Bibliometric Analysis of the Journal Acta Stomatologica Croatica: 2009-2018

Bibliometrijska analiza časopisa Acta Stomatologica Croatica: od 2009. do 2018.

Objective: To analyze a bibliometric profile of scientific production published in Acta Stomatologica Croatica (ASCRO). Material and methods: Scientific papers published from March 2009 to December 2018 were analyzed. Information on the year of publication was collected by four trained examiners. Dentistry area, study type and design, data analysis method, presence of randomization, number of authors and corresponding author affiliation were investigated. Data were analyzed using descriptive statistics. Results: A total of 328 articles were evaluated, with a predominance of research in the field of Dental Materials (16.5%), with original article being the most frequent (74.1%). Observational studies accounted for 52.4%, using inferential statistics (83.2%) and non-randomized experimental studies (66.1%). Cross-sectional studies were more common in areas of Behavioral, Epidemiologic & Health Services Research (86.3%), case reports in Craniofacial Biology (54.0%) and Oral Health Research (53.1%), while in vitro studies were more common in the areas of Dental Materials (90.7%), Microbiology / Immunology (70.0%) and Cariology Research (66.7%). Most articles were written by four authors (24.1%), while foreign affiliation was observed in 53.0% of studies. Conclusion: The profile of ASCRO scientific production shows a predominance of original studies carried out in the areas of Dental Materials and Behavioral, Epidemiologic & Health Services Research, with growing participation of foreign researchers.

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Introduction

Research is an investigative process used to increase or reassess current knowledge. The evolution of knowledge in a given area allows the development of not only important scientific and technological advances, but also generates great implications, both in the health and social spheres (1).

The way in which knowledge is constructed and disseminated is of paramount importance, since it will influence and guide thoughts, reflections and attitudes, shaping actions in all fields of knowledge (2). In the health sciences, the dissemination of new knowledge is firstly performed through scientific journals, specialized in the publication of original information and elaborated as research articles that have the ultimate goal of improving professional practice (3).

The search for the best scientific evidence in clinical decision-making in Dentistry has gained attention in recent years (4), with bibliometric analysis being an important tool that measures the level of development of a specific scientific field (5). Bibliometrics is a systematic method for evaluating re-
Material and methods

This is a descriptive research dealing with articles published in ASCRO from March 2009 to December 2018. Data were collected from the journal’s website (http://www.ascro.hr/) and ten volumes were analyzed, with four annual editions (quarterly periodicity), totaling 40 issues.

Inclusion criteria were: selection of original research articles, which included preliminary communications and professional articles, literature review articles and case reports. Book reviews, reports of congresses and professional meetings, as well as summaries of congresses, editorials and letters to the editor were excluded.

Data collection was independently performed by four trained examiners. Information regarding the year of publication; area of Dentistry according to the International Association for Dental Research (IADR) (11); study type (original scientific article, review article and case report); study design (experimental, observational and documentary); data analysis method (descriptive and analytical); the presence of randomization (yes or no); number of authors and corresponding author affiliation (Croatian or foreign) were recorded.

Initially, the abstract of each publication was analyzed and on occasions when this analysis was not sufficient for data extraction, the article was fully read. When there was disagreement in the categorization, the decision was obtained by consensus among examiners.

Data were recorded on a form standardized in Microsoft Office Excel 2016 (Microsoft Press, Redmond, WA, USA) and analyzed using the IBM SPSS software (version 22.0 for Windows, IBM Corp., Armonk, NY, USA). A descriptive analysis was performed for categorical variables and measures of central tendency and variability for quantitative variables.

Materijali i metode

Ovo opisno istraživanje provedeno je na temelju članaka objavljenih u ASCRO-u od ožujka 2009. do prosinca 2018. Korišteni su podatci s internete stranice časopisa (http://www.ascro.hr/) i analizirano je deset svezaka s četiri godišnja izdanja (tromjesečna periodičnost), dakle, ukupno 40 brojeva.

Kriteriji za uključivanje bili su odabir izvornih članaka o istraživanju koji su obuhvaćali preliminarnu komunikaciju i stručne članke, članke za pregled literature i izvješća o slučajevima. Isključeni su bili recenzije knjiga, izvještaji s kongresa i stručnih skupova te sažetci kongresa, uvodni prilozi i pijsma uredniku.

Prikupljanje podataka samostalno su obavila četiri edukirana ispitivača. Usredotočili su se na podatke o godini izdavanja, područje stomatologije prema Međunarodnom udrugovanju za stomatološka istraživanja (IADR) (11), vrstu istraživanja (izvorni znanstveni članak, pregledni članak i izvješće o slučaju), nacrta istraživanja (ekspersimentalni, promatrački i dokumentarni), metodu analize podataka (opisna i analitička) i randomizaciju (da ili ne), a bilježili su i broj autora i odgovarajuće autorsko podrijetlo (hrvatsko ili strano).

Na početku je analiziran sažetak svakoga članka, a ako to nije bilo dovoljno za bilježenje podataka, procijenit je cijeli. U slučaju nedoumica u kategorizaciji odluka je donesena koensuzom ispitivača.

Podatci su bilježeni na standardiziranom obrascu u Microsoft Office Excelu 2016. (Microsoft Press, Redmond, WA, SAD) i analizirani s pomoću softvera IBM SPSS (verzija 22.0 za Windows, IBM Corp., Armonk, NY, SAD). Descriptivna analiza obavljena je za kategorijске varijable, a mjere su središnje tendencije i varijabilnosti za kvantitativne varijable.
Results

In the evaluation period, 328 articles were published, corresponding to an average of 32.8 papers / year, with a minimum of 28 and a maximum of 38 publications / year. Of these, 11.6% were published in 2018, followed by years 2015 and 2016, both with 11.0%. Years 2012 and 2014 had the lowest percentage of scientific productions, with 8.5% each (Figure 1).

The predominant areas of Dentistry in studies were Dental Materials (16.5%), followed by Behavioral, Epidemiologic & Health Services Research (15.5%) and Craniofacial Biology (11.3%). In contrast, the areas of least representation were Evidence-Based Dentistry with 0.6% and Woman in Science with only 0.3% of articles (Figure 2). No studies in the areas of Network for Practice-Based Research, Neuroscience and Nutrition Research were found.

Regarding the characteristics of studies, there was a predominance of original articles (74.1%), observational studies (52.4%), analytical data analysis method (83.2%) and most experimental studies were not randomized (66.1%) (Table 1.).

Rezultati

U promatranom razdoblju objavljeno je 328 članaka, što u prosjeku iznosi 32,8 godišnje, s najmanje 28 i najviše 38 članaka na godinu. Od toga je 11,6 % tiskano u 2018. godini, a slijede 2015. i 2016., obje s 11,0 %. Godine 2012. i 2014. postotak znanstvene produkcije bio je najniži – 8,5 % (slika 1.).

Dominantna područja u istraživanjima ponajprije su stomatološki materijali (16,5 %), zatim ona o ponašanju, a slijede epidemiologija i zdravstvene usluge (15,5 %) te kraniofacijalna biologija (11,3 %). Suprotno tomu, teme s najmanjom zastupljenošću su stomatologija utemeljena na dokazima s 0,6 % te žene u znanosti sa samo 0,3 % članaka (slika 2.). Nisu pronađena istraživanja o područjima mreže za istraživanje utemeljene na praksi, neuroznanosti i prehrani.

Kad je riječ o obilježjima istraživanja, dominiraju izvorni članci (74,1 %), opservacijske studije (52,4 %) i metode analize analitičkih podataka (83,2 %), a većina eksperimentalnih istraživanja nije bila randomizirana (66,1 %) (tablica 1.).
**Table 1**  Distribution of articles according to the characteristics of studies

| Variables • Varijable | N  | %   |
|------------------------|----|-----|
| Article type • Tip članka |    |     |
| Original scientific article • Originalni znanstveni članak | 243 | 74.1 |
| Review article • Pregledni članak | 12 | 3.6 |
| Case report • Prikaz slučaja | 73 | 22.3 |
| Study design • Nacrt istraživanja | | |
| Observational • Promatračka | 172 | 52.4 |
| Experimental • Eksperimentalna | 114 | 34.8 |
| Documentary • Dokumentarna | 42 | 12.8 |
| Data analysis method • Metoda analize podataka | | |
| Descriptive • Deskriptivna | 41 | 16.8 |
| Analytical • Analitička | 203 | 83.2 |
| Presence of randomization • Randomizacija | | |
| Yes • Da | 39 | 34.2 |
| No • Ne | 75 | 65.8 |

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**Table 2**  Distribution of study designs according to area of Dentistry.

| Área da odontologia • Područje stomatologije | Design • Nacrt | Cr Sec N | Case Ct N | COH N | Case Rep N | IN VIT N | IN VIV N | IN VIT IN VIV N | Clin Tr N | DOC N | LR N | SR N | Total N |
|---------------------------------------------|----------------|---------|-----------|-------|------------|---------|---------|----------------|-----------|-------|------|------|--------|
| Oral Health Research • Istraživanja oralnog zdravlja | | 4 | 2 | 0 | 17 | 0 | 2 | 1 | 1 | 2 | 1 | 2 | 0 | 32 |
| Behavioral, Epidemiologic & Health Services Research • Istraživanja o ponašanju, epidemiologiji i zdravstvenim uslugama | | 44 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 4 | 0 | 0 | 51 |
| Periodontal Research • Parodonotsko istraživanje | | 4 | 6 | 0 | 5 | 0 | 2 | 0 | 0 | 4 | 0 | 2 | 0 | 23 |
| Salivary Research • Istraživanja sline i sinovnic | | 0 | 2 | 0 | 0 | 0 | 2 | 0 | 0 | 4 | 0 | 1 | 0 | 9 |
| Pediatric Oral Health Research • Oralno zdravlje u pedijatrijskim istraživanjima | | 4 | 2 | 0 | 10 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 18 |
| Mineralized Tissue • Mineralizirana tkiva | | 1 | 0 | 0 | 1 | 0 | 4 | 0 | 0 | 0 | 0 | 1 | 0 | 7 |
| Prosthodontics • Protetika | | 6 | 0 | 0 | 7 | 0 | 0 | 0 | 2 | 4 | 1 | 0 | 20 |
| Orthodontics Research • Ortodontska istraživanja | | 2 | 2 | 0 | 0 | 1 | 0 | 0 | 0 | 3 | 0 | 0 | 8 |
| International Network for Orofacial Pain and Related Disorders Methodology • Međunarodna mreža za metodologiju vezanu za poremećaje i orofacialnu bol | | 1 | 3 | 0 | 2 | 0 | 1 | 0 | 0 | 2 | 0 | 1 | 0 | 10 |
| Dental Anesthesiology Research • Istraživanje anestezije zuba | | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 4 |
| Pulp Biology and Regeneration • Biologija zubne pulpe i regeneracija | | 0 | 0 | 0 | 3 | 0 | 5 | 1 | 0 | 1 | 0 | 1 | 0 | 11 |
| Craniofacial Biology • Kraniofacijalna biologija | | 4 | 2 | 0 | 20 | 1 | 0 | 0 | 0 | 2 | 5 | 2 | 1 | 37 |
| Implantology • Implantologija | | 0 | 1 | 0 | 3 | 0 | 0 | 0 | 0 | 6 | 0 | 1 | 0 | 11 |
| Dental Materials • Zubni materijali | | 1 | 0 | 0 | 0 | 0 | 49 | 0 | 0 | 2 | 1 | 0 | 1 | 54 |
| Cariology Research • Istraživanja u karijesologiji | | 1 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 1 | 0 | 0 | 6 |
| Education Research • Istraživanja obrazovanja | | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 1 | 0 | 7 |
| Geriatric Oral Research • Oralno-gerijatrijska istraživanja | | 1 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| Microbiology/Immunology • Mikrobiologija/Imunologija | | 0 | 1 | 0 | 0 | 0 | 7 | 0 | 0 | 2 | 0 | 0 | 0 | 10 |
| Woman in science • Žene u znanosti | | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Diagnostic Sciences • Dijagnostičke znanosti | | 0 | 0 | 0 | 2 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 4 |
| Evidence based Dentistry • Stomatologija po dokazima | | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 2 |

Cr Sec = Cross-Sectional; Case Ct = Case Control; COH = Cohort; Case Rep = Case Report; Cas Ser = Case Series; IN VIT = In vitro; IN VIV = In vivo; IN VIT IN VIV = In vitro and In vivo; Clin Tr = Clinical Trial; DOC = Documentary; LR = Literature Review; SR = Systematic Review.
1. Regarding the design of observational studies, 75 were cross-sectional, 73 were case reports, 22 control cases, 1 cohort and 1 case series. Clinical trials comprised 33, experimental *in vitro* comprised 78, *in vivo* comprised 2 and *in vivo* and *in vitro* comprised 1. Of documentary studies, only two of them were systematic reviews.

Cross-sectional studies stood out as the design most frequently used in the area of Behavioral, Epidemiologic & Health Services Research (86.3%). Case reports represented the study type most used in the area of Craniofacial Biology (54.0%) and Oral Health Research (53.1%), and *in vitro* studies, in turn, in Dental Materials (90.7%), Microbiology / Immunology (70.0%) and Cariology Research (66.7%) (Table 2).

Regarding authorship, the 328 articles included a total of 1407 authors, with an average of 4.29 ± 1.75 author/article, median of 4.00, minimum of 1 and maximum of 10 authors. There was a greater number of articles with four authors (24.1%) (Figure 3).

As for the corresponding author affiliation, there was a higher frequency of publications of foreign origin (53.0%). Foreign studies were carried out in Brazil (25.9%), Turkey (12.1%), Greece (10.9%), India (9.8%), Bosnia (7.5%), Thailand (4.0%), Spain (4.0%), Kosovo (3.4%), Germany (2.9%), Italy (2.9%), Malaysia (2.3%), Saudi Arabia (2.3%), in Serbia (1.1%), the United States of America (1.1%). Other countries such as Poland, Bulgaria, Switzerland, Romania, Pakistan, Nigeria, Holland, Scotland, North Macedonia, Israel, Portugal, Slovenia, Libya, England, Albania, Sudan and Colombia accounted for 0.6% each.

**Discussion**

The strategy most used for the dissemination of research results is the publication of articles in scientific journals (12). There is significant growth in the dental literature for most bibliometric indices (13), and bibliometric analysis can be described as a tool for identifying trends in scientific research. However, it helps researchers to identify changing research focuses, as well as knowledge gaps (14).

A previous study involving the ASCRO bibliometric analysis from 1987 to 2006 revealed an average of 35.6 articles per year (15). It was found in this study that the scientific production of the journal during the analyzed period increased considerably. The following can be considered as possible reasons related to this result: significant changes in ASCRO over these 10 years such as indexation in Scopus (Elsevier) in 2009; the creation of a website, enabling the access of the scientific community to the journal at any time and any place; the inclusion in the Cross Ref system and the adoption of its own DOI number (Digital Object Identifier), in 2014, making documents permanently available (16); indexation in Pub Med Central (PMC), which increased its visibility in 2016; and inclusion in the ESCI (Emerging Sources Citation Index), which is an integral part of the Web of Science Core Collection (Clarivate Analytics), in 2018 (8).

These changes in ASCRO affected its visibility and a gradual increase in the number of published articles confirms the quality of the journal, which is well accepted by research-
ers and professionals and has consolidated editorial policy, receiving support from the School of Dental Medicine of Zagreb, the Croatian Medical Association and the Ministry of Science, Education and Sports (16). Currently, the demand to “publish or perish” in the academic community may also have driven the increase in dental productivity (13).

The most frequently studied areas of Dentistry were Dental Materials and Behavioral, Epidemiologic & Health Services Research. The science that involves dental materials aims to explore and develop biomaterials that will be used in the oral cavity (17). This greater focus on the area of dental materials may be related to high competition among technological innovation companies, mainly in the field of nanotechnology, which has promoted rapid progress in the area of biomaterials, providing the development of new materials and devices for biomedical applications, in addition to greater knowledge about the interaction between biomaterials and biological tissues (17). New materials have been daily launched and the application of dental biomaterials on gingival, mucous and hard tissues may constitute a risk if the professional does not master the characteristics, concentrations and inherent properties of materials (18). In this context, advances in the area allow dentists to use innovative therapies, restoring the physical, psychological and social well-being of patients.

In this research, the area of Epidemiology showed significant representativeness. Despite being a relatively new field, the study of Epidemiology was stimulated by the growing concern with public health (19). These studies are important because they seek to identify the causes of a disease in order to deepen the understanding and improve population’s health through numerous applications in the field of public health related to the planning and evaluation of health services (19).

However, there are areas which are not sufficiently explored, such as Evidence-Based Dentistry and Woman in Science, which is a gap in scientific knowledge. Thus, greater incentive to research and dissemination of scientific production in these areas is necessary in order to increase the journal’s impact.

Most published articles were cross-sectional studies that presented limitations as to the fact that they are performed at a certain time, which did not allow inferring causality (20). However, they are quick and had low cost to estimate the prevalence of oral health problems, identify treatment and follow the time, which did not allow inferring causality (20).

The pyramid of scientific evidence determines the hierarchy or levels of evidence in its structure. These levels are organized in ascending order of internal validity, with randomized clinical trials, systematic reviews and meta-analyses representing the highest level of evidence available (23). A small number of clinical trials and systematic reviews were observed in the present research, a fact that may be associated with the difficulty of their execution, since these are studies

či i stručnjaci dobro prihvatili i ojačali uredničku politiku, te dobili potporu Stomatološkog fakulteta u Zagrebu, Hrvatskoga liječničkog saveza i Ministarstva znanosti, obrazovanja i športa RH (16). Možda je i potreba za objavom ili propadanjum u akademskoj zajednici također potaknula porast proizvodnosti kod stomatologa (13).

Najčešće proučavane stomatološke područja su materijali i istraživanja o ponašanju, epidemiologiji i zdravstvenim uslugama. Znanosti koja uključuje stomatološke materijale svrha je istražiti i razviti biomaterijale koji će se primjenjivati u usnoj šupljini (17). Taj pojačani fokus na područje stomatoloških materijala može biti povezan s velikom konkurencijom među tehnološkim inovacijskim tvrtkama, uglavnom u području nanotehnologije. To je potaknulo brz napredak u istraživanju biomaterijala i osiguralo razvoj novih materijala i uređaja za biomedicinsku primjenu, te stjecanje sve kompleksnijeg znanja o interakciji između biomaterijala i bioloških tkiva (17).

Svakodnevno se pojavljuju novi stomatološki materijali, a primjena tih biomaterijala na gingivu, sluznica i tvrdom tkivu može biti rizična ako stručnjak ne poznaje koncentraciju, te pojedinčna i zajednička svojstva materijala (18). U tom kontekstu, napredak u tom području omogućuje stomatologima da se koriste inovativnim terapijama, vraćajući pacijentima fizičku, psihološku i socijalnu komponentu dobrobiti.

U ovom istraživanju je područje epidemiologije pokazalo značajnu reprezentativnost. Iako je to razmjerno novo područje, proučavanje epidemiologije potaknulo je sve veću zainteresiranost za javno zdravstvo (19). Istraživanja o tom temi važna su zato što njihovi autori nastoje ustanoviti uzroke bolesti kako bi se produbilo razumijevanje i poboljšalo zdravlje stanovništva primjenom u javnom zdravstvu, a to se odnosi na planiranje i procjenu zdravstvenih usluga (19).

Postoje i područja koja se rijetko istražuju, poput stomatologije utemeljene na dokazima i ona o ženama u znanosti, što je svakako nedostatak u znanstvenim spoznajama. Zato je potreban veći poticaj za istraživanje i širenje znanstvene izvorišnosti u tim područjima kako bi se povećao učinak časopisma.

Većina objavljenih članaka bila su presječna istraživanja koja su imala ograničenja zbog činjenice da se provode u određeno vrijeme, što nije dopuštao zaključke o učinkovitosti i značajnosti studija znanstvenih novin i Ministarstva znanosti, obrazovanja i športa RH (16). Možda je i potreba za objavom ili propadanjum u akademskoj zajednici također potaknula porast proizvodnosti kod stomatologa (13).

Istraživanja in vitro činila su većinu experimentalnih istraživanja, ali iako su nužna zato što prethode istraživanju na ljudima, njihovi autori nisu u mogućnosti odrediti postoji li ograničenje za određivanje i klinički učinak eksperimenata, a često se i ponavljaju zbog velikoga broja anketa (21, 22).

Piramida znanstvenih dokaza određuje hijerarhiju ili razinu dokaza u njoj pomjereni strukturi. Ona je znanstveno organizirana uzlaznim redoslijedom unutarnje valjanosti, s randomiziranim kliničkim ispitivanjima, sustavnim preglednim člancima i metaanalizama, te su najviša razina dostupnih dokaza (23). U ovom je istraživanju uočeno malo kliničkih ispitnih...
that require more time and cost, requiring greater experience for their execution, as well as a research group well prepared for their development (24).

It could be expected that the number of well-conducted clinical trials will be even lower, considering criteria related to the randomization of experimental groups, since most experimental studies found were not randomized. Therefore, it is necessary to encourage researchers to publish the gold standard study types for an evidence-based practice.

ASCRO’s bibliometric analysis in the 1987-2006 period showed that 711 articles were written by 1136 authors, corresponding to 3.3 authors/article (8). In the present study, the average number of authors/article was 4.29. A recent study carried out with Brazilian researchers with notorious scientific production indicated that they consider four the ideal number of co-authors to enhance scientific production (25). Collaboration among authors makes research more visible, since co-authors add their scientific knowledge, enabling deeper evaluations, which, consequently, create more favorable conditions for the production of high-quality works (26).

Regarding the corresponding author affiliation, there was a prevalence of publications of foreign origin and, among these, there was a predominance of Brazilian researchers. Over the years, Brazil has grown considerably in the field of scientific production. According to data from SC Imago Journal and Country Rank, the country ranks 2nd position, with most international articles published in Dentistry (27). The increase in the number of scientific publications by Brazilian researchers reflects the role of incentives implemented by Brazilian funding agencies, with emphasis on the development of national graduate programs and the granting of research productivity grants by CNPq (National Council for Scientific and Technological Development), as a way of motivating researchers (28).

A high number of studies of foreign origin may indicate the journal’s visibility worldwide. Free access to the journal through the Portal of Scientific Journals of the Republic of Croatia (Hrčak), a central portal that brings together Croatian scientific and professional journals that offer open access, as well as the publication of the online version of the journal and the digitization of the entire collection since the first year has increased the interest of researchers in publications, increasing the relevance of ASCRO in the scientific community and allowing the increase in the number of authors in its editions (8). Indexing in global databases has also expanded the journal’s worldwide relevance (8); another factor is that there are no fees for submission or publication of articles.

According to Borić and Štefić (8), the use of Cross-ref Similarity Check, software that facilitates the recognition of articles that contain plagiarized data will also raise the standard of acceptance of articles and will have a high impact on the future of the journal.

It is important to highlight the fact, which is a limitation of the present article, that this study considers the corresponding author as a way of identifying the institutional affiliation of authors, consequently, some studies may have been inadequately categorized, as there is the possibility of having collaborators of different nationalities in the same article.
Conclusion

The profile of ASCRO’s scientific production shows a predominance of original studies carried out in the areas of Dental Material, Behavioral, Epidemiologic & Health Services Research, with growing participation of foreign researchers.

Conflict of interest

The authors declare that they have no conflict of interest.

Zaključak

Profil znanstvene produkcije ASCRO-a pokazuje da prevladaju izvorna istraživanja o stomatološkim materijalima te biohevronalnih, epidemiološkim i zdravstvenim uslugama, uz sve veće sudjelovanje stranih istraživača.

Sukob interesa

Autori izjavljuju da nisu bili u sukobu interesa.

References

1. Castro Y, Chale-Yaringa NA, Gonzales UP. Production científica en periodoncia e implantes a nivel de Iberoamérica. Rev Clin Periodoncia Implantol Rehabil Oral. 2016 Apr;9(2):114-120.
2. Costa RM, Vieira RS, Cavalcanti AN. Perfil da pesquisa acadêmica da odontologia da EBMSP. Revista da ABENGO 2015;15(1):70-76.
3. Gomes PB, Ferreira SH, Poletto VC, Bervian J, Kramer PF. Bibliometric evaluation of the scientific production of the Stomatos Dental Journal. Stomatos 2011 Jul;17(33):20-31.
4. Kramer PF, Feldens CA, Ilha MC, Borges TS, Kramer PF. Bibliometric analysis of the scientific production of the Pesquisa Bras Odontopediatria Clin Integr. 2018 Oct;18(1):e4441.
5. Araújo RF, Alvarenga L. A bibliometria na pesquisa científica da pós-graduação brasileira de 1987 a 2007. Enc. Biblii: R Eletr Bibliotecn Ci Inf. 2011 Mar;16(31):51-70.
6. Thomas J, Walker TW, Miller S, Cobb A, Thomas SJ. The Olympic legacy: Journal metrics in sports medicine and dentistry. J Int Soc Prevent Commun Dent. 2016 Nov/Dec;6(6):501-508.
7. Uribe S, Pradenas I, Urriola M. Impacto del aumento de escuelas de odontología en la productividad científica odontológica chilena. Revista Clínica de Periodoncia, Implantología y Rehabilitación Oral. 2012 Apr;5(1):13-19.
8. Boric V, Struijc L. The First Fifty Years of the Journal Acta Stomatologica Croatica (1966 - 2016): Citation Analysis. Acta Stomatologica Croatica. 2018 Dec;52(4):348-357.
9. Boric V, Struijc L. Acta Stomatologica Croatica 1987-2019: Online Bibliography, [serial on the Internet]. 2019. Available from: http://bib.ascro.hr/about
10. MeSH Browser [database on the Internet], HRCAK. Posjećenost časopisa u razdoblju: 01.08.1989. - 31.08.2019., biomedicina i zdravstvo. 2019. [cited 2019 Nov 03]. Available from: https://hrcak.srce.hr/index.php?show=posjecenost-casopisa&mjesec_od=8&godina_od=1989&mjesec_do=8&godina_do=2019&podrucje=3.
11. MeSH Browser [database on the Internet], International Association for Dental Research. IADR SCIENTIFIC GROUPNETWORK AWARDS. 2019. [cited 2019 Oct 15]. Available from: https://www.iadr.org/IADR/Awards/Scientific-Group-Network-Awards
12. Faggion CM, MáLAGA L, Monje A, Treasher AL, Listi S, Alarcón MA. The 300 most cited articles published in periodontology. Clin Oral Investig. 2017 Jul;21(6):2021-2028.
13. Jayarathne YSN, Zawahna RL. The Evolution of Dental Journals from 2003 to 2012: A Bibliometric Analysis. PLoS ONE 2015 Mar;10(3):e0119503.
14. Celeste RK, Broadbent JM, Moyes SJ. Half-century of Dental Public Health research: bibliometric analysis of world scientific trends. Community Dent Oral Epidemiol. 2016 Dec;44(6):557-563.
15. Boric V, Struijc L. Bibliometric Analysis of Acta Stomatologica Croatica: 1987-2006. Acta Stomatol Croat. 2006(4):336-46.
16. Boric V. 50th Anniversary of Acta stomatologica croatica. Acta Stomatol Croat. 2016 Mar;50(1):2-7.
17. Sinhoreti MAC, Vitti RP, Sobrinho LC. Biomaterials on Odontology: panorama atual e perspectivas futuras. Rev Assoc Paul Cir Dent. 2013 Oct;67(3):178-186.
18. Bugarin Junior JS, Garrafa V. Bioética e biossegurança: uso de biomateriais na prática odontológica. Rev. Saúde Pública. 2007 Apr;41(2), 223-228.
19. Veiga N, Coelho I. The Importance of Epidemiology in Dental Medicine. J Dent Oral Health. 2015 Jan;14(1):1-4.
20. Levin KA. Study design ill: cross-sectional studies. Evid Based Dent. 2006 Mar;7(1):24-25.
21. Oliveira GJ, Oliveira ES, Leles CR. Survey of study designs of papers published in Brazilian dental journals. Rev Odont Cienc. 2007;22(55):42-7.
22. Rode SM. Editorial. Pesq Odontol Bras. 2000;14(supl):1.
23. Multiman PS. Evidence-based practice and the evidence pyramid: A 21st century orthodontic odyssey. Am J Orthod Dentofacial Orthop. 2017 Jul;152(1):1-8.
24. Nedel WL, Silveira F. Os diferentes delineamentos de pesquisa e suas particularidades na terapia intensiva. Rev Bras Ter Intensiva. 2016 Jan;28(3):256-260.
25. Hilário CM, Gracio MDC. Scientific collaboration in Brazilian researches: a comparative study in the information science, matematics and dentistry fields. Scientometrics. 2017 Sep;113(1):929-950.
26. Pan RK, Kaski K, Fortunato S. World citation and collaboration networks: Uncovering the role of geography in science. Scientific Reports 2012 Nov;2:902.
27. MeSH Browser [database on the Internet], Scimago Journal & Country Rank. 2019. [cited 2019 Nov 03]. Available from: http://www.scimagojr.com
28. Souza IGS, Veloso Popoff DA, Nunes Oliveira RC, de Almeida ER, Junior HM, Lima AMEB. Profile and scientific production of Brazilian researchers in dentistry. Arq Odontol. 2016 Jan;52(1):13-22.