

A Scopus-Based Bibliometric Analysis of the *Journal of Craniofacial Surgery* From 1990 to 2023

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Objectives: This study aims to conduct a Scopus-based bibliometric analysis of the studies published in the *Journal of Craniofacial Surgery*, which has a very important place in its field.

Methods: In this bibliometric study, all articles in the *Journal of Craniofacial Surgery* in the Scopus database on 7 July 2024 were listed. The information of the listed articles was exported in CSV file format. When exporting these articles, the citation information, bibliographic information, abstract and keywords, funding details, and other information options were all selected. These exported CSV data were analyzed with VOSviewer software (version 1.6.18).

Results: The bibliometric analysis of the *Journal of Craniofacial Surgery* from 1990 to 2023 included 15,271 articles listed in the Scopus database. The majority (84.7%) of these articles were original studies. The top 5 countries with the highest number of publications were the United States (4004 articles), Turkey (2124 articles), China (2111 articles), South Korea (1597 articles), and Italy (1109 articles).

Conclusion: This comprehensive bibliometric analysis demonstrates the *Journal of Craniofacial Surgery*'s increasing prominence and impact in the field over the years. The diverse international contributions highlight the journal's role in fostering global collaboration and knowledge dissemination in craniofacial and maxillofacial research. While the use of a single database (Scopus) is a limitation, the study provides a detailed overview of the journal's scholarly contributions, influential authors, and publication trends. These findings underscore the journal's pivotal position in advancing craniofacial surgery research and education.

Key Words: Bibliometric analysis, *Journal of Craniofacial Surgery*, Scopus

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The *Journal of Craniofacial Surgery*, established in 1985 and first published in 1990, has a crucial role in its field.¹ Since its first publication, it continues to publish all kinds of information and educational materials related to the craniofacial and maxillofacial regions.^{2,3} The *Journal of Craniofacial Surgery* covers surgical procedures related to these regions and all topics related to the basic sciences underlying these procedures. In this way, it mediates the dissemination of up-to-date information worldwide.^{3,4} This steady progress of the journal, especially due to its emphasis on educational materials, has led to significant increases in journal metrics in Scopus, as in many other indexes. The rise in CiteScore values for the last 5 years is one of the most prominent examples of this situation (The CiteScores 2019–2023 are 1.3, 1.3, 1.4, 1.6, and 1.7, respectively).

Journal of Craniofacial Surgery, which has an essential place in the literature for many years and has an even more significant impact every day, aims to take its place in the literature even higher with the *Journal of Craniofacial Surgery Open*, which has just started its publication life and has common academic goals.⁵

It is valuable for practitioners and academics to examine all the studies published in a leading scientific journal to recognize the intellectual structure and subject integrity of the journal.^{6,7}

On the other hand, as the literature expands daily, it becomes difficult for researchers to have information about all publications on a particular subject. For this reason, bibliometric studies have become increasingly important.^{8–10}

Bibliometric analyses are an essential method used to measure the productivity of individuals, institutions, or countries by revealing the articles published in a particular subject or field and trend analyses of these articles in detail.⁸

Web of Science and Scopus are the 2 most common databases used for bibliometric studies.^{8,11} On the other hand, Web of Science-based analysis of articles published in the *Journal of*

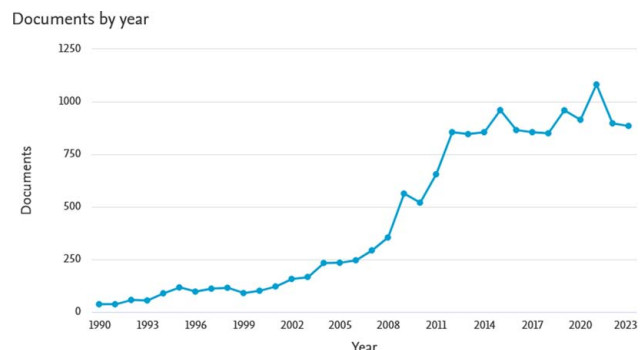


FIGURE 1. In the Scopus database, the distribution of articles published in the *Journal of Craniofacial Surgery* between 1990 and 2023 according to years.

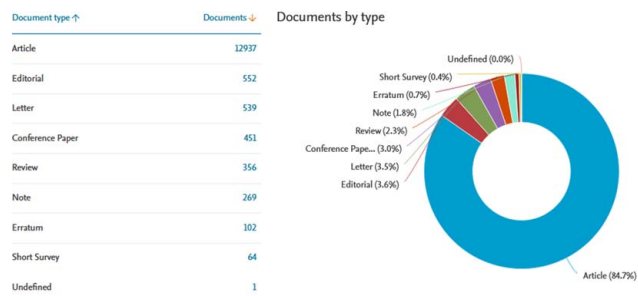


FIGURE 2. Document types of articles published in *Journal of Craniofacial Surgery* between 1990 and 2023.

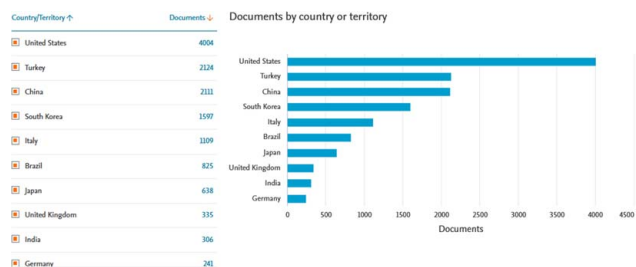


FIGURE 5. Distribution of top publishing countries.

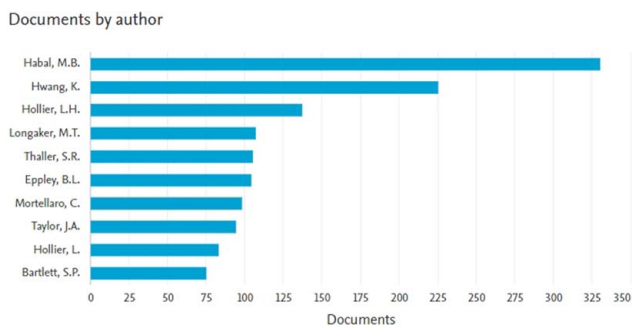


FIGURE 3. The top 10 authors with the highest number of publications between 1990 and 2023.



FIGURE 6. The top 7 affiliations with the highest number of publications.

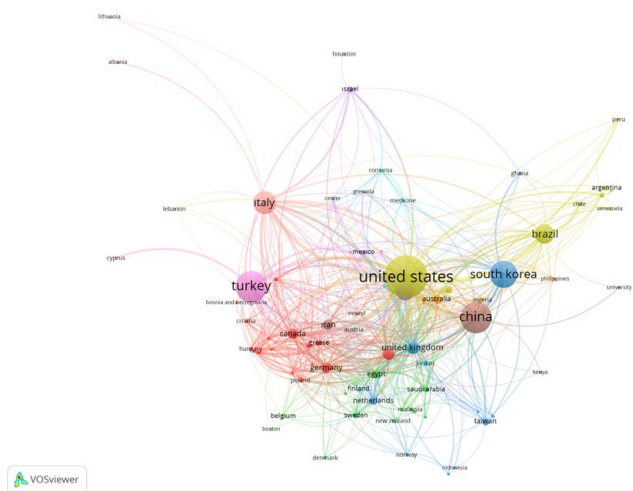


FIGURE 4. Distribution of top publishing countries and cooperation map.

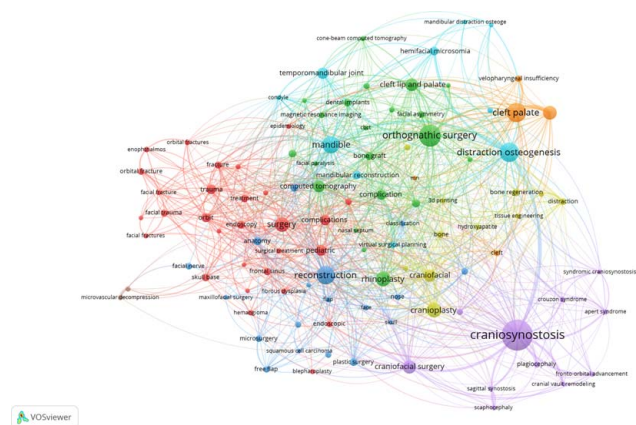


FIGURE 7. Most frequently used keywords and keyword collaboration map.

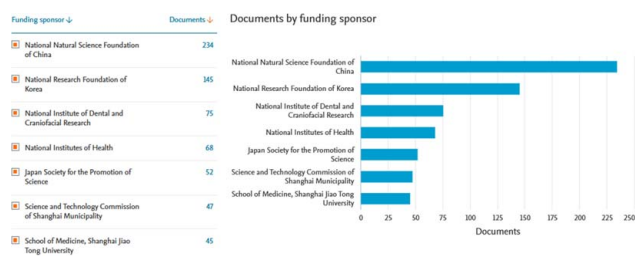


FIGURE 8. Institutions providing the most funding support.

Craniofacial Surgery between 1995 and 2020 has been investigated.^{6,7,10} In addition, the Scopus database contains a relatively larger number of journals, so more comprehensive results can be obtained.¹¹ For this reason, Scopus-based bibliometric analysis was performed in this study.

In this context, it was aimed to conduct a Scopus-based bibliometric analysis of the studies published in the *Journal of Craniofacial Surgery* between 1990 and 2023.

METHODS

In this bibliometric study, all articles in the *Journal of Craniofacial Surgery* page in the Scopus database on July 7, 2024 were listed.¹² The information of the listed articles was exported in CSV file format. When exporting these articles, the citation information, bibliographic information, abstract and keywords, funding details, and other information options were all selected. These exported CSV data were analyzed with VOSviewer software (version 1.6.18).¹³ In addition, the graphs in the analyze results section on the journal page in the Scopus database were also examined.

RESULTS

It was determined that the number of articles published in the *Journal of Craniofacial Surgery* between 1990 and 2023 in the Scopus database was 15,271 (Fig. 1). The document types of these articles are given in Figure 2. The top 10 authors with the highest number of publications between 1990 and 2023 are shown in Figure 3. The distribution and cooperation map of the countries with the highest number of publications is given in Figures 4 and 5.

The top 7 affiliations with the highest number of publications are shown in Figure 6. The most commonly used keywords in these articles and the keyword collaboration map are given in Figure 7. Among these articles, the institutions that provided the most funding support are shown in Figure 8.

The top 10 most cited articles among 15,271 articles published between 1990 and 2023 are shown in Supplemental Table 1, Supplemental Digital Content 1, <http://links.lww.com/SCS/G733>.¹⁴⁻²³

DISCUSSION

Bibliometric analyses are studies that examine scientific productivity, publication trends, active countries, influential authors, and citation values in a particular field or subject and provide comprehensive data.^{9,11,24} Through these analyses, readers can quickly access comprehensive information about a particular topic or field.^{25,26} Similarly, through bibliometric studies, comprehensive analyses of articles published in an academic journal over the years can be easily conducted.^{6,7,10}

The most widely used databases for bibliometric studies are Web of Science and Scopus.^{8,11} However, the *Journal of Craniofacial Surgery* has been covered in the Scopus database since

1990, although it has been covered in the Web of Science since 1995. In addition, Scopus is a relatively large database, and the data from it may generate more comprehensive results.

The increasing number of articles published in the *Journal of Craniofacial Surgery* over the years can be considered an indication that the journal is increasing its position in the literature every year. The fact that 84.7% of the published articles are original studies reinforces this idea (Fig. 2).

The fact that the top 5 countries with the highest number of articles published are the United States (n=4004), Turkey (n=2124), China (n=2111), South Korea (n=1597), and Italy (n=1109) shows that the journal attracts a large number of researchers from all over the world and exhibits a largely homogeneous distribution (Fig. 5). These results are similar to those of Liechty et al²⁷ who used data from PubMed database between 2010 and 2019, and Bahşi et al¹⁰ who used data from Web of Science database between 1995 and 2020. This is an indication that the *Journal of Craniofacial Surgery* has maintained a similar stability for many years. In addition, this data supports the statement of Liechty et al²⁷ that *Journal of Craniofacial Surgery* has the most diverse country representation compared with other journals in this field.

Limitations

The use of a single database (Scopus) is an important limitation of this study. However, the use of multiple databases for the same study is not methodologically feasible. Another limitation is that variables such as population and academic conditions of countries cannot be taken into account when analyzing country distributions.

CONCLUSIONS

This Scopus-based bibliometric analysis of the *Journal of Craniofacial Surgery* from 1990 to 2023 provides valuable insights into the journal's publication trends, influential authors, and countries with the highest research output. The findings highlight the journal's significant growth and impact in the field, with a diverse global representation of contributing researchers. The data reveals the prominence of original studies in the journal and underscores its role in disseminating cutting-edge craniofacial and maxillofacial research. Despite the study's limitation of using a single database, it offers a comprehensive overview of the journal's scholarly contributions and its evolution over the decades.

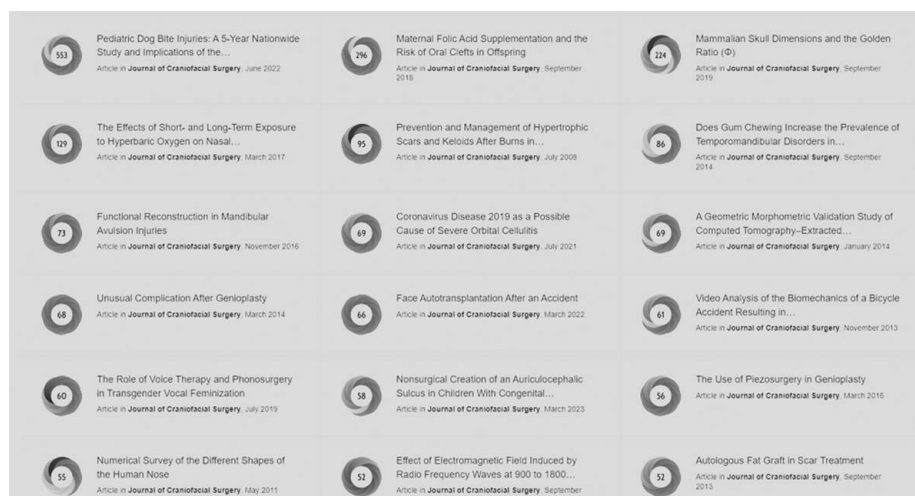
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During the preparation of this work, the authors used ChatGPT to translate parts of the manuscript. After using this tool service, the authors reviewed and edited the content as needed and took full responsibility for the content of the publication.

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