

REVIEWER'S REPORT

Manuscript No.: IJAR-57558

Title: Bibliometric Analysis of Craniofacial Deformities in Dentomaxillofacial Radiology: Thematic Trends and Evolution of Research Areas

Recommendation:

Accept as it isYes.....

Accept after minor revision.....

Accept after major revision

Do not accept (*Reasons below*)

Rating	Excel.	Good	Fair	Poor
Originality	•			
Techn. Quality	•			
Clarity	•			
Significance	•			

Reviewer's ID: JPR-Dr. Sireesha Kuruganti

Detailed Reviewer's Report

Here's a detailed in-depth review of the manuscript "Bibliometric Analysis of Craniofacial Deformities in Dentomaxillofacial Radiology: Thematic Trends and Evolution of Research Areas", with references to line numbers for precision.



Abstract & Introduction

- Lines 1–26: The abstract clearly outlines the scope — bibliometric analysis of craniofacial deformities in dentomaxillofacial radiology. It highlights the rise in publications post-2012 and identifies orthognathic surgery, cephalometry, and computed tomography as dominant themes.
 - Strength: Concise and well-structured.
 - Weakness: Could benefit from quantitative data (e.g., % growth rate of publications).
- Lines 27–59: The introduction contextualizes craniofacial anomalies, emphasizing their hereditary etiology and systemic manifestations. It stresses the role of 3D imaging modalities in advancing research.
 - Strength: Strong rationale for bibliometric analysis.
 - Weakness: Slightly repetitive in explaining syndromic involvement; could be condensed.



Materials and Methods

- Lines 60–86: The methodology is robust, using WoSCC database (1995–2025) and bibliometrix package in RStudio. Exclusion criteria (editorials, conference proceedings, pre-1995 publications) are well justified.
 - Strength: Transparent search strategy.

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- Weakness: Limitation of English-only keywords noted later (line 119–126) could have been acknowledged here.



Results

- Lines 87–91: 178 publications analyzed, with a sharp rise after 2012.
- Strength: Clear trend visualization (Figure 1).
- Weakness: Graph (Figure 1) lacks exact numerical clarity; axis labels are partially garbled.

- Lines 92–97: Most productive authors: Choi Jong Woo (6 papers), followed by Moroi Akinori, Ueki Koichiro, Yoshizawa Kunio (5 each).
- Strength: Identifies leading contributors.
- Weakness: No h-index or citation impact comparison.

- Lines 98–106: Japan leads with 44 publications, followed by USA (26). Shanghai Jiao Tong University is the top institution (19 papers).
- Strength: Highlights Asian dominance.
- Weakness: Europe's contribution is underexplored.

- Lines 107–118: Citation analysis shows Arnett et al. (1999) and Ngan & Moon (2015) as most influential.
- Strength: Identifies seminal works.
- Weakness: No normalized citation metrics (citations/year).



Keyword & Thematic Analysis

- Lines 119–138: Keyword co-occurrence (Figure 2) places orthognathic surgery at the center, linked with cephalometry and dentofacial deformity.
- Strength: Strong visualization of conceptual clusters.
- Weakness: Network density values not reported.

- Lines 139–146: Thematic map (Figure 3) categorizes:
 - Motor themes: Orthognathic surgery, osteotomy, stability, malocclusion.
 - Niche themes: Management, deformity, distraction osteogenesis.
 - Emerging/Declining themes: Lip, palate, facial asymmetry, cephalometry.
- Strength: Clear thematic quadrant analysis.
- Weakness: Emerging/declining classification could be supported with temporal citation data.

- Lines 147–154: Thematic evolution (Figure 4) shows early focus on orthognathic surgery & dentofacial deformity, shifting later to cephalometry & CT imaging.
- Strength: Demonstrates evolution of research priorities.
- Weakness: Limited discussion of why certain themes declined.

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Discussion

- Lines 155–176: Discussion links rise in publications to CBCT adoption. Japan's leadership is attributed to technological advancements.
 - Strength: Strong correlation between imaging innovation and publication growth.
 - Weakness: Could expand on clinical translation of bibliometric findings.
- Lines 177–198: Orthognathic surgery identified as central; cephalometry and CBCT as critical tools. Temporomandibular joint research is positioned between motor and basic themes.
 - Strength: Nuanced thematic positioning.
 - Weakness: TMJ research trends could be elaborated further.



Limitations & Conclusion

- Lines 199–126: Limitations include reliance on WoSCC, English-only keywords, and inability to assess methodological quality.
 - Strength: Honest acknowledgment.
 - Weakness: Could suggest remedies (e.g., Scopus, PubMed inclusion).
- Lines 127–144: Conclusion emphasizes orthognathic surgery, cephalometry, and CBCT as central themes, with Asian countries leading contributions.
 - Strength: Concise and aligned with results.
 - Weakness: Future directions could be more specific (e.g., AI-driven imaging, multicenter collaborations).



Overall Evaluation

- Strengths:
 - Comprehensive bibliometric methodology.
 - Clear identification of thematic clusters and evolution.
 - Strong visualization (Figures 1–4).
- Weaknesses:
 - Limited geographical diversity analysis.
 - Lack of normalized citation metrics.
 - Emerging/declining themes not deeply contextualized.