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Information research: South African journal of library and information science (2005-2015): A bibliometric study

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Abstract
This paper deals with the analysis of the 179 contributions of the journal entitled "South African Journal of Library and Information Science" published during 2005-2015. It examines year wise, authorship pattern, citation analysis, length of the contributions etc. The study shows that most of the contributions of this journal are contributed by double author 80(44.69%) and geographical distribution shows that most of the contributions are contributed from South Africa Citation analysis of 6274 citations, types of publications cited and preparing of ranked list of cited journals in contributions of this journal. The study reveals that Books are the most cited publication amongst the library and information scientists and the source journal i.e.

Keywords: Librametrics, scientometrics, bibliometrics, informetrics, webometrics, SAJLIS, South Africa

Introduction
The 20th and 21st century decodes may be described as the century of the development of metric sciences, i.e. 'librametrics' 'scientometrics' 'bibliometrics' 'informetrics' 'econometrics' 'technometrics' 'biometrics' 'sociometrics' 'psychometrics' 'educametrics' 'webometrics or cybermetrics or 'scientific mapping' and so on was the concluding milestone of the metric sciences' voyage in the last century. The bibliometrics is a quantitative study of various aspects of literature on particular multi-disciplinary subjects such as Science, Social science, Physical science, Linguistics, Education, Management and other similar fields and it used to identify the pattern of publication, authorship, citation and or primary or secondary journal coverage with the objective of getting an insight into the dynamics of the growth of information and knowledge in the areas and fields under consideration.

The bibliometric methodological tool has been frequently used in field of library and information science education and research (LISER), because of ever-growing number of 'primary' 'secondary' and 'tertiary' bibliographic units like books, periodical, reports, working papers, databases, corresponding increase in the size of library collection, number of readers, issue of library materials, increasing costs of journals, number of catalogues cards, changes in search strategy and so on. The librametrics' 'scientometrics' 'bibliometrics' 'informetrics' 'sociometrics' 'webometrics or cybermetrics' are used to explore the impact of LIS field and to provide quantitative, descriptive, linguistics, development of thesauri and evaluation of usage and academic and research literature productivity analysis.

2. The Origin of the Bibliometrics
The term of bibliometrics to replace the name 'statistical bibliography' is compounding by two distinct parts i.e 'biblio and 'metrics' the both term 'biblio' and 'metrics' derived from the combination of the Latin and Greek. The word 'biblio' means book, paper and the term 'metrics' indicates the science of meter i.e. measurement and is also derived either from the Latin or Greek word 'metrics' or 'metrikons' each meaning measurement.

The term of bibliometrics was first used by Pritchard (1969), clearly defined it in his (1996) book "*the application of mathematical and statistical methods to books and other media*". The bibliometrics is involves the analysis of a set of resources like books, articles, websites,

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monographs, conference proceedings, policy statements, even patents are characterized by bibliographic variables or frequency distributions such as the author/s, the place of publication, the associated subject keywords, and the citations. The bibliometrics is just one of the many and multi-disciplinary sciences whose name ends with 'metrics' and it influenced by some well sub-disciplines 'metrics tools' like, 'Librametrics' 'Informatrics' 'Scientometrics' and 'Webometrics' etc.

3. Types of literature measuring "Metrics"

3.1 Librametrics: Some fifty years ago, at the Aslib Conference in Leamington Spa in 1948, the term 'Librametry' was established by the famous Indian librarian S. R. Ranganathan: ". it is necessary for librarians to develop librametry in the lines of biometry, econometry and psychometry since *many of the matters connected with library work and services involve large numbers...*" (Aslib Proceedings 1949, p. lO2). His suggestions were avidly welcomed at the conference, notably also by Bernal.

3.2 Bibliometric

- Cole & Eales (1917) studied the growth of literature in comparative anatomy for the period 1550-1860.
- Hulme's (1923) work is another early study, using document counts to provide insight into the history of science and technology.
- The of field of metrics can be trace back to the first half of the twentieth century through the works of Lotka (1926) Bradford (1934) and Zipf (1949).
- The French equivalent of the term, 'bibliometrie', by Paul Otlet (1934) in his Traitee de Documentation 'Le livre sur le Livre' Theorie et pratique
- The term predates 'Librametry' which was coined by Pritchard in 1969 and the Pritchard & Wittig (1981) Bibliometric methods have been applied in various forms for a century or more.
- Khurshid & Sahai (1991) to be the first bibliometric study (although using the older terminology of 'statistical bibliography').
- Sengupta (1992) claims that Campbell (1896) produced the first bibliometric study, using statistical methods for studying subject scattering in publications.
- The bibliometrics includes Operation research (Linear programming, transport problems), Statistics (Multivariable techniques, trends correlations), Bibliometrics law (Laws of Zipf. Lotka, and Bradford), Citation analysis (Networks, Science policy), Circulation theory (Models), Information theory, Theoretical aspects of infomiation and retrieval etc., metrics models.

3.3 Informetrics: The term, 'informetrics' was first proposed by Otto Nacke of West Germany in 1979 on the concept of information productivity. It was derived from English verb 'Informare' (to inform) in the sense of 'to give from to the mind' 'to discipline' 'instruct' 'tech' and 'metrics' means measuring the quantitative aspect of information.

3.4 Scientometric: The term had gained wide recognition by the foundation in 1978 of the journal Scientometrics by Tibor Braun in Hungary in 1977. It denotes 'Measurement of Information Process'.

3.5 Webometrics or Cybermetrics: also called it as 'Scientific Mapping' is tries to measure the WWW to get knowledge about the numbers, hyperlinks and usage pattern. The term was coined by Norbert Wiener in 1948.

4. South African Journal of Libraries and Information Science

The SAJLlS is alive since 1933 and now it standing on door step of 100 year celebration. In early the SAJLIS has brought publications under entitles *"South African Journal of Librarianship and Information Science"* [ISSN: 0256-887X] and *"South African Libraries - Suid-Afrikaanse Bibliotheca (South Africa)"* [ISSN: 0038-240X]. Than 2002 onwards the title has been change as "South African Journal of Library and Information Science (SAJLlS)" [ISSN: 0256-8861]. The journal was supposed to be published quarterly, largely in the English language and it is published in South Africa by Forum Press, which replaced the South African Bureau for Scientific Publications. The journal publishes original, scientifically viable contributions on any area of Library and Information Science (LIS), including specific arrays of library science called information literacy, management, children's literature, ethics, globalization, impact of the digital divide, technology, communications, Indigenous Knowledge Systems (IKS), knowledge management, etc. According to the journal's editorial policy (available on L1ASA'swebsite), SAJLIS publishes a range of documents, including scholarly articles, review articles, practical library work, short communications, book reviews and letters to the editor. More information about the journal can be found at:
http://www.liasa.org.za/publications/sajlis.php.

5. Objectives of the study

The objective of this study is to examine the South African Journal of Library and Information Science (SAJLIS) research contributions contributed by the various professional of South Africa and others countries of the world. The main objectives of this study are:

- To find the year and issues wise distribution of the contributions.
- To know the gender differentiation of the contributions.
- To examine authorship collaboration for the contributions.
- To analysis the thematically expertise of the contributors.
- To find forms of citation resources used for the contributions.
- To find the length and highest coated references for contributions.

6. Literature Review

A review literature is essential, primarily to identify the work in a subject selected for investigation. A comprehensive literature of study is made here. The data collection has been done from the recent research intellectual output related to my study of investigation. The selected Indian and Foreign periodicals in the field of Library and Information Science has been reviewed and consulted.

Azer S A & Azer S (2016) [1] number of citations varied from 1049 to 2959 in list A and from 1929 to 5500 in list B. In both lists, the majority of articles were research papers. No significant correlations were found between the number

of citations and the number of years since publication ($R2=0.00992$, $p=0.473$ and $R2=0.00202$, $p=0.757$, respectively). However, the mean number of citations of papers published before the year 2000 was lower than those published after 2000 (36.70 ± 19.31 vs 106.03 ± 39.22). No correlation was found between number of authors and the number of citations ($R2=0.04352$, $p=0.130$), but strong correlations were found between the number of institutes involved or number of countries and the number of citations ($R2=0.275$, $p<0.001$ and $R2=0.16181$, $p=0.003$, respectively). Females were under-represented in authorship (45 vs 254, $p=0.004$). The inter-rater agreement between evaluators had a Cohen κ coefficient 0.76–0.84.

Gogoi & Barooah (2016) [2] study deals the bibliometric analysis of articles and references provided at the end of each article contributed in Indian Journal of Chemistry Section B, Vol.52B, 2013. The study indicates the authorship trend is towards team works rather than a work in isolation It is observed that most of the publications cited are articles in journals; the number of references in other kinds of documents such as books/monographs, conference proceedings, theses/dissertation etc. are small. Among the citations from journal literature, majority are from foreign journals though the journals of Indian origin have also extensively used by the researchers. On other hand the Francisco & et al (2016) [3] identified 639 original documents published between 1998 and 2013 from India. Our results indicated fulfilment of Price's law (correlation coefficient r = 0.9619 after exponential adjustment vs. r = 0.9382 after linear adjustment). The most widely studied AADs were olanzapine (173 documents), clozapine (117), risperidone (100) and quetiapine (65). Publications appeared in 221 different journals, with only 4 of the top 10 journals having an impact factor greater than 2. Division into Bradford zones yielded a nucleus occupied by the Indian Journal of Psychiatry (53 articles). It is remarkable that the 27.38% of the production is devoted to "medical/pharmaceutical chemistry" field. India has the largest ratio PI AAD / PI Psychiatry and Neurology in the world's 12 most productive countries in biomedicine and health sciences.

Swati Jain, P & et al (2015) [4] Bibliometric study was done for 601 articles of JCDR published from Feb. 2007 to Oct. The majority of the study designs published in both the journal were case reports (42.6%) followed by cross sectional studies (24.8%). 96.3% of the articles were from India and majority of the articles published were of multi authors (65.2%) and from educational institutes (98.4%). The trends of the articles published indicated that the case reports/series formed the major bulk (others=59.1%) followed by research studies (21.3%).

Vellaichamy, A and Jeyshankar, R (2015) [5] study analysis of the 158 papers published articles in the journal "Webol gy" during the period 2004-2013. The study focuses on various aspects of the journal such as growth of papers in year-wise, authorship pattern, degree of collaboration, length of paper, document types, subject wise distribution of papers, ranking of contributors have also been analyzed. The study find that majority (22.03%) of the contributions were Indians.

Wankhede & et al. (2015) [6] study deals a bibliometric analysis of 36 papers published in the Urban Library Journal on DOAJ during the period 2010 - 2014. The study focused on various aspects: such as document types, of publications and citations, year-wise, authorship pattern, institutions involved, most prolific authors of the journal. The study revealed that most of the papers (33.33%) of papers were contributed by multiple authors. United States is the top producing country with 100% publications of the total output.

7. Methodology

The study was conducted the comprised all original articles were published in "South African Journal of Library and Information Science (SAJLIS)" between 2005 to 2015 has been selected and analyzed. The overall ten (10) years available full-text articles were downloaded from the SAJLIS archival site: http://sajlis.journals.ac.za/pub/issue/archive in the month of October and November 2015. Data concerning total number of articles, total number of references, length of contributions, year-wise, geographical distribution of contributions of the journal. The gender of authors has been identified by looking at all the forename of the authors one by one. etc., was scanned, checked and examined carefully. Short communications are also included for the study. The collected data have been analyzed and is presented in the form of tables as follow.

8. Data analysis and Interpretations

There were as many as 174 research publications are published in the various field of library and information science from last ten (10) years contributions 2005-2015. The investigators have made an attempt to consolidate all the research contributions contributed by the South African as well as others nations LIS professionals and examine the overall research productivity year, issues, collaborations, thematically interest of contributors.

Table 1: Year and issues wise distribution of contributions

Publication details			No. of Contributions			Total	%
Years	Vol.	Issues	Issue 1	Issue 2	Issue 3		
2005	Vol. 71	1 to 3	8	8	7	23	12.84
2006	Vol. 72	1 to 3	7	5	10	22	12.29
2007	Vol. 73	1 to2	8	10	-	18	10.05
2008	Vol. 74	1 to 2	9	9	-	18	10.05
2009	Vol. 75	1 to2	10	9	-	19	10.61
2010	Vol. 76	1 to 2	8	9	-	17	9.49
2011	Vol. 77	1 to2	8	7	-	15	8.37
2012	Vol. 78	1 to 2	7	5	4	16	8.93
2013	Vol. 79	1 to2	4	5	-	9	5.02
2014	Vol. 80	1 to 2	6	5	-	11	6.14
2015	Vol. 81	1 to 2	6	5	-	11	6.14
11	11	23	81	72	21	179	99.93

The totals of 179 contributions have been published in 11 years (2005-2015), which consists of full research articles. Table-1 gives details regarding the distribution of 179 contributions published from 2005-2015. Maximum number of articles i.e., 23 (12.84%) was published in 2005 from Three issues, in second spot is 22 (12.29%) was published in 2006 from Three issues and minimum number of contributions i.e., 9 (5.02%) in 2013 from two issue.

Table 2: Gender wise distribution of contributions

Years	No. of Contributions			No. of Authors	Male authors	%	Female authors	%
	Vol.	Issues	Articles					
2005	Vol. 71	1 to 3	23	38	31	9.81	7	2.21
2006	Vol. 72	1 to 3	22	34	22	6.96	12	3.79
2007	Vol. 73	1 to2	18	30	21	6.64	9	2.84
2008	Vol. 74	1 to 2	18	29	16	5.06	13	4.11
2009	Vol. 75	1 to2	19	34	30	9.49	4	1.26
2010	Vol. 76	1 to 2	17	29	18	5.69	11	3.48
2011	Vol. 77	1 to2	15	27	21	6.64	6	1.89
2012	Vol. 78	1 to 2	16	35	29	9.17	6	1.89
2013	Vol. 79	1 to2	9	18	13	4.11	5	1.58
2014	Vol. 80	1 to 2	11	19	17	5.37	2	0.63
2015	Vol. 81	1 to 2	11	21	15	4.74	8	2.53
11	11	23	179	316	233	73.68	83	26.21

Table-2 finds male dominance in terms of contribution for majority of years but aggregated figures highlights female dominance with contribution of 26.21% articles during 11 years. Males have contributed more than 73.68% during the year 2005, to 2015.

Table 3: Authorship pattern of contributions

Years	No. of Contributions			One Authors	Two Authors	Three Authors	Three > Authors	Total
	Vol.	Issues	Articles					
2005	Vol. 71	1 to 3	23	9	13	1	-	23
2006	Vol. 72	1 to 3	22	13	6	3	-	22
2007	Vol. 73	1 to2	18	11	6	1	1	18
2008	Vol. 74	1 to 2	18	7	8	2	-	18
2009	Vol. 75	1 to2	19	7	6	5	-	19
2010	Vol. 76	1 to 2	17	7	8	2	-	17
2011	Vol. 77	1 to2	15	5	8	2	-	15
2012	Vol. 78	1 to 2	16	4	7	3	1	16
2013	Vol. 79	1 to2	9	3	6	0	1	9
2014	Vol. 80	1 to 2	11	5	4	2	-	11
2015	Vol. 81	1 to 2	11	2	8	1	-	11
11	11	23	179	73 (40.78)	80 (44.69)	22 (12.29)	3 (1.67)	179 100%

Table 3 gives the details about the authorship pattern. A total of 80 contributions (44.69%) out of 179 have been contributed by double authors, 73 contributions (40.78%) by single authors and 22 contributions (12.29%) by three authors and only 3 contributions (1.67%) by more than three authors.

Table 4: Theme wise distribution of contributions

SL.	Theme of Subject	No. of Contributions	%
1	Information Commutation Technology (ICT)	18	37 (20.67)
	✍ICT Applications: Websites, portals/blogs	6	
	✍Internet/Search Engines	6	
	✍Digital events: Digital Libraries, Automations	4	
	✍Institutional Repositories /OSS/Open access	3	
2	Information Processing and Retrieval	6	3.35
3	Libraries/Library System	14	7.82
4	Information Literacy	17	9.49
5	Library Management/Knowledge Management	15	8.37
6	Collection Development	2	1.11
7	LIS education Research and Training (LISERT)	19	10.61
8	Sources and Services	19	10.61
9	User Studies	26	14.52
10	Bibliometrics/Webometrics/Scientometrics	18	10.05
11	Other thematically issues	6	
	Total	179	100

The table-4 showed that majority of the contributions appeared under the theme of subject Information Communication and Technology 37 (20.67%) followed by User Studies 26(14.52.%), LIS education Research and Training (LISERT) 19 (10.61%), Sources and Services 19 (10.61%), Bibliometrics/Webometrics/Scientometrics 18 (10.34%), Information Literacy and Library Management/Knowledge Management 15 (8.37%), Libraries/Library System 14 (7.82%).

Table - 5: Geographical distribution of contributors and contributions

Sl. No	Nations	No. of contributors	%	No. of contributions	%
1	South Africa	281	88.92	163	91.06
2	Botswana,	2	0.63	1	0.55
3	Kenya	3	0.94	2	1.11
4	Nigeria	12	3.79	3	1.67
5	USA	1	0.31	1	0.55
6	Istanbul, Turkiye	1	0.31	1	0.55
7	Durban,	2	0.63	1	0.55
8	Malawi	2	0.63	1	0.55
9	New Zealand	1	0.31	1	0.55
10	Johannesburg	3	0.94	1	0.55
11	Pretoria	4	1.26	2	1.11
12	Australia	1	0.31	1	0.55
13	Tanzania	1	0.31	1	0.55
	Total	316	100	179	100

Collaborative research is very good happens for futuristic perspective of library and information Science especially during the 21st century. It is a natural reflection of complexity, scale and costs of modern investigations in Library and Information Science. Multi authorship provides different measures of collaboration in the subject. Table 5 reveals the authors of the articles published during the period of study. South Africa – Kenya-1, South Africa – Nigeria-1, South Africa-New Zealand-1, South Africa – Australia-1, contributors of this journal are contributed their contribution with other countries.

Table 6: Forms of citation contributions

Volume	Contributions	Forms of citations							No. of Citations	%
		JA	CA	Books	Thesis/ Disse.	Others	e- Citations	p/e Citations		
Vol. 71	22	245	324	06	4	52	8	52	691	11.01
Vol. 72	23	296	376	17	20	43	25	42	819	13.05
Vol. 73	18	143	192	26	10	34	16	22	443	7.06
Vol. 74	18	216	304	21	14	40	13	27	635	10.12
Vol. 75	19	242	340	34	18	32	24	32	752	11.98
Vol. 76	17	223	173	16	8	36	21	23	500	7.96
Vol. 77	15	214	286	15	16	39	17	24	607	9.67
Vol. 78	16	225	304	06	4	41	8	32	620	9.88
Vol. 79	9	154	146	24	12	17	13	16	382	6.08
Vol. 80	11	139	147	19	14	13	11	10	353	5.62
Vol. 81	11	123	284	18	8	9	21	9	472	7.52
11	179	2220	2876	202	128	356	177	289	6274	Avg.cit
	%	35.38	45.83	3.21	2.04	5.67	2.82	4.60	100	35.05

JA-journal articles, CA-conference articles, e-electronic citations, p/e-print and electronic citations

Table- 6 indicates that the 11volumes have 6274 citations appended to the 179 articles. Out of 6274 citations, vol. 72 has the highest number i.e., 819 (13.05%), vol. 75, 752 (11.98) and vol.80 has the lowest number i.e. 353(5.62%). Total 6274 citations have been recorded in 179 contributions therefore the average number of citations per contribution is 36.35 which is good enough (cite-Av. 35.05) and table 6 indicates that the conference articles are the preferred cited sources in each the year with the highest percentage 2876 (45.83%) in during 2005-2015 out of 6274 citations, while as Journals are also cited most in the each year with highest percentage 2220(35.38) consulted in 2005-2015, while thesis/dissertations 128(2.04%), e-citations 177(2.82%) and others include Magazines, Newspaper Articles and Reference sources 356(5.67%).

Table 7: Length of contributions and length of references

No. of Pages	Length of contributions											Total	%
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015		
1> 5	1	-	-	-	-	-	-	-	-	-	2	3	1.67
6> 10	9	12	9	9	6	8	7	6	5	6	3	80	44.69
11> 15	11	9	8	8	10	8	8	8	3	5	6	84	46.92
16> 20	1	1	1	1	2	1	-	1	1	-	-	9	5.02
21>25	-	1	-	-	1	-	-	1	-	-	-	3	1.67
Total	22	23	18	18	19	17	15	16	9	11	11	179	100

Citations	Length of Reference												
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	total	%
1>10	-	2	-	-	-	1	-	-	-	-	-	3	1.67
11>15	3	-	-	-	1	1	-	1	-	-	-	6	3.35
16>20	2	3	1	1	2	2	1	1	-	3	1	17	9.49
21>25	5	3	1	5	4	-	3	2	-	1	2	26	14.52
26>30	4	-	7	3	2	3	1	3	1	2	1	27	15.08
31>35	5	5	4	4	3	5	-	2	2	-	1	31	17.31
36>40	1	3	2	2	1	-	3	-	1	2	1	16	8.93
41>45	-	4	2	-	2	1	1	1	1	1	2	15	8.37
46>50	-	-	1	-	1	2	3	1	2	-	-	10	5.58
51>55	-	1	-	2	-	-	-	1	1	-	1	6	3.35
56>60	-	-	-	-	-	-	1	1	1	1	1	5	2.79
61>65	2	-	-	1	1	-	-	1	-	1	-	6	3.35
66>70	-	1	-	-	-	-	1	-	-	-	-	2	1.11
71>75	-	1	-	-	-	1	-	1	-	-	-	3	1.67
76>80	-	-	-	-	-	1	-	-	-	-	1	2	1.11
81>85	-	-	-	-	-	-	-	1	-	-	-	1	0.55
86>90	-	-	-	-	-	-	-	-	-	-	-	-	0.00
91>95	-	-	-	-	1	-	-	-	-	-	-	1	0.55
96>100	-	-	-	-	1	-	1	-	-	-	-	2	1.11
Total	22	23	18	18	19	17	15	16	9	11	11	179	100

Table 7 reveals that the majority of articles 84 (46.92) have the length of 11-15 pages followed by 80 (44.69%) articles with 6-10 pages, 9 (5.02%) articles with 16-20 pages and the remaining 3 articles have the length of 1-5 and more pages and the thrice of articles have the length of 21-25 pages and majority of articles 31 (17.31%) have the number of 31-35 references followed by 27 (15.08%) articles with 26-30 references and Highest number of reference 96-100 cited in 2(1.11%) contribution, minimum is 1-10 references in 3 (1.67%) contributions.

9. Conclusion

Bibliometric techniques are being used for a variety of purposes like determination of various scientific indicators, evaluation of scientific output, selection of journals for libraries and even forecasting the potential of a particular field. The popularity in the adaptation of bibliometric techniques in various disciplines stimulated stupendous growth of literature on bibliometrics and its related areas. Our study found 179 articles published in last 11 years and maximum numbers of contributions are double authors with 80 (44.69%) out of 179 contributions, the majority of contributions contributed by male 233 (73.68%) out of 316 contributors and also study fund highest number of articles have appeared in the area of information communication technology 37 (20.67%) and 90% of contributions contributed by staff of Universities (Technological Universities), similarly most of the contributions were came from South Africa geographical regions, while developing countries contribution is very less. Commonly the authors preferred 2876 (45.83%) conference articles to refer to write their research works. The study revealed that maximum number of citations accounted in the period 2001- 2010.

10. References

1. Azer SA, Azer S. Bibliometric analysis of the top-cited gastroenterology and hepatology articles. In BMJ Open, 6:e009889.
doi:10.1136/bmjopen-2015- 009889. Accessed. 2016. from
http://bmjopen.bmj.com/content/6/2/e009889.full.pdf+html on 5th March 2016.

2. Gogoi Manisha, Barooah Pronab Kuma. "Bibliometric analysis of Indian journal of Chemistry, section B to study the usage pattern of information in the field of Material Science. In Library Philosophy and Practice (e-journal). 2016, 1311. Accessed from http://digitalcommons.unl.edu/libphilprac/1311 on 5th March 2016.

3. Francisco Lopez-Munoz, Venkatramanujan Srinivasan, Agustin Gutierrez-Soriano, Winston W Shen, Pilar Garcia-Garcia, Gabriel Rubio *et al*. A bibliometric analysis of scientific research on atypical antisychotic drugs in India during 1998-2013. In Molecules & Medicinal Chemistry. 2016; 2:e1113. doi:10.14800/mmc.1113.

4. Swati Jain P, Basavaraj Ashish Singla, Khushboo Singh, Hansa Kundu, Vaibhav Vashishtha, Venisha Pandita *et al*. Bibliometric Analysis of Journal of Clinical and Diagnostic Research (Dentistry Section; 2007-2014), In Journal of Clinical and Diagnostic Research, 2015; 9(4):ZC47–ZC51.

5. Vellaichamy A, Jeyshankar R. Bibliometric Analysis of the Journal Webology from 2004-2013. In Journal of Advances in Library and Information Science. 2015; 4(1):7-13. Accessed from http://jalis.in/pdf/4-1/Vellaichamy.pdf on 12th December 2015.

6. Wankhede Raju Shesharao, Kakde Bharat B, Bhikaji Khandare Sandip. Knowledge Librarian"- An International Peer Reviewed Bilingual E-Journal of Library and Information Science. 2015; 02(01). Accessed from http://www.klibjlis.com/2.1.9.pdf on 12th December 2015.