ORIGINAL RESEARCH PAPER
Volume - 12 | Issue - 05 | May - 2023 | PRINT ISSN No. 2277 - 8179 | DOI : 10.36106/ijsr
INTERNATIONAL JOURNAL OF SCIENTIFIC RESEARCH

PHARMACOGNOSY AND PHYTOCHEMISTRY: A SCIENTOMETRIC STUDY

Library & Information Science

Ms. Bawaskar Sangeeta S Research Student, Dept .of Library & Information Science, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad, Maharashtra 431004, India.

Khaparde Vaishali S* Professor and Head, Dept .of Library & Information Science, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad, Maharashtra 431004, India. *Corresponding Author

ABSTRACT

The Purpose of this papers is to find outScientometric analysis of 109 research article published on International journal of Pharmacognosy and Phytochemistry. The paper present gives information about, authorship pattern, author productivity and further it reveals Majorities 70 articles are published by India contributors followed by China and alternative contributors. The findings reveals various aspects of the characteristics and patternsof contributions of the study.

KEYWORDS

Pharmacognosy, Phytochemistry, Chemical, Biochemical, Plant Biology, Biosynthesis, Plant Diseases.

1. INTRODUCTION

Scientometric is one of the most important measures for the assessment of scientific productions. Macias-Chapula argues that "scientometric indicators have become essential to the scientific community to estimate the state-of-the-art of a given topic" (quoted In Lolis et. al. 2009). Scientometric is related to and has overlapping interests with Bibliometric and Informetric. **(A. Mooghali, R. Alijani, M. S., N. Karami, M.S., A. Khasseh, M.A., 2011).**

The terms Bibliometric, Scientometric, and Informetric refer to component fields related to the study of the dynamics of disciplines as reflected in the Scientometric Analysis of the Scientometric Literature International Journal of Information Science and Management, Vol. 9, No. 1January / June 2011 20 production of their literature **(Hood & Wilson, 2001).**

Scientometric is a branch of the science 'Science of Science'. Haitun treats 'Scientometric', as scientific disciplines, which performs reproducible measurements of scientific activity. **(Haitun, 1983).**

2. Definitional Analysis:

Scientometric:

Scientometric: According to bankapur, M.B. andKumabar, (1993) "Scientometric is a more general that Bibliometric. It is interesting to know, that both disciplines have a large overlap. It is surprised to learn certain comments stating that both disciplines have a large overlap. It is surprised to learn certain comments stating that Scientometric, using Bibliometric techniques id a part of Bibliometric"

Pharmacognosy:

Pharmacognosy is the study of plants or other natural sources as a possible source of drugs. The American Society of Pharmacognosy defines pharmacognosy as "the study of the physical, chemical, biochemical and biological properties of drugs, drug substances or potential drugs or drug substances of natural origin as well as the search for new drugs from natural sources" **(https://en.wikipedia.org/wiki/Pharmacognosy)**

Phytochemistry:

Phytochemistry is the study of phytochemicals, which are chemicals derived from plants. Those studying phytochemistry strive to describe the structures of the large number of secondary metabolic compounds found in plants, the functions of these compounds in human and plant biology, and the biosynthesis of these compounds. Plants synthesize phytochemicals for many reasons, including to protect themselves against insect attacks and plant diseases. Phytochemicals in food plants are often active in human biology, and in many cases have health benefits.

International Journal of Pharmacognosy and Phytochemistry:

Research & Reviews: Journal of Pharmacognosy and Phytochemistry is a peer-reviewed scholarly journal that aims to publish high quality research on Plant Science, Pharmacognosy, Phytochemistry, Medical Plants, Toxic Plants, Natural Products discovery and evaluation, Cell and Molecular Plant Biology, Ethnobotany, Plant Anatomy, Primary and Secondary Metabolites, Plant Nutrition, Traditional Medicine, Biological evaluation of crude extracts, essential oils and pure isolates, Medicinal and Aromatic Plants and Phytopharmacological Activities. **(://www.rroij.com/pharmacognosy-and phytochemistry.php)**

3. Review of Literature

Khaparde V S (2011) she studied the pattern of information use by researcher in the field of library and information science. It is based on the references appended to International Journal of "Library Hi Tech" during 2005-2009. The present study is based on 3876 references appended to 247 articles contributed by the authors Library Hi Tech. In Authorship pattern it was found that Solo Research is Predominant than Collaborative Research. The degree of research collaboration was calculated and it was found that the single authorship trend increased gradually in Library Hi Tech.

Scientometric / Bibliometric / Citation studies have done earlier by different authors on the different individual journal publications and literature on specific subject areas. The following studies related to the objectives of this study have been reviewed.

SrimuruganA&NattarS, analysed the D-LIB magazine published during 2000 –2007 which revealed that highest number of paper was published in 2005 and the lowest in2007.

Jeevan and Gupta (2002) studied research productivity of nine departments of IIT, Kharagpur by analysing proportion of papers covered in SCI, Impact rate, Proportion of high quality papers and Publication Effectiveness Index (PEI). In addition to this other factors such as degree of collaboration among departments as well as international collaborations are also measured.

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

4. Objectives ofthe Study

1 To study authorship patterns of contribution.
2. To study Author Wise Distribution of Contribution.
3. To study Distribution of contribution Institution wise.
4. To study Country wise Distribution of contributions.
5. To study Types of publication (Year wise).

5. Scope and Limitation

The present study is based on 6 volumes, 16 issues of theInternational journal of Pharmacognosy and Phytochemistry.2013 -2018.

6. Methodology

The study is based on the 109 Articles on International journal of

Pharmacognosy and Phytochemistry during the period 6 years (2013-2018).Quantitative method used this article

7. Data Collection

The Data was collected from International journal of Pharmacognosy and Phytochemistryin6 volumes, 16 issues of theduring Period 2013-2018. Authorship has been analysed by using K. Subramannian's degree of collaboration in quantitative terms. All the data were subsequently examined observed, analysed and tabulated for making observation

8. Data Analysis & Interpretation

Table 1: Authorship Pattern of contribution.

Table 1: Authorship Pattern		
No. of Author	No. of Contribution	Percentage
Single Author	79	72.48
Two Author	4	3.67
Three Author	9	8.26
Four Author	4	3.67
Six /Malty Author	10	9.17
Total	109	100

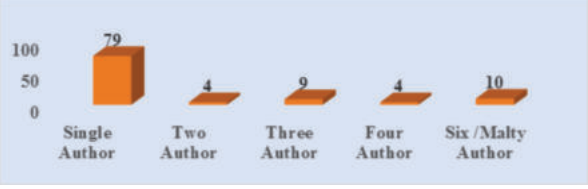

Figure no.1 Authorship Pattern of contribution.

It can be observed from Table No. 1 show the authorship pattern of the papers published during the period of study. Study revealed that single author 79 (72.47 %), while the rest 10 (9.17%) were contributed by multiple author observed here. "Single authors is the highest contribution.

Table No.2 Author Wise Distribution of Contribution.

Author Wise Distribution of Contribution			
Sr. No.	Author	Frequency	Percentage
1	TeenaAgrawa	10	9.17
2	ChamakuriSubba Rao	4	3.67
3	DevduttChaturvedi	3	2.75
4	ReenaHoonda	3	2.75
5	A. Divya	3	2.75
6	P. Udaya Lakshmi	2	1.83
7	AnuradhaMishra	2	1.83
One cited Author		82	75.23
Total		109	100

It can be observed from Table No.2 that, the most productive author is TeenaAgrawa with 10 contribution, followed by Chamakuri Subba Raohaving 4 contribution each, followed by Devdutt Chaturvedi, A Dutta And ReenaHoonda having 3 contribution each, followed by P. UdayaLakshmi,AnuradhaMishrahaving2 contribution each, remain 82 authors published One Time Cited Author article each.

Table No. 3 Country wise Distribution of contributions.

Sr. No	Country	No of Contributors	Percentage
1	India	70	64.22
2	China	5	4.59
3	Brazil	4	3.67
4	Nigeria	4	3.67
5	Guntur	3	2.75
6	Kenya	3	2.75
7	Egypt	2	1.83
8	Oman	2	1.83
9	Russia	2	1.83
10	Bamenda	1	0.92
11	Botswana	1	0.92
12	Canada	1	0.92
13	Germany	1	0.92
14	Hungary	1	0.92
15	Japan	1	0.92
16	Kakinada	1	0.92
17	Morocco	1	0.92
18	Nellore	1	0.92
19	Pakistan	1	0.92
20	Philippines	1	0.92
21	Rohtak	1	0.92
22	Sudan	1	0.92
23	Visakhapatnam	1	0.92
Total		109	100

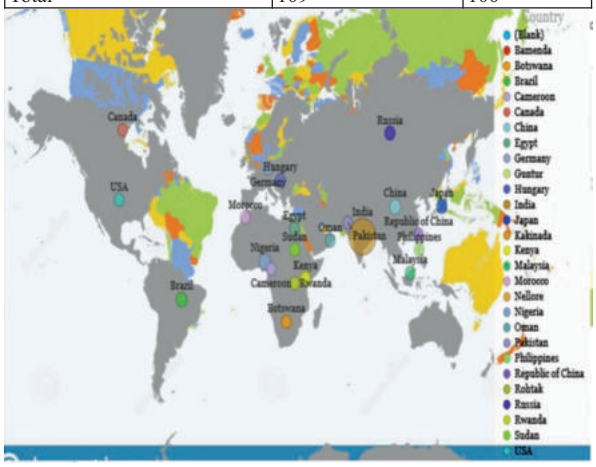

Figure no. 2 Country wise Distribution of contributions.

It can be observed from Table No 3& Figure no.2 that, there was as many as 23 countries carrying out research and produced 109 articles. Table no.3 provides ranked List of countries contributing to this field, the number of publications of each country and their share in percentages. India is the top producing country with 70 (64.22%) publications of the total output. "India is the highest productive country

Table No. 4 Types of publication (Year wise)

Year	2013	2014	2015	2016	2017	2018	Total
Research Article	6	15	19	11	5	4	60
Review Article	9	11	1	11	2	2	36
Short Communication	1	0	1	0	1	0	3
Commentary	0	0	1	0	0	0	1
Commentary Article	0	0	2	0	0	0	2
Short Commentary Article	0	0	6	0	0	0	6
Editorial	0	0	1	0	0	0	1
Total	16	26	31	22	8	6	109
Percentage	14.68	23.85	28.44	20.18	7.34	5.50	100

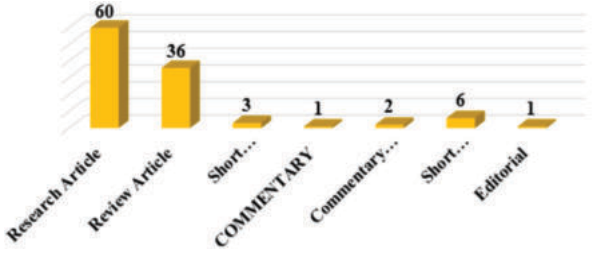

Figure No. 3 Types of publication (Year wise)

It was observed that Table No.4&Figure No. 3that highest number of publications in 15 Articles was published in the year 2014, whereas Publication in Review Article(11) was published in the year 2014-2016,Short Communication(1) was published in the year 2013-2015-2017, Commentary(1) was published in the year 2015, Commentary Article(2) was published in the year 2015,Short Commentary Article(6) was published in the year 2015, Editorial(1) was published in the year 2015.

Table No.5: distribution of contribution Institution wise

Sr. No.	Institution	Frequency	Percentage
1	University	58	53.21
2	College	29	26.61
3	Institute	18	16.51

4	Centre	1	0.92
5	Organization	1	0.92
6	School	1	0.92
7	NA	1	0.92
Total		109	100

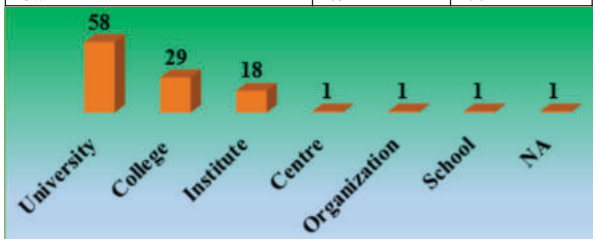

Figure No.4: distribution of contribution Institution wise

The table no.5&Figure No.4Show the institution wise contributors. These sectors have been grouped into six distinct categories for the convenience of the study. The highest contributions was from universities with 58 (53.21%). This is followed by Colleges with 29 (26.61%). Institute 18 (16.51%). Academy, Centre, Organization, School 1 (0.92%). The remaining 1 articles (0.92%). Wasnot available.

9. CONCLUSION

Scientometric relatively new subject of information. It helps to evaluate information & to handle the information in libraries and information centres by the quantitative analysed information. It deals with the mathematical and statistical analysis. This is an umbrella term used for many studies where quantitative method or techniques are used to investigate various aspect of written document. This study is completed with the help of MS -Excel. This study is helpful for researchers as well as information scientists. It is good and informative for the researcher.

REFERENCES

1. Mooghali, R. Alijani, M. S., N. Karami, M.S., A. Khasseh, M.A.,(2011). Scientometric Analysis of the Scientometric Literature, International Journal of Information Science and Management, v-9, 1, p-1-14
2. Hood, W.W. & Wilson, C. (2001). The literature of bibliometrics, scientometrics, and informetrics. Scientometrics, 52 (2), 291–314.
3. Khaparde, V.S. E-journals in Library and Information Science: Abibliometric Study.International Journal of Humanities and Social Sciences. Center for Promoting Ideas, USA. Special Issue August 2011. 1(11).
4. Khaparde V. S. (2011) Pattern of information use by researchers in library and Information Science.International Journal of Humanities and Social Sciences. 1(12).Center for promoting Ideas, USA.
5. Haitun D. (1983). Scientometrics: State and Perspectives, Science, 8, 48-54.
6. Bankapur,M.B. and Kumabar (1993):Job satisfaction and publication output among librarians in Nigerian Universities. Library Management.20(1), 39-48
7. Khaparde V. S. (2011) Pattern of information use by researchers in library and Information Science. International Journal of Humanities and Social Sciences. 1(12) September 2011 Centre for promoting Ideas, USA.
8. Jeevan, V.K.Y & Gupta, B.M. (2002). A Scientometric analysis of research output from Indian Institute of Technology, Kharagpur. Scientometric, 53(1), 165-168.
9. Bonitz, A., (1999): Bradford's laws in different disciplines. Annals of Library science and Documentation, 46(4), 133-138.
10. Wikipedia,https://en.wikipedia.org/wiki/Pharmacognosy, (Accessed on8/08/2019).