

SCIENTOMETRIC STUDY OF CONTRIBUTION TO THE JOURNAL OF EXPERIMENTAL MEDICINE

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ABSTRACT: - *The study presents the trends in scientometric Study of contribution to the journal of experimental Medicine with a sample of 134 articles during the period 2012-2015. Co-authored highest articles, the number of highest in university contribution, 631 highest number of citation, the highest number of average pages were covered in 363 in Volume 4.*

KEY WORDS – *Scientometric Analysis, Bibliometric, contribution, Medicine, Experimental medicine, E-Journal.*

1. 1. Introduction:

Scientometric is to provide quantitative characterization of scientific activity; scientometric is branch of library and information science. As the name would imply, this term is mainly used for the study of all aspects of the literature of science and technology. This enables to evaluate the size of scientific production on the assumption that the essence of scientific activity is the assumption the production of knowledge (Garfield, 2000).

The present study is based on 134 articles on journal of experimental Medicine. The present study is based on 4 volumes of journal of experimental Medicine the period of 4years i.e. (2012-2015) was taken for the present study. A total of 134 records of publications authored by 1703 authors during the period 2012 – 2015 were analyzed in this study.

The paper consists of five main parts: introduction, literature review, research design, results and discussions, and conclusions.

1.1. Journal of Experimental medicine:

Since its inception in 1896, the goal of *The Journal of Experimental Medicine* (JEM) has been to publish outstanding and enduring studies in medical biology. At a time when many leading publishing groups are establishing topic-specific journals, we believe it is critical to complement that approach by offering a distinguished venue for publication of studies that integrate disciplines within the field of pathogenesis.

2.1 Bibliometrics:

The terms bibliometrics consist of two words namely 'Biblio' and 'Metrics', biblio means book and metrics means simply measurement. Bibliometric is the quantitative treatment of the properties of recorded as bibliometric is the study of use of document and pattern of publication in which mathematical and statistical method have been applied (Fair Thom, 1970).

2.2 Scientometrics:

A complex of quantitative mathematical and statistical methods used to investigate such aspects as research staff, and to define evolutionary & prospectus of science (Bonitz, 1999). Scientometrics is a very recent term .It is often used synonymously with the term bibliometrics.

2.3 Scientometric analysis:

The main currency for an academician is his reputation just as that for the politician is the politician is the power the commands and that for

the business person is the wealth he has accumulated (Becher, 1989).

2.4 Journals:

According to, a journal, academic in nature which is published using the World Wide Web, such a journal usually uses internet technology refereeing of papers. Many e- journals pride themselves on rapid refereeing and consequent repaid publication. (Gupta, 1998).

2.5 Journal of Experimental medicine

The JEM was founded in 1896 at the Johns Hopkins school of medicine by William Welch. Journal of Experimental medicine is by monthly published in the year. JEM Online ISSN 1540-9538 and Print ISSN 022-1007.

3. Review of Literature

Scientometric is complex of quantitative method which is used to investigate the process of science. According to Kademani and et al. (2005) the key scientometric concepts include: if scientist is renowned personality in this field these specializations will naturally attracts more number of collaborators. Mahapatra and Kaul (1992); Singh (2007); Balasubramanian and Bhaskar, (1984); Kogamuramath, (2001); Kumar, (1984); James, (2008), Deshpande (1997); indicates that the use of analysis of chronological distribution show that older documents are less cited than newer ones. Haridasan, (2007), indicated that the citing half life (median citation age) shows how for back in time one must go to account for the age one half of the bibliographic references

published in a journal in a particular year. Le Minor, (1991), compiled an inventory a list of article that subservient to the appearance of the original article refers to as cite article this method has been used expensively in the legal profession and is particularly applicable to scientific literature. Wilson, (2001) analyzed. It is useful to establish a list of journals mostly cited by the author. Ojedokun and Owolabi, (2003); indicates that the year wise distributions of citation use an idea about scattering and. expansion of the subject or discipline. Marklein (1997) carried out a study in the specific period how many book and periodicals are articles or articles are distributed in a specific period. Lehnus (1973); analyzed Authors enrich a subject by their contributions citation analysis studies identify the familiar and prominent in the field. Brace (1999); indicates that the highly cited journals are listed as ‘core journals’ of a specific subject. The core journals are considered as ‘central set of journals, which most clearly reflects the conceptual essence of the research being reported in the discipline. Mahapatra (1985); carried out study in Further, if the number of articles in a subject doubles during a given period then the difference between the logarithms of numbers at the beginning and at the end of this period must be the logarithm of the number 2.

4. Objectives of the Studies

The main objective of the present studies issue follows -

1. To Find Distribution of contributions (volume wise).
2. To Find Authorship Pattern of Contributions
3. To Find Contribution (Institution –wise)
4. To Find Average Citation per contribution in each volume
5. To find out Average Pages (Per volume & per contribution)

4. Analysis and Result:

Analysis of total 1703 citations articles in the journal during 2012 to 2015. The was done by using various parameters like to identify the car e journals, to rank of cited journal, to rank of cited author to find out geographical distribution of citations to find out the types of cited document, to find out of the total citation of the average in the journals. The data or information was presented in the form of table and graphs to show the result prominently and easily.

4.1.Distribution of contributions (volume wise).

The distribution of contribution is shown in table no.1

Table No.4.1 Distribution of contribution’s (Volume-wise)

Distribution of contribution's(volume wise)				
Year	Volume No.	No. of Issue	No. of Contribution	Percentage
2012	1	2	14	10.45%
2013	2	2	30	22.39%

2014	3	3	45	33.58%
2015	4	3	45	33.58%
TOTAL		10	134	100.00%

Figure no.1 Distribution of contribution's (volume wise)

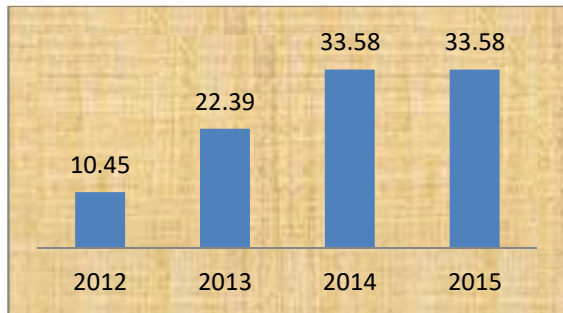


Table No.4.1 and Figure No.1 the distribution of contribution volume- wise, table No.1 depicts that out of 134 contributions majority of the contributions i.e. 45(33.58%) contributions, were contributed in 2014 & 2015 and were as minimum contributions i.e. 14(10.45%) contributions were contributed in 2012.

4.2.Authorship pattern of contribution's

The authorship pattern of contributions for shown in Table No.4.2

TableNo.4.2 Authorship pattern of contribution's

Authorship pattern of contribution's			
No. of Author	No. of Contribution	No. of Authorship	Percentage
Single Author	13	13	9.70
Two Author	31	62	23.13

Three Author	89	267	66.42
More Than Three	1	4	0.75
Total	134	346	100.00

Figure no.2 Authorship pattern of contributions

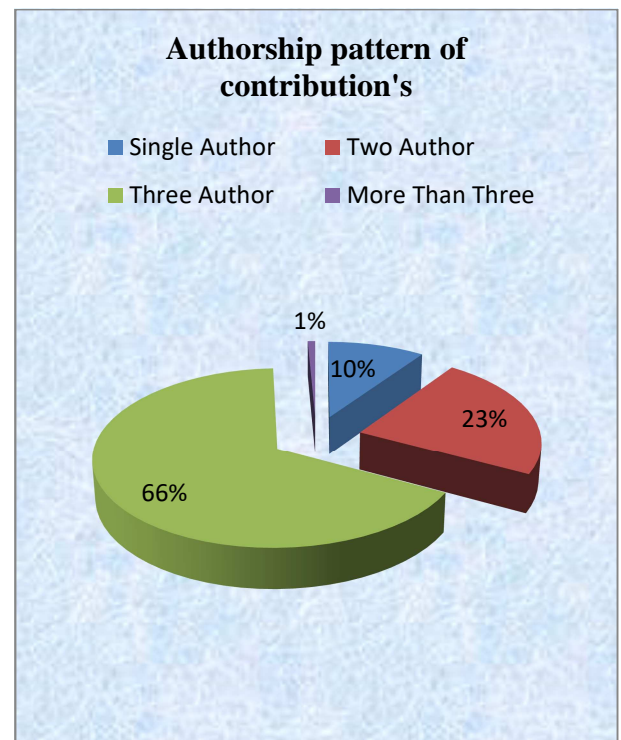


Table no.4.2 and Fig No.2 display the authorship pattern of contributions, 134 articles Single author 13 (9.70%) contribution, Two Authors contribution by 31(23.13%), Three authors contribution by 89 (66.42%), more than three authors 1(0.75%) the majority of the contributions are contributed by multi authors.

4.3.Contribution’s (Institution-wise)

Contribution is displayed in the table no.4.3

Table No.4.3 Institution wise contribution

Contribution's (Institution-wise)						
Volume No.	Year	University	Institution	College	Not Mention	Total
1	2012	8	1	2	3	14
2	2013	19	4	7	0	30
3	2014	21	9	11	4	45
4	2015	34	2	6	3	45
	Total	82	16	26	10	134

Fig No. 3 Institution Wise Contribution

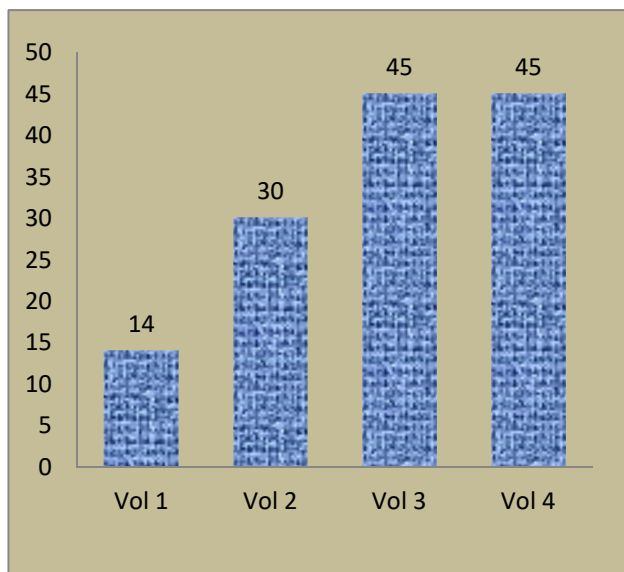


Table No.4.3 depicts the Institution wise distribution of contributions, University is at the national level followed by institutions and colleges. It is inferred from the above table that university – wise contribution maximum is no is 82 contribution, were 26 contribution is college

and Institution contribution was 16 contribution and 10 contribution is not mention.

4.4.Citation Wise Distribution

Citation Wise Distributions displayed in the table no.4.4

Table No.4.4 Citation wise contribution

Average Citation per Contribution in each Volume			
Year	No. of Contribution	No. of Citation	Average
2012	14	147	8.62%
2013	30	356	20.89%
2014	45	569	33.40%
2015	45	631	37.4%
TOTAL	134	1703	100%

Figure No.4 Citation wise contribution

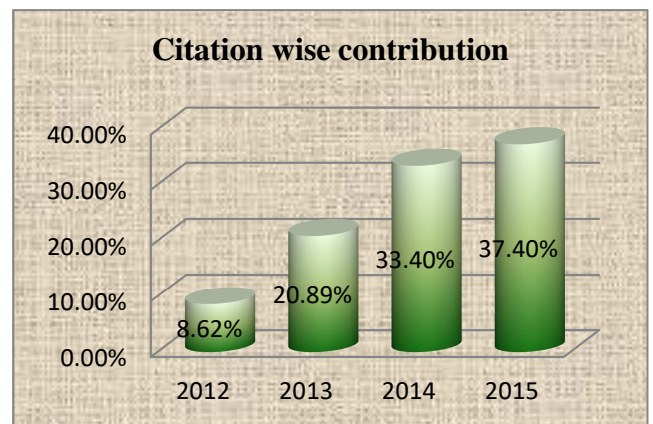


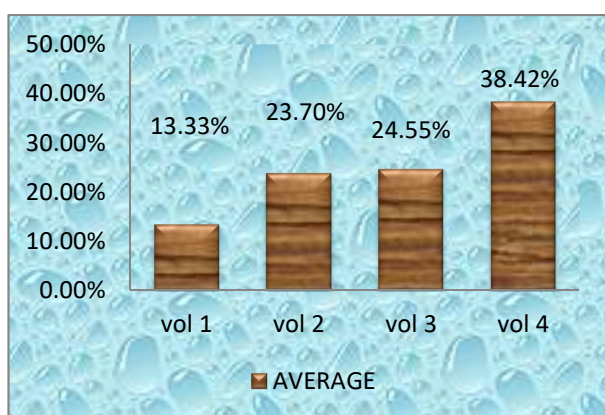
Table no 4.4 and Fig No.4 show the distribution of contribution, citation published in year of 2015(631) show the highest number of citation total contributions, and 2012 (147) show the lowest number of citation total contribution.

4.5. Average Pages (Per volume & per contribution)

Table No.4.5 Average Pages (per volume & per contribution)

Average Pages (per volume & per contribution)			
Volume No.	No. of Article	Total Pages	Average
1	14	126	13.33%
2	30	224	23.70%
3	45	232	24.55%
4	45	363	38.42%
Total	134	945	100%

Fig No.5 Average Pages (per volume & per contribution)



The table no. 4.5 & fig no. 5 shows the average pages (per vol & per contribution) the maximum pages were covered in the volume no.4 363(38.42%) & minimum pages were covered in the volume no.1 of (126) (13.33%).

Conclusions

1. The number of articles published is highest in the year 2014 and 2015 with 45 articles.
2. A significant note of the study is that the majority of the articles are contributed by multi authors.

3. The number of highest in university contribution is followed by 82.

4. The highest number of citation published in year of 2015(631).

5. The highest number of average pages were covered in 363 (38.42%) in Volume 4.

References:

- Andres, A.. Measuring academic research: how to undertake a bibliometric study. Library science. (pp.17). Cambridge: chandos publishing 2009.
- Arora, jagdish. And pawan, usha, Collaborative research and authorship patterns in immunology: correlation between multiple authorship and citedness. Iaslic bulletin, 40 (2), 73-85 (1995).
- Cronin, Blaise. Shaw, Debora And Barre, Kathryn La., A cast of thousands: coauthorship and subauthorship collaboration in the 20th century as manifested in the scholarly journal literature of psychology and philosophy, jasist, 54 (9):855-871, (2003).
- Davarpanah, A. and M. R. S. Aslekia,, Scientometric analysis of international lis journals: productivity & characteristics. Scientometrics, 77 (1), 21-39, (2008).

- Farahat, Hashem., Authorship patterns in agricultural sciences in egypt. *Scientometrics*, 55 (2), 157-170, (2002).
- Gupta, B. M. and S. M. Dhawan, India's collaboration with people's republic of china in science and technology: a scientometric analysis of coauthored papers during 1994-1999. *Scientometrics*, 57 (1), 59-74, (2003).
- Kalbande, D.T., Collection of Prof. S Seetharama Information Centre: A Bibliometric Study. In: *e-Library Science Research Journal*, Vol. 1 No 3. (Jan, 2013). Pp. 1-8. ISSN No: 2319-8435. 2013.
- Lee, Jin Ha., Jones, M. Cameron. and Downie, J. Stephen, An analysis of ismir proceedings: patterns of authorship. Topic, and citation. Presented at 10th international society for music information retrieval conference 2009.
- O'neill, G Patrick, Authorship patterns in theory based versus research based journals. *scientometrics*, 41 (3), 291-298, 1998.
- Suradkar P. A. and Dalve daya (Patil), Academic Emergency Medicine: A Scientometric Study. *International Research Journal of Multidisciplinary Science & Technology*, vol.2 (2),12-18, 2017.