Full-length publication rates of endodontic abstracts presented at the Brazilian Society of Oral Research meetings between 2013 and 2016

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ABSTRACT

Introduction: Evidence-based dentistry consists in the clinical application of concepts based on researches published as scientific papers in indexed periodicals. **Objective:** This study aimed to evaluate the publication rates of endodontic abstracts presented in the meeting of SBPqO in the years of 2013, 2014, 2015 and 2016. **Materials and Methods:** Endodontic abstracts presented between 2013 and 2016 were included. Then, they were classified into six categories: endodontic basic research, review endodontic topics, clinical studies, randomized clinical trials, technological basic research or case reports. An electronic database search using the Medline (PubMed) engine was performed from January 2018 to July 2018 to identify full-text Englishwritten publications of the endodontic abstracts previously

selected. The identification of full-text publication of the abstracts was initially performed using the first authors last name and the main keywords from the title of the abstract. Following full-text article verification, additional information was recorded such as: elapsed time until publication; name, impact factor and *Qualis* classification of the journal; and type of study. **Results:** After reading the content of the meeting, 1,238 abstracts (10.2%) were considered to be of endodontic interest, and then an electronic database search was performed. **Conclusion:** A large number of endodontic abstracts were not published as a full-length manuscript. Clinical studies and randomized clinical trials represented the small part of the publications.

Keywords: Journal article. Database. Search engine. Endodontics.

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Introduction

The concept of evidence-based dentistry requires the clinical application of findings obtained through researches published in high-quality international journals.¹ However, a previous step to publication is the presentation of the research outcomes in congresses and conferences.² This scientific information is essential to spread new methodologies, materials, techniques, and treatments worldwide. Because usually only research abstracts are presented in congresses, much relevant information may be lost, only being addressed in the publication of the full-text.³ The abstracts commonly do not wholly provide some methodological details and full discussion of the results.⁴ This lack of information is supplied by an oral presentation that usually highlights the main points and findings of the research, while the presenter is given several minutes at the end of the presentation to explain uncertainties and answer guestions related to the study.²

Limited information in the abstracts reduces the capacity of the reader to evaluate the study critically, apply the results and disseminate the knowledge presented in these papers.⁴ Thus, researchers should be stimulated to go beyond the congress presentations and publish their findings in journals as soon as possible irrespective of the directions of the results. An accepted method to investigate the publication trends is to rate the publication reviews of studies that were initially presented at conferences and congresses.^{2,3,5,6,7}

Several studies presented at conferences and congresses do not get published in periodicals because of some reasons. The reviewing process, in congresses and peer-reviewed journals, is different. The first may not present a strict reviewing process like a journal, namely at least two blinded reviewers and a final decision of an editor. Moreover, some cases of low quality or low-level evidence researches must be accepted due the few times between abstract submission and its acceptance for congress presentation.^{8,9} Finally, the limited number of periodicals compared to the number of researches carried out and methodological limitations of the studies also contributes to difficulties for publication.¹⁰

For these reasons, many studies presented in conferences and congresses are not further pub-

lished in indexed journals. The full-text publication rates are one of the methods used to evaluate the national dentistry research. Some studies reported the publication rates of abstracts presented in international congress ranging between 19% and 54%.^{2,3,6,8,11-16} Bergoli et al.³ developed a different investigation regarding the abstracts presented in the Brazilian Society of Oral Research Meeting and further published as full text. The authors found a publication rate of 26.5% and an average time between congress presentation and the publication in peer-reviewed journals was 24.1 months. Only one study evaluated endodontic researches presented in an international endodontic congress (European Society of Endodontology) that became full-length manuscripts and found a publication rate of 34%.

Thus, this study aimed to evaluate the publication rates of endodontic abstracts presented in the meeting of Brazilian Society of Oral Research in the years of 2013, 2014, 2015 and 2016. Additionally, the impact factor and *Qualis* classification and the elapsed time between congress and full-length publication were also assessed.

Materials and Methods

The abstracts presented at the meeting of the Brazilian Society of Oral Research (SBPqO) in the years of 2013, 2014, 2015 and 2016 were evaluated. Abstract information was obtained after reading the SBPqO contents (2013 to 2016). To be classified as being of endodontic interest, the abstract must have evaluated endodontic issues. Then, they were classified into six categories: endodontic basic research, review endodontic topics, clinical studies, randomized clinical trials, technological basic research or case reports.

The following parameters were also recorded:

- » Year of abstract presentation,
- » Title,
- » Authors' names,
- » The aim of the study,
- » Results,
- » Conclusion.

An electronic database search using the Medline (PubMed) engine was performed from January 2018 to July 2018 to identify full-text English-written publications of the endodontic abstracts previously selected. The search was performed by two previously trained and independent researchers (T.C.F. and C.S.L.). When the researchers disagreed if the fulltext publication corresponded to an abstract previously included, another independent researcher performed the additional evaluation.

The identification of full-text publication of the abstracts was initially performed using the first author's last name and the main keywords from the title of the abstract. In case of a negative result, the lead author's last name was used with the same keywords used before. If this search was negative, it was recorded as an abstract that had not been published in a peer-reviewed journal indexed on this database (PubMed).

If the electronic database search was positive, some characteristics of the abstract were compared to the full-length publication, such as: authors' names, title, aims, materials and methods (sample size and tests used for assessment), results and conclusions. When the criteria were fulfilled, the abstract was designated as "published". Following fulltext article verification, additional information was recorded such as:

- » Elapsed time until publication: The number of months between the abstract presentation in the meeting and the full-length publication. If the paper was published before the meeting, this research was removed from the elapsed time until publication analysis;
- » Name, impact factor and *Qualis* classification of the journal;
- » Type of study: biological basic research, narrative articles/review articles, clinical studies, randomized clinical trials, technological basic research or case report.

Results

A total of 12,085 abstracts were presented in the SBPqO meetings between 2013 and 2016. After reading the meeting contents, 1,238 abstracts (10.2%) were considered as being of endodontic interest, and then an electronic database search was performed. Full-length publications were confirmed in 285 endodontic abstracts (23%). Table 1 shows these results according to each year evaluated. The mean elapsed time until publication was 14 months. Thirty-three endodontic abstracts were full-length published previously to the SBPqO meeting.

From the abstracts presented in 2013, most of them were published in journals with A1 and A2 *Qualis* classification, 30.6% and 41.9%, respectively. The mean impact factor of the journals in which the papers were published was 1.571. Two journals were excluded from the mean impact factor calculation because their impact factor values were not available.

When 2014 meeting contents were evaluated, 59 endodontic abstracts were further published, comprising 20.8% of all presentations in this year. The majority of full-length publications occurred in journals scored as A1 and A2 according to *Qualis* classification, 44%, and 27.1%, respectively. As described before, the mean impact factor was also 1.571. The impact factor of one journal was not available.

In 2015, 98 abstracts were published, representing 33.3% of the abstracts presented in this year. More than a half were published in journals A1 (53,1%). The mean impact factor of the journals was 2.810. One journal did not present impact factor and was excluded from the mean impact factor calculation.

From the abstracts presented in 2016, 66 were published, being 17.1% of the endodontic abstracts. *Qualis* A1 journals represented 59.4% of the full-length publications. The mean impact factor of the journals was 2.97. One journal was also excluded for mean impact factor calculation.

When the type of study was evaluated, technological basic researches were predominant with 156 full-length publications, representing 54.7% of the endodontic abstracts presented in SBPqO meetings between 2013 and 2016, followed by biological basic researches with 90 full-length publications (31.6%). Clinical studies, narrative papers/review papers, and randomized clinical trials were observed in 17 (6%), 12 (4.2%) and 10 (3.5%) cases, respectively. Case reports were not found after electronic database search.

The number and percentage of full-length publications according to the journal are presented in Table 2. The full-length publication rates of abstracts presented between 2013 and 2016 are summarized in Figure 1. **Table 1.** Number and percentage of abstracts presented in each SBPqO meeting between 2013 and 2016, number of endodontic abstracts and percentage related to all abstracts presented in each year, and number of full-length publications and percentage related to endodontic abstracts.

	2013	2014	2015	2016	Total
Abstracts presented	2,822	2,752	3,106	3,405	12,085
	(23.30%)	(22.80%)	(25.70%)	(28.20%)	(100%)
Endodontic abstracts	275	283	294	386	1.238
	(9.70%)	(10.30%)	(9.50%)	(11.30%)	(10.20%)
Full-length publications	62	59	98	66	285
	(22.50%)	(20.80%)	(33.30%)	(17.10%)	(23%)
Elapsed time until publication months	16	13	18	10	-

Table 2. Number and percentage of full-length publications according to the journal.

Journal	Impact factor	Qualis	Number of full- length publications	Publication rates
Journal of Endodontics	2.886	A1	69	24.2%
International Endodontic Journal	3.015	A1	46	16.1%
Brazilian Dental Journal	0.816	A2	25	8.8%
Brazilian Oral Research	1.223	A2	20	7%
Clinical Oral Investigations	2.386	A1	14	4.9%
Journal of Applied Oral Science	1.709	A2	13	4.6%
The Journal of Contemporary Dental Practice	0.431	B2	7	2.5%
Indian Journal of Dental Research	0.334	B2	6	2.1%
Microscopy Research & Technique	1.147	B1	5	1.7%
Outros	-	-	80	28.1%

Only journals with at least five full-length publications of abstracts presented in 2013 to 2016 SBPqO meetings were individually considered in this table.

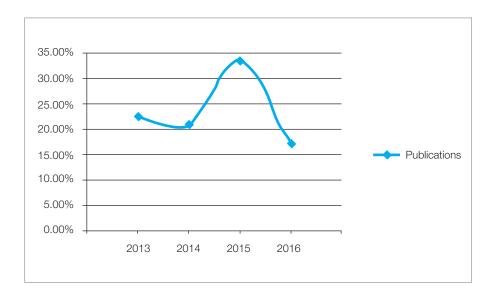


Figure 1. Full-length publication rates of abstracts presented between 2013 and 2016.

Discussion

This study evaluated the full-length publication rates of endodontic abstracts presented at the Brazilian Society of Oral Research meetings between 2013 and 2016. The SBPqO meeting is the most important congress of the Brazilian research dentistry. The authors chose four meetings and not only one year to better represent the endodontic pattern of full-length publications. Besides, early years as 2017 and 2018 were not assessed because some delayed publications may be not found in the electronic databases once the mean elapsed time between congress presentation and full-length publication was 14 months. The mean time until publication found in this study is following some previous study.^{2,6,12,16} However, other investigations found an average time for publication twice as large as those found in this study.14,17,18,19 The main reasons for the delay in publishing manuscripts have been reported as being only partial results, alterations on manuscript content, low priority in publishing manuscripts, insufficient time, lack of novelty in results, flaws in statistical analysis, low expected interest among readers, and a slow peer-review process of some journals.

Previous studies evaluated the full-length publications of abstracts presented in meetings and congress of specific areas such as orthodontics, prosthodontics surgery, and endodontics.^{2,14,15,16} The type of scientific congress influences the full-length manuscript publication rates. Abstracts presented at meetings that involve several specialties usually have lower publication rates than those presented in congresses of a specific área.13,18 This investigation focused on endodontic abstracts presented at the SBPqO meetings between 2013 and 2016, a congress that includes all areas of dentistry. Endodontic researches represented 10.2% of all the abstracts presented at the SBPqO meetings between 2013 and 2016. This congress requires the submission of original abstracts that were not submitted, published or presented in another congress or journal. However, from the 285 full-length publications, thirty-three (11.6%) occurred previously to the SBPqO meeting. This result can be explained by the early online publication option, which has been encouraged by the authors by journals to protect their researches from plagiarism.²⁰

Publication rates ranged from 17.1% to 33.3% according to the year of assessment, 2016 and 2015, respectively. The mean of publication rate was 23%, which is in accordance to previous studies that showed publication rates ranging from 19% to 54%.^{2,16} Only a search in English was used for the data collection. Additionally, the number of manuscripts that are accepted for publication is limited because there are few journals compared to the number of researches developed around the world. Besides, their policies and capacity in absorbing all submissions difficult the publication of the manuscripts. Moreover, the low publication rates found in this study can be attributed to the electronic database used for search (Medline). Some abstracts may be published as a fulllength manuscript in journals that are not indexed in the Medline database. All these factors may have underestimated the number of published articles from the meetings.

The 285 abstracts published as full-length manuscripts were published in forty-two different journals. International Endodontic Journal and Journal of Endodontics published 40.3% (115 abstracts) of the manuscripts. Both of them present the highest impact factor among the specific journals of endodontics, 3.015 and 2.886, respectively. Evaluation of publication rates according to the impact factor of the journals is an important outcome once denotes the quality of researches developed in each country. In Brazil, the journals are categorized according to their impact factors by the Coordination for the Improvement of Higher Education Personnel (CAPES). Such classification is called Qualis and has eight levels in decreasing order of relevance as follows: A1, A2, B1, B2, B3, B4, B5, and C. This study found 185 full-length publications (65.5%) in journals scored as Qualis A1 or A2. Brazilian journals, like Brazilian Dental Journal, Brazilian Oral Research, and Journal of Applied Oral Science, published 20.4% of the total endodontic abstracts that become full-length manuscript. These results confirm the preference of the authors to publish their papers in international journals with high impact factors and, for consequence, high Qualis. Although this study did not evaluate the relationship between the time for publication and impact factor or Qualis, there is a trend for faster publication in high indexed journals. This quick process occurs because the authors, initially, submit the manuscripts to these journals, and if the paper is rejected, the submission occurs in journals with low impact factors.

The International Dental Journal classify the manuscripts in six categories: endodontic basic researches, review endodontic topics, clinical studies, randomized clinical trials, technological basic research and case reports. One hundred and fifty-six manuscripts were published and classified as technological basic research, followed by biological basic research with 89 publications. The low number of randomized clinical trials (only ten publications) can be attributed to the difficulty to develop and conduct this type of study in comparison to laboratory ones. The absence of publications in the case reports category also indicates a lack of interest from the high impact journals in this type of paper. For consequence, it influences the abstracts presented at conferences, since the number of case reports is also remarkably reduced with a preference for laboratory, animal or clinical studies.

Conclusions

Endodontic abstracts represent a tenth of the total abstracts presented in the central Brazilian dentistry congress (SBPqO) from 2013 until 2016. A large number of endodontic abstracts were not published as a full-length manuscript. A mean period of 14 months elapsed between the congress presentation and publication. International journals with *Qualis* A and high impact factor represented the significant part of the published abstracts. Clinical studies and randomized clinical trials accounted for a small proportion of the publications.

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