dynamics, productivity, and effect of scientific research, assisting institutions, researchers, and policymakers in the scientific community's strategic planning and decision-making.

Therefore, this research aimed to describe, through a scientometric analysis, the scientific productivity of "Odovtos-International Journal of Dental Sciences in the period 2019-2023.

MATERIALS AND METHODS

STUDY DESIGN

The design was descriptive, retrospective as a bibliometric analysis of manuscripts published in the journal "Odovtos-International Journal of Dental Sciences" during the period from 2019 to 2023.

DATA SOURCE SELECTION

The selected manuscripts were classified into various categories, including articles, reviews, editorials, and letters to the editor. They were analyzed in terms of their content, authors, institutions, countries of origin, keywords provided by the authors, and citations received. The Scopus database was used for manuscript selection. The search criterion `SRCTITLE ("Odovtos-International Journal of Dental Sciences") AND PUBYEAR > 2019 AND PUBYEAR < 2024 was applied.

MANUSCRIPT SELECTION

During the period evaluated, 164 manuscripts were identified in the "Odovtos-International Journal of Dental Sciences". Of these, 36 articles, 14 reviews, 7 editorials and 7 letters to the editor were evaluated.

MANUSCRIPT ANALYSIS

The selected manuscripts were analyzed in terms of their content, authors, institutions, countries of origin, keywords provided by the authors, and citations received. Trends and dynamics in scholarly production and collaboration between authors were identified.

INTERPRETATION OF RESULTS

The results of the analysis provided valuable insight into the scholarly output and inter-author collaboration in the journal "Odovtos-International Journal of Dental Sciences". The findings of this study may be useful for researchers, journal editors, and policy makers to better understand the dynamics and trends in the field of dental sciences.

RESULTS

In this bibliometric study, Amaury De Jesús Pozos-Guillen, from the Universidad Autonoma de San Luis Potosi in Mexico, was found to have the highest academic production with a total of 10 publications, although these have not received any citations to date. On the other hand, Adrián Gómez-Fernández, from the University of Costa Rica, showed a high field-weighted citation impact

(Field-Weighted Citation Impact) with a value of 0.45, having received 43 citations in total. These results underscore the significant contribution of these authors to the journal and to dental science in general. However, it is important to remember that the quantity of publications or citations does not always reflect the quality of the research, being essential to read and understand the content of the publications to evaluate their relevance and quality (Table 1).

The University of Costa Rica in Costa Rica led in terms of academic production with 44 publications, which have accumulated a total of 789 views and 60 citations, with a field-weighted citation impact of 0.16. The Universidad Científica del Sur in Peru has produced 15 publications, which received 350 views and 6 citations, with a field-weighted citation impact of 0.07. On the other hand, the Universidad Científica del Sur in Peru has produced 15 publications, which have received 350 views and 6 citations, with a field-weighted citation impact of 0.07. Despite having only 5 publications, the Universidad Arturo Prat in Chile has achieved a high field-weighted citation impact of 0.86, with 13 citations in total (Table 2).

Table 1. Top-10 authors.

Author	Affiliation	Country/Region	Scholarly Output	Views Count	Field-Weighted Citation Impact	Citation Count
Pozos-Guillen, Amaury De Jesús	Universidad Autonoma de San Luis Potosi	Mexico	10	99	0	0
Chavarria-Bolaños, Daniel	University of Costa Rica	Costa Rica	7	129	0.35	41
Reyes Carmona, Jessie Fabiola	University of Costa Rica	Costa Rica	7	60	0.29	4
Gómez-Fernández, Adrián	University of Costa Rica	Costa Rica	6	159	0.45	43
Montero-Aguilar, Mauricio	University of Costa Rica	Costa Rica	6	89	0.34	40
da Costa, Eliana Dantas	Universidade de São Paulo	Brazil	5	96	0.25	3
Ramirez, Karol	University of Costa Rica	Costa Rica	5	132	0.22	4
Barboza-Solis, C.	University of Costa Rica	Costa Rica	4	99	0.19	7
Boza Oreamuno, Yadira V.	University of Costa Rica	Costa Rica	4	18	0.07	2
Guerreiro-Tanomaru, Juliane	Universidade Estadual Paulista Júlio de Mesquita Filho	Brazil	4	25	0.44	3

Table 2. Top-10 productive colleges.

Institution	Country/Region	Scholarly Output	Views Count	Field-Weighted Citation Impact	Citation Count
University of Costa Rica	Costa Rica	44	789	0.16	60
Universidad Científica del Sur	Peru	15	350	0.07	6
Universidad Autonoma de San Luis Potosi	Mexico	13	145	0	0
Universidad Nacional Mayor de San Marcos	Peru	9	253	0.15	4
Universidad Nacional Autónoma de México	Mexico	8	90	0.02	1
Universidade Estadual de Campinas	Brazil	7	108	0.18	3
Altinbas University	Turkey	5	91	0.71	14
Bezmialem Vakif University	Turkey	5	73	0.57	7
Universidad Arturo Prat	Chile	5	15	0.86	13
Universidade Estadual Paulista Júlio de Mesquita Filho	Brazil	5	64	0.43	4

In the period from 2019 to 2023, a total of 195 papers from the journal "Odovtos - International Journal of Dental Sciences" were analyzed. These papers showed an annual growth rate of 8.52% and an average age of 2.83 years. On average, each paper received 1,138 citations. Regarding the contents of the papers, 704 keywords provided by the authors were identified. Regarding authors, 567 authors were identified in total, of which 25 were authors of single-authored papers. The papers had an average of 3.53 coauthors per paper, and 13.85% of the papers included international coauthorships. In terms of paper types, the majority were articles (161), followed by reviews (18), editorials (9), and letters (7). These results provide valuable insight into the scholarly output and collaboration between authors in the Odovtos-International Journal of Dental Sciences (Table 3).

Table 3. Main information.

Description	Results
Timespan	2019:2023
Sources (Journals, Books, etc)	1
Documents	195
Annual Growth Rate %	8.52
Document Average Age	2.83
Average citations per doc	1.138
References	5790
DOCUMENT CONTENTS	
Keywords Plus (ID)	0
Author's Keywords (DE)	704
AUTHORS	
Authors	567
Authors of single-authored docs	25
AUTHORS COLLABORATION	
Single-authored docs	32
Co-Authors per Doc	3.53
International co-authorships %	13.85
DOCUMENT TYPES	
Article	161
Editorial	9
Letter	7
Review	18

The map of collaboration between countries revealed several interesting interactions. For example, Mexico and Costa Rica show the most frequent collaboration, with 7 interactions recorded. Brazil shows strong collaboration with both Peru and the United States, with 4 interactions each. Costa Rica has also collaborated 4 times with Brazil. Collaborations between Mexico and Canada, Mexico and Chile, Mexico and Chile, Mexico and Colombia, Costa Rica and Canada, Costa Rica and Chile, Peru and Ecuador, Peru and India, United States and Colombia, and United States and Italy have been recorded once. These results underscore the global nature of research in the Odovtos-International Journal of Dental Sciences, with collaborations crossing borders and continents (Figure 1).

In the period from 2019 to 2023, an interesting thematic evolution was observed in the journal "Odovtos-International Journal of Dental Sciences". For example, bruxism and composite resin maintained a constant presence during this period, although bruxism showed a relatively low rate of stability, indicating possible variations in its treatment. The theme of COVID-19 and dentistry emerged in 2019-2020 and evolved into "dental materials" in 2021-2022, although its inclusion rate suggests that this theme may not be fully integrated into the journal. Oral hygiene evolved into "oral health" in 2021-2022, and shear bond strength maintained a constant presence. Cone beam computed tomography emerged as a new topic in 2021-2022. These results underscore the dynamics and evolution of topics in the journal during this period (Figure 2).

In the term frequency analysis, the terms "covid-19", "dental materials" and "dentistry" were found to be the most frequently mentioned terms, each with a frequency of 10 (5%). The terms "bruxism", "composite resins", "cone-beam computed tomography", "endodontics" and "shear bond strength" have a frequency of 6. Lastly, "composite resin" and "knowledge" have a frequency of 5 (Figure 3).

The keyword co-occurrence graph showed how certain keywords tend to appear together in the same context. If you observed 4 large clusters in the order of "Covid-19", "Dental material", "Bruxism" and "Periodontitis", this suggests that these terms tend to co-occur together in your dataset. The "covid-19" cluster suggests that there is a set of documents or texts that discuss covid-19. The cluster "Dental material" suggests that there is another set of documents that focus on dental materials. Similarly, the clusters "Bruxism" and "Periodontitis" represent sets of documents that discuss these respective topics. Since these clusters are close to each other in the graph, this could indicate that these topics are related or are frequently discussed together. If they are further apart, this could indicate that they are more distinct or independent of each other (Figure 4).
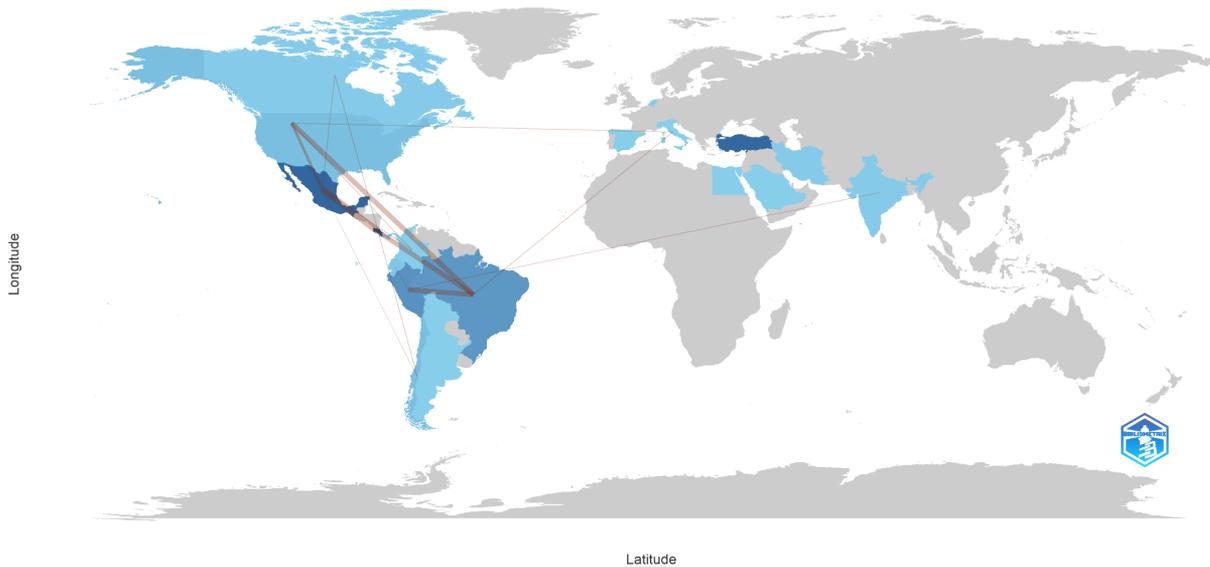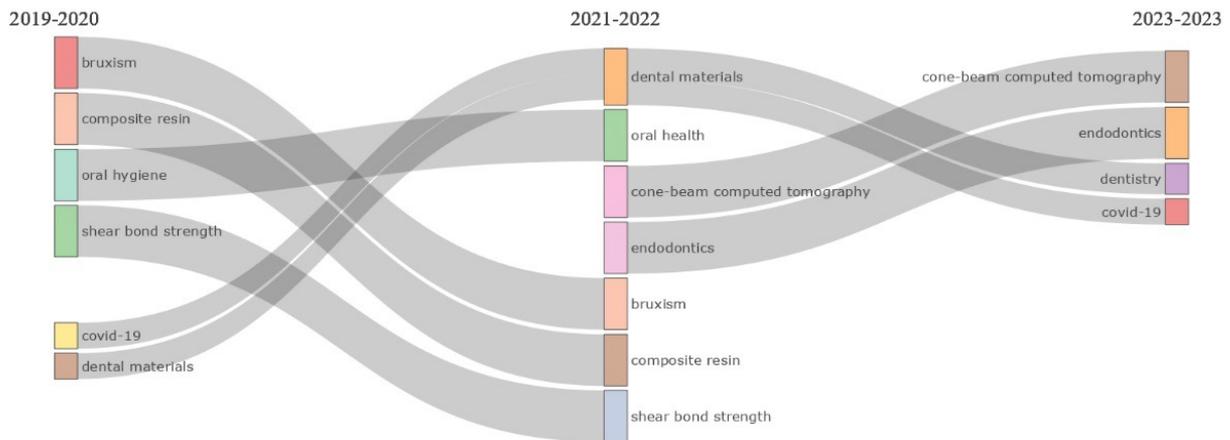

Figure 1. Country collaboration map.
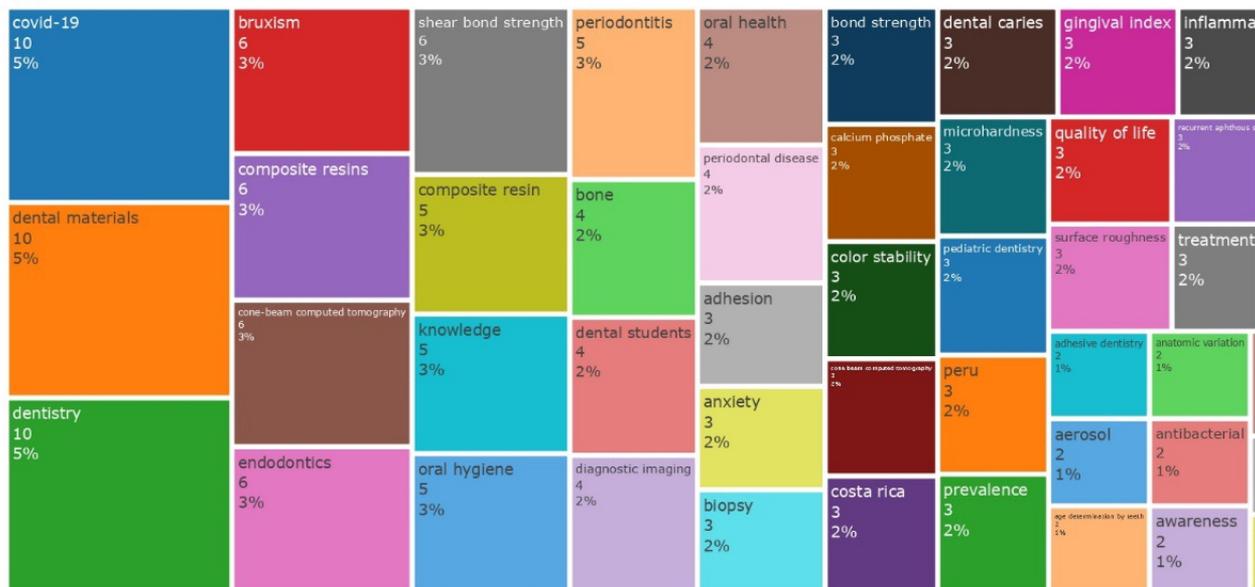

Figure 2. Thematic evolution.
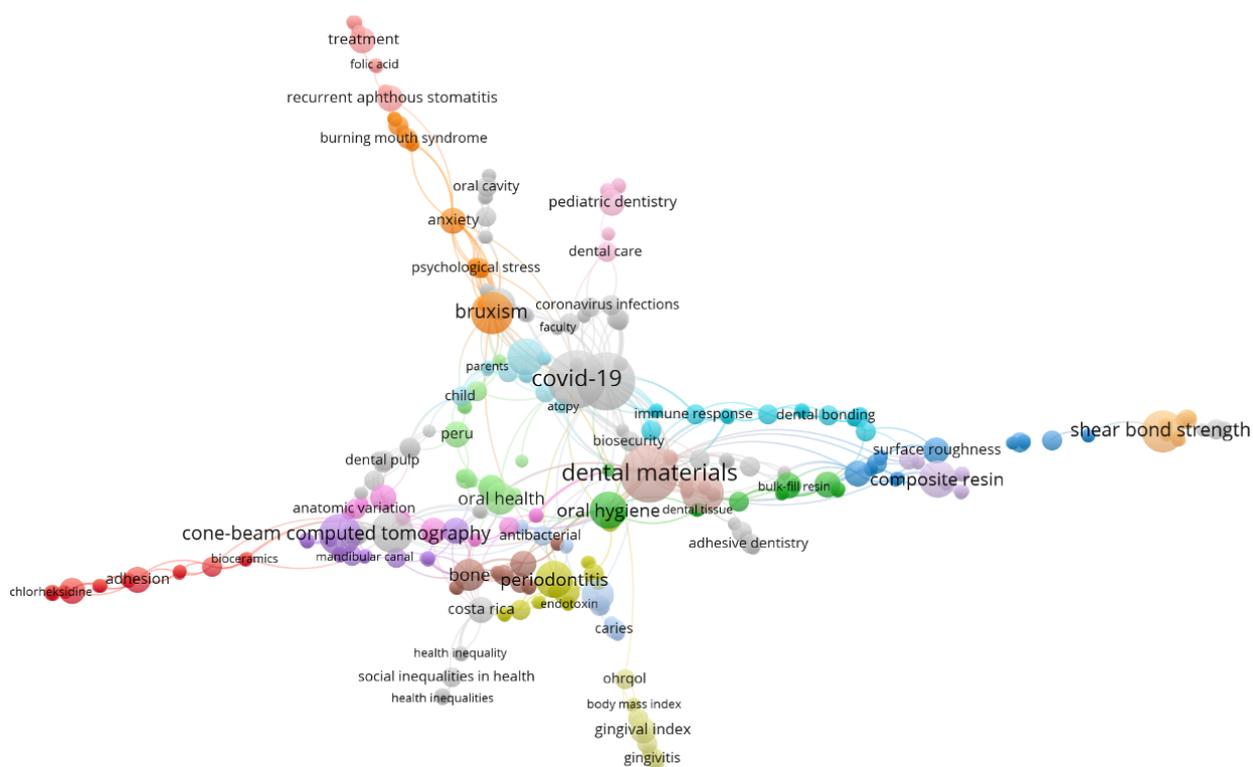
Figure 3. Tree map.

Figure 4. Co-occurrence by key words.

DISCUSSION

Currently, the number of scientific publications has experienced exponential growth. This boom, driven by the increase in both official and independent journals and publishers, has generated the need for tools to evaluate the quality of the information available. In this context, scientific databases have become a fundamental ally for researchers. These platforms house a vast bibliography and, through specific quality criteria, help to discern between reliable information and that which does not meet scientific standards. Scientific databases are a fundamental pillar in the information age, helping researchers navigate the vast ocean of scientific publications and find the reliable information they need. They are an indispensable tool for the advancement of scientific knowledge and for informed decision making in health and research (6-11).

For example, a recent study analyzed the most cited articles in dentistry between 2005 and 2019, finding that periodontics and dental implants ranked high, with 40% of the most cited articles. Leading periodontics journals, such as Journal of Clinical Periodontology, Journal of Periodontology and Periodontology 2000, experienced a significant increase in their impact factor, ranking among the top 10 most cited dental journals. In some years, Journal of Clinical Periodontology and Periodontology 2000 even obtained the highest impact factor in dentistry. These results show the importance of research in periodontology and dental implants for oral health and medicine in general. Journals in this area continue to publish high impact articles, demonstrating their relevance and value to the scientific and medical community (12).

In the realm of endodontics, The International Endodontic Journal (IEJ) has established itself as a leading voice since 1967. A recent study delved into the journal's rich history, offering a bibliometric analysis and overview of its publications from 1967 to 2020. The researchers utilized Elsevier's Scopus database to comprehensively identify all IEJ publications and employed various bibliometric software packages, including the open-source visualization tools Gephi and Biblioshiny (version 2.0), to analyze and visualize the data. Their findings solidified IEJ's position as a top endodontic journal, highlighting its role in fostering and disseminating innovative research and clinical reports for over five decades. The study also revealed the journal's global reach, showcasing contributions from a diverse range of authors, institutions, and countries around the world (13).

Even in Asia, the ever-evolving landscape of dental journals demands regular evaluation. Enter the Journal of Dental Sciences (JDS), committed to publishing high-quality articles across all dentistry disciplines. This study dissects the bibliometric characteristics of JDS, specifically focusing on factors tied to citation counts of its "classic" articles. Utilizing the Scopus database, researchers delved into JDS publications from 2009 to 2021. They meticulously analyzed various bibliometric parameters, including journal impact factor (JIF), self-citations, study design, research field, origin details, collaboration trends, and keywords. Their aim: to identify factors associated with highly cited articles. While acknowledging limitations, the study revealed positive trends. Both JIFs (with and without self-citations) and inter-institutional/international collaboration exhibited upward trajectories among classic articles. Interestingly, of all analyzed factors, Preventive and Community Dentistry emerged as the field most significantly boosting citation counts for classic JDS articles (14).

Another noteworthy study explored the scientific output of the Journal of Clinical and Experimental Dentistry (JCED). Launched in 2009 as an English-language publication by the Spanish Society of Oral Surgery, JCED quickly established its online presence and gained recognition by indexing in PubMed Central and Scopus in 2012.

Since 2016, it has consistently delivered monthly installments of dental research. The study meticulously evaluated 11 years of content, diving into the number, type, and subject matter of published articles. It further analyzed the institutions of first authors, citations on PubMed, and the h5 index, a metric reflecting research impact.The findings confirmed JCED's significant contribution to the vast library of dental knowledge. Authors concluded that the journal has consistently provided a platform for diverse dental research, encompassing various disciplines and attracting researchers from around the globe (15).

Another important study mentioned that bibliometrics allows to evaluate the scientific production of journals. For this reason, the International Dental Journal (IDJ) was evaluated between 2011 and 2020. For this purpose, all the articles published in IDJ in Scopus between 2011 and 2020 were analyzed. Indicators such as number of publications, most productive institutions, collaboration, most productive countries, most cited articles, and most prolific authors were used. The data were analyzed with SciVal. They concluded that IDJ is a high-quality journal with high global impact in dentistry, which is reflected in the high number of citations of its articles. It is positioned as a reference for future research in the field (16).

The present study had some limitations such as, for example, the limited database as only Scopus was used, which excludes other important databases such as Web of Science. This could bias the results, as coverage varies between databases. Also, it is important to engage in the process of peer review, a researcher must have gained a certain level of expertise in specific research areas, encompassing both technical proficiency and substantial understanding (17). In addition, the short period because only five years were evaluated limits the understanding of long-term trends and journal evolution. A longer period would allow more stable patterns to be observed. Lack of contextualization, because the study does not analyze external factors that can influence scientific productivity, such as funding, editorial policies or changes in the dental research landscape. However, despite these limitations, the study provides a valuable starting point for understanding the scientific productivity of "Odovtos". Future studies with greater breadth, depth and diversity of data sources could shed light on the evolution of the journal and its positioning within the field of dentistry.

CONCLUSIONS

The journal Odovtos stands as a beacon of knowledge, illuminating the minds of researchers and practitioners. Between 2019 and 2023, its pages have witnessed vibrant scientific activity, with authors from diverse countries weaving a global collaborative network. Adrián Gómez-Fernández, from the University of Costa Rica, stands out as a prolific author, receiving a high number of citations for his work. On the other hand, Amaury De Jesús Pozos-Guillen, from the Universidad Autónoma de San Luis Potosí, invites us to explore his numerous publications. The University of Costa Rica is crowned as the leading institution in scientific production, followed by the Universidad Científica del Sur in Peru and the Universidad Arturo Prat in Chile. The latter, despite its lower production, achieves a remarkable impact in its publications. In short, Odovtos is consolidated as a space for the exchange of ideas, promoting the advancement of dentistry and providing valuable tools to improve the oral health of the population.

CONFLICT OF INTEREST

No conflict of interest.

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None to declare.

AUTHOR CONTRIBUTION STATEMENT

Conceptualization and design: F.E.C., F.M.T. and J.F.R.C.
Literature review: L.V., D.G.V and J.M.
Methodology and validation: F.M.T .and F.E.C.
Formal analysis: J.F.R.C.
Investigation and data collection: F.E.C. and D.G.V.
Resources: F.E.C. and L.V.
Data analysis and interpretation: F.M.T., F.E.C., D.G.V.
Writing-review and editing: J.F.R.C. and J.M.
Supervision: F.M.T.
Project administration: J.M. F.E.C. and L.V.

REFERENCES

1. de Marco A. Metrics and evaluation of scientific productivity: would it be useful to normalize the data taking in consideration the investments? Microb Cell Fact. 2019; 18 (1): 181.
2. Reyes-Carmona J. Peer Reviews in Scientific Journals: Recommendations from ODOVTOS. Odovtos - International Journal of Dental Sciences. 2021; 23 (3): 10-22.
3. Thwaites T. Research metrics: Calling science to account. Nature. 2014; 511 (7510): 57-60.
4. Reyes Carmona J. Editor-in-Chief Editorial. Odovtos - International Journal of Dental Sciences. 2015;17 (3): 9.
5. Cabanillas-Lazo M., Quispe-Vicuña C., Loli-Guevara S., Mego J.C., Ruiz-Yaringaño A.J., Barja-Ore J., et al. A 10-year scientometric analysis of the academic publications of the 27 Peruvian Scientific Societies of Medical Students. Educación Médica. 2023; 24 (1): 100771.
6. Butler D. Investigating journals: The dark side of publishing. Nature News 2013; 495: 433.
7. Eriksson S., Helgesson G. The false academy: predatory publishing in science and bioethics. Med Health Care Philos 2017; 20: 163-70.
8. Ioannidis J.P. The mass production of redundant, misleading, and conflicted systematic reviews and meta-analyses. Milbank Q 2016; 94: 485-514.
9. Shamseer L., Moher D., Maduekwe O., Turner L., Barbour V., Burch R., et al. Potential predatory and legitimate biomedical journals: can you tell the difference? A cross-sectional comparison. BMC Medicine 2017; 15: 28.
10. Demir S.B. Scholarly databases under scrutiny. Journal of Librarianship and Information Science 2018; 52: 150-60.
11. Alhajj M.N., Al-Sanabani F.A., Alkheraif A.A., Smran A., Alqerban A., Samran A. Bibliometric analysis and evaluation of the Journal of Prosthetic Dentistry from 1970 to 2019. J Prosthet Dent. 2023; 129 (2): 323-340.
12. Ahmad P., Slots J. A bibliometric analysis of periodontology. Periodontol 2000. 2021; 85 (1): 237-240.
13. Khan A.S., Ur Rehman S., Ahmad S., AlMaimouni Y.K., Alzamil M.A.S., Dummer P.M.H. Five decades of the International Endodontic Journal: Bibliometric overview 1967-2020. Int Endod J. 2021; 54 (10): 1819-1839.
14. Chen M.C., Chen S.H., Cheng C.D., Chung C.H., Mau L.P., Sung C.E., Weng P.W., Cathy Tsai Y.W., Shieh Y.S., Huang R.Y.,

Cheng W.C. Mapping out the bibliometric characteristics of classic articles published in a Taiwanese academic journal in dentistry: A scopus-based analysis. J Dent Sci. 2023; 18 (4): 1493-1509.

15. Bhalla V.K., Chockattu S.J. Publication trends in journal of clinical and experimental dentistry. J Clin Exp Dent. 2020; 12 (9): e857-e863.

16. Mayta-Tovalino F., Quispe-Vicuña C., Cabanillas-Lazo M., Munive-Degregori A., Guerrero M.E., Mendoza R. A Bibliometric Analysis of the International Dental Journal (2011-2020). Int Dent J. 2023; 73 (1): 157-162.

17. Salcedo A. Perspectives on peer-review and editorial activities of Peruvian dental researchers. Rev Cient Odontol. 2023; 11 (4): e170.

PEER REVIEW PROCESS
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