

Assessment of Systematic Reviews Abstract Reporting Quality in Periodontology Journals

Systematic
Review Quality
in Periodontology
Journals

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ABSTRACT

Objective: This study assessed the completeness of abstract reporting in periodontology systematic reviews based on PRISMA guidelines.

Place and Duration of Study: A manual search was conducted in three top periodontology journals (Journal of Periodontology, Journal of Periodontal Research, and Journal of Clinical Periodontology) for systematic reviews published from January 2018 to July 2022.

Methods: Eligible articles were independently screened by two authors. The PRISMA statement checklist was used to evaluate abstract quality. Descriptive statistics, linear regression, univariate analysis, and reliability assessments were performed using SPSS 29.00 software.

Results: We evaluated 1506 abstracts and included 87 systematic reviews with meta-analyses. The Journal of Clinical Periodontology (JOCP) published the highest number of reviews (66%). The mean abstract reporting score was 54.8, with the highest scores found in studies from South America (60.8) and the Journal of Periodontal Research (JOPR) (mean score: 60). Most journals adequately reported objectives, eligibility criteria, included studies, and result synthesis, but lacked information on sources, bias, synthesis methods, evidence limitations, interpretation, funding, and registration. Univariate analysis showed statistically significant differences between journals ($p < 0.05$).

Conclusion: This study highlights areas for improving abstract reporting in periodontology systematic reviews. Adhering strictly to PRISMA guidelines is recommended to enhance reliability and transparency in periodontology systematic reviews.

Key Words: Systematic Reviews; Periodontology; PRISMA guidelines; Reporting Quality

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INTRODUCTION

Systematic reviews employ a comprehensive and rigorous approach to provide scientific evidence on diagnostic procedures and clinical protocols. As a result, they, along with meta-analyses, occupy the highest position on the evidence pyramid. These reviews utilize a meticulous study design, garnering significant academic interest, attention, and appraisal from researchers. Systematic reviews and meta-analyses prioritize transparency while minimizing bias by implementing a robust search strategy using reputable search engines and databases.

They offer authors a concise and well-defined overview of the available literature on a specific topic, enabling them to identify, organize, and evaluate all relevant research.^{1,2} They provide authors with comprehensive knowledge about research outcomes, help identify gaps in the research, enhance research methodology, and contribute to a deeper understanding of the research field.³ By incorporating a meta-analysis component into systematic reviews, researchers can obtain more robust results compared to relying solely on findings from randomized controlled trials (RCTs)⁴. In recent years, scientific publications have experienced a rapid rise, with a similar trend in the increasing number of systematic reviews and meta-analyses being conducted in both the medical and dental fields^{5,6}.

To ensure an accurate interpretation of study outcomes, it is necessary to properly manage the scientific reporting of research findings. The reporting process should be conducted meticulously by adhering to proposed guidelines, such as the standard guidelines for reporting scientific studies provided by the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA). PRISMA facilitates transparent reporting of systematic reviews by offering a comprehensive checklist framework. By utilizing the PRISMA guidelines, researchers cover all important

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aspects of their research, thereby ensuring that readers gain a comprehensive understanding of the study and its outcomes⁷. In different fields, including dentistry, there is a gap in proper reporting of systematic reviews with meta-analysis, including in the field of periodontology.^{1,7-9}

It has been observed that in a biomedical article, the abstract is the most important part that researchers read after the title. Various research studies are presented at conferences, and their abstracts are usually made available to readers in the proceedings. Sometimes, only the abstract of a study is accessible when the full text of the article is not available. Therefore, it is of utmost importance to maintain good reporting quality for these abstracts. Abstracts of systematic reviews should contain a well-organized summary that enables a rapid evaluation of the review's relevance and reliability. This structure also aids in the convenient retrieval of articles through electronic searches.¹⁰ A well-framed checklist is being provided by PRISMA for Abstracts (PRISMA-A) to the authors for summarizing the required portions of their systematic review for meeting the essential requirements of the readers. Limited studies have been conducted on evaluating the effect of the PRISMA-A for the reviews being published in the field of periodontology. Thus, the present study was conducted to assess the completeness of reporting the abstracts in systematic reviews in the field of periodontology as suggested by the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines.

METHODS

To identify systematic reviews (with or without a meta-analysis) published between January 2018 and July 2022, a literature search was conducted manually, along with an electronic search, focusing on the top three journals in the field of periodontology with the highest impact factors according to the 2022 Reuters report: The Journal of Periodontology (JOP), the Journal of Periodontal Research (JOPR), and the Journal of Clinical Periodontology (JOCP). The terms "Systematic Review" or "meta-analysis" were used to search for relevant articles in the title, abstract, or methodology sections. Narrative reviews and unpublished conference abstracts were excluded. Two authors (FA and AA) independently screened and reviewed the abstracts based on predefined inclusion criteria. Disagreements were resolved through discussion to reach a consensus. A checklist comprising 12 items was developed based on the PRISMA statement to evaluate the quality of reporting in systematic review abstracts. Calibration of the authors was achieved through collaborative assessment of five abstracts against the checklist criteria. Each PRISMA item was rated as "Yes" if it applied and scored as "1," "No" if it did not apply and

scored as "0," or "NA" if it did not apply and was not included in the final score. A percentage score was calculated for each citation based on the sum of scores for the applicable items.

Additional information, such as the journal of publication, number of authors, affiliation of the lead author, and continent of publication, was collected for each study. In order to assess the consistency between examiners in scoring the PRISMA scores, a second examiner (FA) evaluated a randomly selected 10% sample of the articles. Three months after the initial data collection, the first examiner (AA) re-evaluated a second randomly selected 10% sample of the papers to determine the consistency within the examiner.

Statistical Analysis: The statistical analysis involved calculating descriptive statistics for each reporting item and systematic review (SR), which were then converted into a percentage scale. Linear regression modelling and univariate analysis were used to determine the characteristics associated with the mean score. Inter-correlation coefficient tests were conducted to evaluate both inter-examiner and intra-examiner reliability. A significance level of $p < 0.05$ was used to determine statistical significance. All analyses were performed using SPSS 29.00 (Stata Corp, College Station, TX, USA)

RESULTS

A total of 1,506 abstracts were initially assessed, and after reviewing them, 87 systematic reviews with meta-analyses were included in the current study.

The characteristics of all included systematic reviews, such as journal name, year of publication, number of authors, region, and settings, were evaluated and calculated. The proportion of published systematic reviews was found to be 5.7% of the published articles during the investigation period. Among the included reviews, 66% were published in the Journal of Clinical Periodontology (JOCP), followed by 29% in the Journal of Periodontal Research (JOPR), and 6% in the Journal of Periodontology. The majority of the published systematic reviews originated from Europe (63%) and were authored by academicians ($n=86$) from universities or mixed settings. The overall mean score for reporting abstracts was 54.8 (95% CI: 52.6 to 56.9), with the highest scores observed for studies conducted in South America (60.8; 95% CI: 55.9 to 65.6), followed by European-based systematic reviews with a mean score of 54.1% (95% CI: 50.9 to 57.2). However, the difference in scores between these regions was not statistically significant (p -value > 0.05). The Journal of Periodontal Research (JOPR) received the highest score among the journals (mean score: 60; 95% CI: 57.2 to 62.8) (Table 1).

Table No.1: Characteristics of the 87 SRs

Journal	Mean	N	%tage	Std. Deviation	95% CI
JOP	53.3	5	6%	4.6	47.6 to 59.0
JOCP	52.6	57	66%	11.0	49.7 to 55.6
JOPR	60.0	25	29%	6.8	57.2 to 62.8
Year					
2018	58.3	8	9%	4.4	54.6 to 62.1
2019	58.6	27	31%	11.01	54.8 to 62.4
2020	48.7	33	38%	9.7	42.3 to 52.2
2021	57.7	14	16%	8.3	52.9 to 62.5
2022	60.0	5	6%	10.8	46.5 to 73.5
Authors					
4 t 6 authors	55.2	8		11.7	45.3 to 65.0
Less than 4	54.0	58		10.4	51.3 to 56.7
More than 6	56.7	21		9.4	52.5 to 61.0
First continent					
Asia	56.1	11	13%	6.6	51.6 to 60.5
Africa	50.0	1	1%	.	.
North America	52.1	8	9%	5.9	47.1 to 57.0
South America	60.8	10	11%	6.9	55.9 to 65.6
Australia	50.0	2	2%	11.8	(-0.55 to 1.5)
Europe	54.1	55	63%	11.6	50.9 to 57.2
Settings					
Private	58.3	1	1%	.	.
University	55.0	77	89%	10.2	52.6 to 57.3
Mixed	52.8	9	10%	11.0	44.3 to 61.2
Total	54.8	87	100%	10.2	52.6 to 56.9

Table No. 2: Calculated score value of PRISMA-A checklist

Item	All Journals	JOP	JOCP	JOPR
Identify the report as a systematic review.	100%	100%	100%	100%
Objectives	97.7%	80%	100%	100%
Eligibility criteria (Inclusion and exclusion criteria)	89.9%	100%	87.7%	100%
Information sources(databases/registers)	48.9%	40%	38.6%	80.0%
Risk of bias	9.9%	0%	10.5%	12.0%
Methods of Synthesis results	12.0%	60%	12.3%	4.0%
Included studies	86.0%	100%	91.2%	92.0%
Synthesis of results	91.5%	100%	98.2%	100%
Limitation of evidence	1.1%	0%	1.8%	0.0%
Interpretation	33.3%	0%	12.3%	100%
Funding	47.4%	60%	64.9%	24.0%
Registration	10.2%	0%	14.0%	8.0%

Table No.3: Univariate linear regression derived coefficients (B) and 95% confidence interval with mean score of compliance with PRISMA-A as dependent variable for 87 SRs

Model		Unstandardized Coefficients	95.0% Confidence Interval for B	
Authors		B	Lower Bound	Upper Bound
	4 t 6 authors	Baseline (reference)		
	Less than 4	0.012	-0.065	0.089
	More than 6	0.027	-0.025	0.079
Continent				
	Europe	Baseline (reference)		
	Asia	0.02	-0.047	0.087
	Africa	-0.041	-0.246	0.164
	North America	-0.02	-0.097	0.057

	South America	0.067	-0.002	0.137
	Australia	-0.041	-0.187	0.105
Journal				
	JOCP	Baseline (reference)		
	JOP	0.007	-0.084	0.098
	JPR	0.074	0.027	0.12
Year				
	2020	Baseline (reference)		
	2018	0.096	0.023	0.168
	2019	0.099	0.051	0.147
	2021	0.09	0.031	0.149
	2022	0.113	0.024	0.201

The completeness of checklist items was also assessed, revealing that all journals (100%) reported the study type as a systematic review. Proper reporting of objectives was observed in 97.7% of the journals, while eligibility criteria were mentioned in 89.9% of the articles. Information about the included studies was reported in 86% of the abstracts, and the synthesis of results was mentioned in 91.5% of the articles. However, some items were inadequately reported in abstracts published in all journals, including information sources (48.9%), risk of bias (9.9%), methods of result synthesis (12%), limitation of evidence (1.1%), interpretation (33.3%), funding (47.4%), and registration (10.2%). The reporting of abstracts was individually evaluated for each of the three journals based on the checklist criteria (Table 2). Univariate analysis demonstrated statistically significant differences between the journals (Table 3). The inter-rater and intra-rater reliability levels, assessed by ICC tests, were high, with values of 0.88 and 0.94, respectively.

DISCUSSION

The present study aimed to assess the quality of abstract reporting in systematic reviews published in high-impact factor periodontology journals. Systematic reviews (SRs) and meta-analyses (MAs) are widely recognized as valuable sources of evidence due to their ability to effectively evaluate clinical applicability and treatment outcomes. However, for these reviews to fulfil their potential, it is crucial that their reporting is of high quality. This not only helps to minimize bias in research but also enhances transparency and reproducibility, thus contributing to the overall credibility of the findings¹¹. Various authors have evaluated the reporting quality of systematic reviews in diverse fields such as dentistry, medicine, psychology, and industry. These assessments have focused on different aspects, including the evaluation of complete systematic reviews^{7,8,12-14}, methodology^{15,16} or solely abstracts^{1,3,7,8,14,17-24}. To our knowledge, our study is among the limited number of investigations^{1,9,14,17,22}

that examine the reporting quality of abstracts in systematic reviews in the field of periodontology.

We have included and evaluated a total of 87 systematic reviews (SRs) from three highly reputable periodontology journals in order to assess the reporting quality of their abstracts. Our primary objective in conducting this study was to evaluate the impact of the PRISMA-A guidelines on the comprehensive reporting of abstracts in SRs. The articles included in our analysis were sourced from the Journal of Clinical Periodontology (JOCP), Journal of Periodontal Research (JOPR), and Journal of Periodontology, covering the period between 2018 and 2022.

During the investigation period, the proportion of published SRs accounted for only 5.7% of the total published articles. Among these, the majority (66%) were published in the Journal of Clinical Periodontology (JOCP), followed by 29% in the Journal of Periodontal Research (JOPR), and the remaining 6% in the Journal of Periodontology. Geographically, a significant number of the published SRs originated from Europe, comprising approximately 63% of the total. Furthermore, the majority of these SRs were authored by academicians (n=86) affiliated with universities or mixed academic settings.

Various authors have conducted studies in different fields to assess the quality of abstract reporting in systematic reviews (SRs)^{1,9,14,17-24}. Consistent with our study, the majority of these authors have reported that a significant proportion of contributing authors were affiliated with institutions in European countries^{1,18,23,24}.

In contrast, Wasiak et al²⁵ observed a higher prevalence of authors from North America, while Bassani et al⁷ found that most of the authors in their assessment of SRs were from Latin America. It is important to note that these variations may be attributed to different studies being conducted at different time frames, using diverse journals from various fields. Consequently, these findings cannot be generalized to all research on SRs across different time periods.

In our study, we found that the overall mean score for reporting abstracts was 54.8% (95% CI: 52.6 to 56.9). The highest mean score was observed for abstracts of studies conducted in South America, which was 60.8%

(95% CI: 55.9 to 65.6). European-based SRs had a mean score of 54.1% (95% CI: 50.9 to 57.2), showing no statistically significant difference (p -value>0.05).

A similar study conducted by Martin et al¹ also assessed the quality of abstract reporting in selected SRs published in periodontology journals from 2002 to 2020, using the 12 items of the PRISMA-A checklist. They reported a general mean PRISMA-A score of 55.72% (95% CI, 54.46–56.79%), which is almost similar to our findings [54.8% (95% CI: 52.6 to 56.9)]. Furthermore, they observed a statistically significant improvement in the mean score after the publication of the PRISMA-A guidelines in 2013.

In our study, we observed that the highest mean score was found for systematic reviews (SRs) published in the Journal of Periodontal Research (JOPR) (mean score: 60; 95% CI: 57.2 to 62.8), followed by the Journal of Periodontology and the Journal of Clinical Periodontology (JOCp). However, there was no significant difference in scores between these journals. Martin et al⁵ also noted that the International Journal of Dental Hygiene had a significantly better PRISMA-A score compared to top-ranked journals such as the Journal of Clinical Periodontology and the Journal of Periodontology. These findings suggest that even highly esteemed journals may sometimes fall short in maintaining publication standards. In another study conducted by Faggion et al¹⁴ in 2012, abstracts of SRs with meta-analyses in the field of periodontology and implant dentistry were screened using a customized checklist of 7 items. They found that only two-thirds of the abstracts provided proper evidence, and less than 50% exhibited precision in reporting. Furthermore, they observed that only 5% of the selected abstracts demonstrated consistency in reporting. It is worth noting that their study was conducted before the publication of the 12-item PRISMA-A checklist, so their results cannot be directly compared to our study.

Other studies conducted by authors in various fields of dentistry have yielded similar findings regarding the reporting quality of abstracts in systematic reviews (SRs). For instance,¹⁹ discovered that the mean PRISMA-A score for SRs in the field of Orthodontics was 53.39 (95% CI, 51.83-54.96). Similarly, Fleming PS et al²⁶ reported a mean overall PRISMA score of 64.1% (95% confidence interval [CI], 62%-65%). Like Martin MA et al., both Vásquez-Cárdenas et al. and Fleming et al^{19,26} noted an improvement in the overall score of studies after the publication of the PRISMA-A checklist.

Various authors indicated that they found promising results and improved quality after following the PRISMA guidelines in reporting abstracts, methodology and even complete systematic reviews and metanalysis. In our study we also assessed the completeness of the checklist items and found that in all journals (100%) reporting was being done as SR, in

97.7% journals objectives were properly reported; 89.9% articles followed to mention eligibility criteria in the abstract; 86% mentioned about the included studies and the synthesis of results was reported in 91.5% articles. In accordance with our study, Martin MA et al., observed that there was improvement in various reporting criteria after the PRISMA-A checklist guidelines are being followed. They found a statistically significant improvement in items like “included studies” and “synthesis of the results” of the PRISMA-A checklist.

Another notable finding from this study is that the abstracts published across all journals consistently lacked adequate reporting of certain items. These items included information sources (48.9%), risk of bias (9.9%), methods of synthesis of results (12%), limitation of evidence (1.1%), interpretation (33.3%), funding (47.4%), and registration (10.2%). Similarly, Martin MA et al¹ also identified low scores in items such as "registration," "funding," and "conflict of interest report," followed by "strength and limitation of evidence" and "risk of bias" sections in systematic review abstracts. Thus, both studies revealed that the items with the lowest scores were limitation of evidence and risk of bias, followed by registration and funding details.

In 2013, Faggion et al¹⁴ advocated for the reporting of risk of bias, limitations of evidence, and measures of heterogeneity in studies to improve the reporting quality of systematic reviews with meta-analyses. They emphasized that this would provide readers with a better understanding of the strengths and weaknesses of the findings, thus enhancing the clinical utility of evidence-based studies. These findings from Faggion et al. align with our study, as we also observed that limitation of evidence and risk of bias were the least reported items.

Our study revealed an important observation concerning the reporting of registration details in SR abstracts. It was evident that only 10.2% of the SR abstracts included registration details. Surprisingly, similar findings were consistently reported in studies conducted by Vásquez-Cárdenas J et al¹⁹, Pulikkotil et al²⁷, Jiancheng et al¹⁸, Seehra et al²³, and Kiriakou et al²⁴ across various medical and dental fields. These results are particularly surprising considering the increasing number of SRs being registered in databases like PROSPERO since 2013. It is crucial to emphasize the inclusion of registration details in SR abstracts. Even in cases where an SR is not registered, it is essential to explicitly mention this fact within the abstract. Similar guidelines should be implemented to address the reporting of funding information. Interestingly, our study revealed a complete absence of funding source reporting in any of the SR abstracts examined. By ensuring the proper reporting of registration and funding information in SR abstracts,

transparency and accountability can be significantly improved. This will allow readers to critically evaluate the research and gain a better understanding of any potential biases or conflicts of interest associated with the study.

Our analysis revealed a positive correlation between the number of authors involved in a systematic review and the quality of its reporting. Similar findings were noted in studies conducted by Vásquez-Cárdenas J et al., Pulikkotil et al²⁷, Jiancheng et al¹⁸, Seehra et al²³, and Kiriakou et al²⁴. Conversely, Bigna et al²¹ found no significant relationship between the quality of reporting and the number of authors. Systematic reviews are extensive, well-structured, and detailed write-ups that necessitate meticulous screening, thorough search procedures, and careful selection processes. Therefore, we strongly advocate for larger collaborative teams that can facilitate effective collaboration and support, ultimately ensuring the production of high-quality research outputs.

The study findings are subject to a few limitations. Firstly, our evaluation focused solely on the quality of abstracts, which means we did not assess the full texts of the selected articles. Consequently, this approach may have excluded articles that conducted meta-analyses but did not explicitly mention the term "meta-analysis" in the title, abstract, or keywords. Additionally, our screening was limited to three high-ranking journals within the field of periodontology, and the study was conducted within a specific time frame. As a result, the generalizability of our findings to the broader field of periodontology or dentistry as a whole may be limited.

Despite acknowledged limitations, our study offers valuable contributions due to its unique strengths. Notably, we included a relatively large number of systematic reviews sourced from the three main periodontology journals. To ensure the reliability, accuracy, and transparency of our reporting, we employed a validated checklist and followed a meticulous calibration process. However, it is crucial to acknowledge that our inclusion criteria may introduce selection bias, as we only considered reviews published within a specific timeframe (2018-2022) from the designated journals.

CONCLUSION

The present study provides valuable insights into the adherence to PRISMA guidelines by authors when reporting abstracts of systematic reviews in the field of periodontology. The findings reveal areas that require improvement in the practice of abstract reporting in systematic reviews. As a result, we strongly advocate for a strict adherence to PRISMA guidelines to enhance the reliability and transparency of systematic reviews in the field of periodontology.

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REFERENCES

1. Adobes Martin M, Santamans Faustino S, Llarío Almiñana I, Aiuto R, Rotundo R, Garcovich D. There is still room for improvement in the completeness of abstract reporting according to the PRISMA-A checklist: a cross-sectional study on systematic reviews in periodontology. *BMC Med Res Methodol* 2021;21(1):1-12.
2. Mullen PD, Ramírez G. The promise and pitfalls of systematic reviews. *Annu Rev Public Health* 2006;27:81-102.
3. Ahn E, Kang H. Introduction to systematic review and meta-analysis. *Korean J Anesthesiol* 2018;71(2):103-12.
4. Shamsi M, Mirzaei M, Vaziri S, Mozaffari HR. Common mistakes in reporting systematic reviews and meta-analyses. *Health Promotion Perspectives* 2020;10(2):97-.
5. Shen J, Li Y, Clarke M, Du L, Wang L, Zhong D. Visualization of evidence-based medicine domain knowledge: production and citation of cochrane systematic reviews. *J Evidence-Based Med* 2013;6(1):34-42.
6. Warren HR, Raison N, Dasgupta P. The rise of altmetrics. *JAMA* 2017;317(2):131-2.
7. Bassani R, Pereira GKR, Page MJ, Tricco AC, Moher D, Sarkis-Onofre R. Systematic reviews in dentistry: current status, epidemiological and reporting characteristics. *J Dentistry* 2019;82: 71-84.
8. Sarkis-Onofre R, Pereira-Cenci T, Bassani R, Page MJ, Tricco AC, Moher D, et al. Characteristics of systematic reviews published in dentistry by Brazilian corresponding authors. *J Evidence-Based Healthcare* 2019;1(2):69-82.
9. Santos WVdO, Dotto L, Sarkis-Onofre R. Reporting characteristics of systematic review abstracts published in the proceedings of the

- SBPqO meeting. *Brazilian J Oral Sciences* 2022;21:e226351.
10. Beller EM, Glasziou PP, Altman DG, Hopewell S, Bastian H, Chalmers I, et al. PRISMA for abstracts: reporting systematic reviews in journal and conference abstracts. *PLoS Med* 2013;10(4):e1001419.
 11. Cho SH, Shin IS, editors. A reporting quality assessment of systematic reviews and meta-analyses in sports physical therapy: a review of reviews. *Healthcare*; 2021: MDPI.
 12. Park HY, Suh CH, Woo S, Kim PH, Kim KW. Quality reporting of systematic review and meta-analysis according to PRISMA 2020 guidelines: results from recently published papers in the Korean Journal of Radiology. *Korean J Radiol* 2022;23(3):355.
 13. Ge L, Wang JC, Li Ji, Liang L, An N, Shi XT, et al. The assessment of the quality of reporting of systematic reviews/meta-analyses in diagnostic tests published by authors in China. *PLoS One* 2014;9(1):e85908.
 14. Faggion Jr CM, Liu J, Huda F, Atieh M. Assessment of the quality of reporting in abstracts of systematic reviews with meta-analyses in periodontology and implant dentistry. *J Periodontol Res* 2014;49(2):137-42.
 15. Schalken N, Rietbergen C. The reporting quality of systematic reviews and meta-analyses in industrial and organizational psychology: A systematic review. *Frontiers Psychol* 2017;8: 1395.
 16. Pussegoda K, Turner L, Garritty C, Mayhew A, Skidmore B, Stevens A, et al. Systematic review adherence to methodological or reporting quality. *Systematic Reviews* 2017;6(1):1-14.
 17. Li T, Hua F, Dan S, Zhong Y, Levey C, Song Y. Reporting quality of systematic review abstracts in operative dentistry: An assessment using the PRISMA for Abstracts guidelines. *J Dentistry* 2020;102:103471.
 18. Jiancheng W, Jinhui T, Lin H, Yuxia M, Juxia Z. Has the Reporting Quality of Systematic Review Abstracts in Nursing Improved Since the Release of PRISMA for Abstracts? A Survey of High-Profile Nursing Journals. *Worldviews on Evidence-Based Nursing* 2020;17(2):108-17.
 19. Vasquez-Cardenas J, Zapata-Norena O, Carvajal-Flórez Á, Barbosa-Liz DM, Giannakopoulos NN, Faggion Jr CM. Systematic reviews in orthodontics: Impact of the PRISMA for Abstracts checklist on completeness of reporting. *Am J Orthodontics Dentofacial Orthopedics* 2019;156(4):442-52. e12.
 20. Maticic K, Krnic Martinic M, Puljak L. Assessment of reporting quality of abstracts of systematic reviews with meta-analysis using PRISMA-A and discordance in assessments between raters without prior experience. *BMC Med Res Methodol* 2019;19(1):1-7.
 21. Bigna JJR, Um LN, Nansseu JRN. A comparison of quality of abstracts of systematic reviews including meta-analysis of randomized controlled trials in high-impact general medicine journals before and after the publication of PRISMA extension for abstracts: a systematic review and meta-analysis. *Systematic Reviews* 2016;5(1):1-9.
 22. Polychronopoulou A. The reporting quality of meta-analysis results of systematic review abstracts in periodontology and implant dentistry is suboptimal. *J Evidence Based Dental Practice* 2014;14(4):209-10.
 23. Seehra J, Fleming PS, Polychronopoulou A, Pandis N. Reporting completeness of abstracts of systematic reviews published in leading dental specialty journals. *Eur J Oral Sci* 2013;121(2): 57-62.
 24. Kiriakou J, Pandis N, Fleming PS, Madianos P, Polychronopoulou A. Reporting quality of systematic review abstracts in leading oral implantology journals. *J Dentist* 2013;41 (12):1181-7.
 25. Wasiak J, Shen A, Tan H, Mahar R, Kan G, Khoo W, et al. Methodological quality assessment of paper-based systematic reviews published in oral health. *Clin Oral Investigations* 2016;20:399-431.
 26. Fleming PS, Seehra J, Polychronopoulou A, Fedorowicz Z, Pandis N. A PRISMA assessment of the reporting quality of systematic reviews in orthodontics. *The Angle Orthodontist* 2013; 83(1):158-63.
 27. Pulikkotil S, Jayaraman J, Nagendrababu V. Quality of abstract of systematic reviews and meta-analyses in paediatric dentistry journals. *Eur Archives Paediatr Dentistry* 2019;20:383-91.