

A Study on Most Frequently Cited Journals by Periodontists

Prof. M. Veerabasavaiah

Professor
Department of Library and Information Science
Bangalore University
JB Campus, Bangalore -56.
Email: vrbasavaiah@gmail.com

Shivappa C R

Research Scholar
Department of Library and Information Science
Bangalore University
JB Campus, Bangalore -56
Email: shivucr3@gmail.com

Abstract - *The present study applied citation analysis method to examine the use of information resources by Periodontists. The source journal 'Annals and Essences of Dentistry' published 356 research articles with a total 9 years from 2009-2017 and 5146 citations were examined according to: identify the growth of journal articles by year wise and volumes of the source journal, To identify various bibliographic forms of cited literature by Periodontists, To prepare most frequently cited journals by Periodontists, and to know the country wise distribution of cited journals. The study shows that journals and books are most used sources for information.*

Key words: Periodicals, Citation Analysis, Ranking of most frequently cited journals, Periodontists.

1. Introduction

Periodicals are essential means for scholarly communication. They are issued periodically and published new research results of every discipline. They are ranked on the basis of citation counts of the research articles they published. The Researcher is mainly depending on this publication for their academic and research work, because they carry current and latest information. There are number of periodical publications are brought out in Dental discipline in all over the world. There is no signal library can procure the periodicals for its readers with in the limited fund. Therefore it is very difficult to make selection from large availability of journals.

The Citation study has been used extensively for journal selection and to this study identifies the core periodicals for selection to user community. Citation study is examining the frequency patterns and graphs of citation in articles and widely used method bibliometrics introduced by Garfield in 1955. It is a method of qualitative measurement of published work on Bibliographic reference. The present study focus on the source journal 'Annals and Essences of Dentistry' is main source selected for the study and it published 356 research articles with a total 9 years from 2009-2017 and 5146 citations were examined.

2. Related works

There are many professionals were carried out on journal citation studies by Arjunlal(1), Brace (2), Deshmukh(3), Dhavan and Yadav (4), Elisha raju and Kavitha(5) Fang (6), Garfield (7, 8), Gross and Gross (9), Hemasundar Naidu(10), Mahapatra (11), Moed, (12), Mohinder Singh (13), Nagappa and Maheswarappa (14) Paul Mohan Ray (15), Sangam(17), Sengupta(18), Subramanyam (19), Viswanathan (20).

3. Objectives of the study

- To identify the growth of research articles by year and volume wise from the source journal
- To identify the Bibliographic forms of cited documents by Periodontists
- To prepare Rank list of most frequently cited journals and
- To know the country wise cited journal publications

4. Sample and Methodology

The sample for this study comprises appended to reference section of the 356 research articles published in 'Annals and Essences of Dentistry'. A total of 5146 citations were obtained from 9 volumes of the journals published from 2009-2017 are inclusive for the study. All the citations appended in the articles are collected, examined and tabulated. For each citation, name of the author, type of document cited, year of publication etc. are noted. Use of different abbreviations in journal title was recognised and identified from websites and as well as in Ulrich's International periodical directory.

5. Data analysis

Table 1: Year and volume wise distribution of Research articles and Citations.

Sl. No	Year	Vol. No	Issue no	No of articles	%	No. of citation	%
1	2009	01	1-4	5	1.40	62	1.20
2	2010	02	1-4	105	29.49	1321	25.67
3	2011	03	1-4	91	25.56	1025	19.91
4	2012	04	1-4	30	8.43	400	7.77
5	2013	05	1-4	30	8.43	243	4.73
6	2014	06	1-2	17	4.78	192	3.74
7	2015	07	1-4	30	8.43	671	13.03
8	2016	08	1-4	17	4.78	523	10.17
9	2017	09	1-4	31	8.70	709	13.78
	Total		34	356	100	5146	100

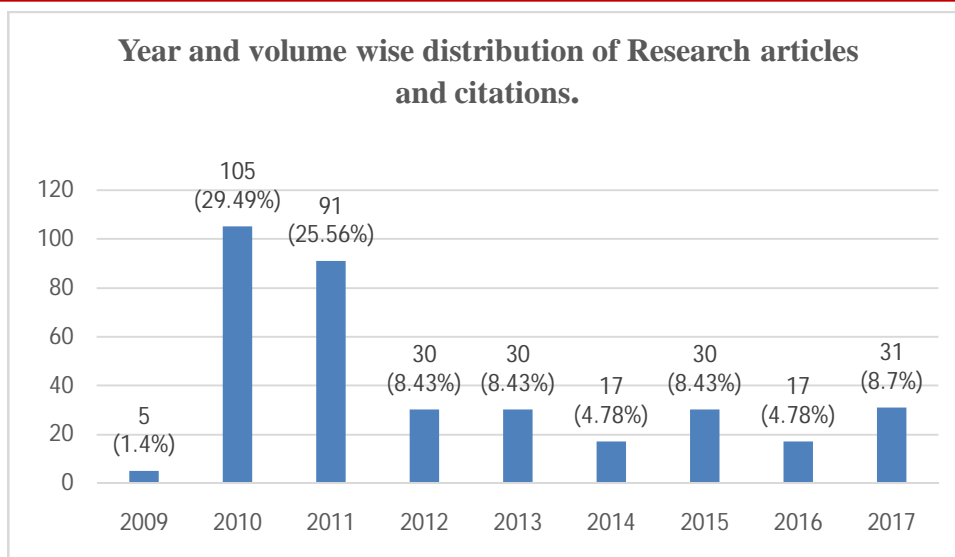


Fig 1

Table 1 indicates that the volume-wise distribution of research articles. Each volume contains four issues and except 6th volume (two issues only). A total of 5146 citations are identified. The highest numbers of citations are found in the year 2010 with 1321 (25.67%), followed by 2011 with 1025 (19.91%) citations and the least 192(3.74%) citations in volume 6 in 2014.

Table 2: Ranking of Bibliographic Forms of Cited Documents.

Sl No.	Rank No.	Bibliographic Forms of Cited documents	No. of citations	%
1	1	Journals	4309	83.72
2	2	Books	305	5.92
3	3	E Resources	253	4.91
4	4	Reports	44	0.85
5	5	Seminarsandconference papers	27	0.53
6	6	Dictionaries	25	0.49
7	7	Encyclopaedia	20	0.39
8	8	Handbooks	19	0.37
9	9	Patents	12	0.24
10	10	Thesisanddissertations	10	0.19
11	10	Directories	10	0.19
12	11	Monographs	8	0.16
13	11	Year Books	8	0.16
14		Incomplete references	96	1.88
Total			5146	100

Table 2 examines bibliographic form wise distribution of citations. Out of 5146 citations, the highest number of citations is 4309 (83.72%) on journals, followed by with books with 305 (5.92%) and reports with 44 (0.85%) and E Resource with 253 (4.91%) respectively.

Table3: Ranking of most frequently cited journals by Periodontists

Sl. No	Rank No	Journal name	No. of citations	%	Cumulative Citation	%	Country of publication
1	1	J. Periodontology	225	5.22	225	5.22	USA
2	2	J. Endodontics	190	4.39	415	9.63	USA
3	3	Am. J.Orthodontics&Dentof. Orthop	174	4.03	589	13.66	USA
4	4	Angle Orthodontist	131	3.03	720	16.70	USA
5	5	Mol. Oral Microb.	94	2.18	814	18.89	Germany
6	6	Clinl.OralImpl Res	86	1.98	900	20.88	Denmark
7	7	Oral Surg. Oral Med.OralPathol. Oral. Radiology	75	1.73	975	22.62	USA
8	8	J. Periodontal Res	74	1.70	1049	24.34	UK
9	9	J. Am DentalAssoc	66	1.53	1115	25.87	USA
10	10	J. Oral Microb	61	1.41	1176	27.29	UK
11	11	Dental Materials	60	1.40	1236	28.68	UK
12	12	Frontiers of oral biology	58	1.36	1294	30.03	Switzerland
13	13	Europ J. Orthod	56	1.30	1350	31.32	UK
14	14	J. Prosthod. Res.	54	1.25	1404	32.58	Netherland
15	15	Intel.J. Oral. Maxillofacial Surg.	52	1.20	1456	33.78	USA
16	16	J. Prosthetic Dentistry	48	1.11	1504	34.90	USA
17	17	Clin. Impl. Dent. Rel. Research	47	1.08	1551	35.99	USA
18	18	Brit. J. Oral. Maxillo. Surgery	46	1.05	1597	37.06	USA
19	19	Comm.Dent. Oral. Epidemiology	45	1.04	1642	38.10	UK
20	19	J. Cranio-Maxillo-Facial. Surg.	45	1.05	1687	39.15	USA
21	20	J.Oral.Maxillof. surg.	44	1.03	1731	40.17	UK
22	20	Annals & essences of Dentistry	44	1.03	1775	41.19	India
23	20	Dental Clinics. North America	44	1.03	1819	42.21	UK
24	21	Caries Research	43	1.00	1862	43.21	Switzerland
25	22	Dentomaxillof. Radiology	42	0.98	1904	44.18	UK
26	22	J. Oral. Path. Med.	42	0.98	1946	45.16	UK
27	23	Intl. J. Paediatric Dentistry	40	0.92	1986	46.08	USA
28	24	Dental Traumatology	39	0.91	2025	46.99	UK
29	24	Intl. j. oral science	39	0.91	2064	47.89	China
30	24	Korean J. Orthod.	39	0.91	2103	48.80	South Korea
31	25	Orthod. Craniofac. Res.	38	0.89	2141	49.68	UK
32	25	Oral Diseases	38	0.89	2179	50.56	UK
33	26	J.Conserv.Dentistry	37	0.85	2216	51.42	India
34	26	Australian Dental Journal	37	0.85	2253	53.12	USA
35	27	J. Oral Rehabilitation	36	0.84	2289	53.12	UK
36	27	Bri. Dental. J.	36	0.83	2325	53.95	UK
37	28	Arch. Oral. Biol.	35	0.82	2360	54.76	UK
38	29	Clin. Oral. Investg.	34	0.78	2394	55.55	Germany
39	29	Europ. J. Oral. Sci.	34	0.78	2428	56.34	UK
40	29	Operative Dentistry	34	0.79	2462	57.13	USA
41	29	Intl.J.Periodon. Resto. Dentistry	34	0.79	2496	57.92	USA
42	29	J. Public Health. Dentistry	34	0.79	2530	58.71	USA
43	30	Operations. Res. Health Care	33	0.77	2563	59.48	UK
44	30	Gerodontology	33	0.77	2596	60.24	UK
45	30	BMC Oral Health	33	0.77	2629	61.01	UK
46	30	J. App. Oral. Sci.	33	0.77	2662	61.77	Brazil
47	30	Medicina. Oral. Patologia. Oral. CirugiaBucal	33	0.77	2695	62.54	Spain
48	31	Intl. J.Dentistry	32	0.75	2727	63.28	Egypt
49	31	Europ. J.Dentistry	32	0.75	2759	64.02	Turkey
50	31	Cleft Palate-Craniofacial J.	32	0.75	2791	64.77	USA

51	31	J.Prostodontics	32	0.74	2823	65.51	UK
52	32	J.Orofacial Pain	31	0.72	2854	66.23	USA
53	32	Monographs. oral science	31	0.72	2885	66.95	Switzerland
54	32	J.Orofacial Orthopedics	31	0.72	2916	67.67	Germany
55	32	J.Evidence-Based Dental Practice	31	0.72	2947	68.39	USA
56	32	Brazilian. Oral. research	31	0.72	2978	69.11	Brazil
57	33	Prog. Orthodontics	30	0.70	3008	69.80	Netherland
58	33	Intl. Dental Journal	30	0.70	3038	70.50	USA
59	34	Intl. J.Prosthod.	28	0.65	3066	71.15	USA
60	34	J.DentalBiomech.	28	0.65	3094	71.80	UK
61	34	Europ. J.Dental Edu.	28	0.65	3122	72.48	UK
62	34	Aust.Endodontic J.	28	0.65	3150	73.10	Australia
63	34	Pain Management	28	0.65	3178	73.75	USA
64	35	J.Orthodontics	26	0.60	3204	74.35	UK
65	35	J.Clin.Orthodontics	26	0.60	3230	74.95	USA
66	36	Odontology	24	0.55	3254	75.51	Germany
67	36	J.Adhes.Dentistry	24	0.55	3278	76.07	USA
68	37	Brazilian Dental J.	22	0.51	3300	76.58	Brazil
69	37	Oral.maxillofacial surg. Cases	22	0.51	3322	77.09	Netherland
70	38	Dental Materials J.	21	0.48	3343	77.58	Japan
71	39	Acta.Odonto.Scand	18	0.41	3361	77.99	UK
72	39	J.Dental Edu.	18	0.41	3379	78.41	USA
73	40	Pediatric Dentistry	16	0.37	3395	78.78	USA
74	41	J.clinicalPeriodo.	15	0.34	3410	79.13	UK
75	42	Seminars.Orthodo.	14	0.32	3424	79.46	UK
76	42	J.Clinical Dentistry	14	0.32	3438	79.78	USA
77	42	Intl. Endodo.J.	14	0.32	3452	80.11	UK
78	43	Imaging Sci. Dentistry	13	0.30	3465	80.41	South Korea
79	43	Implant Dentistry	13	0.30	3478	80.71	USA
80	43	Am. J.Dentistry	13	0.30	3491	81.01	USA
81	44	Iranian Endodo. J.	11	0.25	3502	81.27	Iran
82	44	J. Dental Research	11	0.25	3513	81.52	USA
83	45	J.Esthetic.Restorative Dentistry	10	0.23	3523	81.75	USA
84	46	434 Journals Cited with les 10 times.	786				
Total			4309				

Table3 presents ranking of most frequently cited journals by Periodontists. Out of 517 total periodicals the researchers ranked only 83 ranked journals. The study it is clear that Journal of Periodontologytop in the rank list with 225(5.23%) citation cited by researchers, followed by ‘Journal of Endodontics with 190(4.40%), citations‘American Journal of Orthodontic andDent facial Orthopedics’ 174(4.04%), Angle Orthodontist 131(3.04%), ‘Molecular Oral Microbiology’ 75(1.74%) respectively.

Table 4. Country wise cited journal publications

S N	Name of the countries	No. of journals	%
1	USA	31	37.35
2	UK	27	32.55
3	Germany	4	4.82
4	Switzerland	3	3.62
5	Netherland	3	3.62
6	Brazil	3	3.62
7	India	2	2.4
8	South Korea	2	2.4
9	Denmark	1	1.20

10	China	1	1.20
11	Spain	1	1.20
12	Turkey	1	1.20
13	Japan	1	1.20
14	Iran	1	1.20
15	Australia	1	1.20
16	Egypt	1	1.20
Total		83	100

Table 4 presents country wise cited journal publications. Out of 517 total periodicals the researchers ranked only 83 ranked journals. Among them 16 countries like USA, UK Germany is the top in the rank table.

6. Findings and Conclusion

The study has been carried out ‘Annals and Essences of Dentistry’ during the period from 2009-2017. A total of 356 research articles are published by the journal in the period and it would yield 5146 citations. The study reveals that the highest 105 (29.49%) research articles are published in 2010. Journals articles were most cited source accounting with 84 % of the total citations, followed by books, e-resources, reports and etc. J. Periodontology is the first rank among others journals. USA is the top country to publish research articles in the subject and followed by UK.

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