

Bibliometric Analysis of Herbal Literature and Research Output

P. Vinayagamoorthy*

P. Chellappandi**

J. Shanthi***

ABSTRACT

This paper presents a Bibliometric study of the literature output in the field of herbal literature covered in Biological Abstracts CD-ROM from 1990-2004. Biological Abstracts CD-ROM covered the maximum of 3401 records on herbal literature during the study period 1990 to 2004. India ranks first in the herbal research literature output. Herbal research literature output is found to be in 22 different languages of which English ranks first forming 86.15 per cent of the total output. Journal articles rank first forming 92.15 per cent of the total output with 3134 items. "Journal-of-Medicinal-and-Aromatic-Plant-Sciences" scores the first rank having produced 13.91 per cent of the total Herbal research literature output. The result of research invalidated Bradford's Law of distribution. The majority of the Herbal research is carried out by Research Institutions. Herbal literature published in different languages from various countries ranged from less than 10 pages up to 200 pages.

Key words: Abstracts Database, bibliographic records, Bradford's Law of scattering, Indian literature

INTRODUCTION

Bibliometrics is the study dealing with the quantification of written communication, which helps, in the measurement of the published knowledge. Bibliometric analysis throws light on the pattern of growth of literature, inter-relationship among different branches of knowledge, productivity, authorship pattern, and degree of collaboration, pattern of collection building, and their use. Gradually bibliometric studies are attaining the status of inter-disciplinary in nature (Morillo, 2001)¹.

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 in 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 (Hood and Wilson, 2001)². Bibliometric techniques are now being vigorously pursued and with the result, it has been found that one-fourth of all the articles published in Library and Information Science periodicals are on bibliometrics and its related topics (Devarajan, 1997)³.

Author's Affiliations: *University Librarian, Bharathiar University, Coimbatore-641046, **Librarian, SLS MAVMM Ayria Vaisyar College, Madurai-625014, ***Librarian, KGISL Institute of Technology, Saravananpatti, Coimbatore- 641 035.

Reprints request: * Dr. P. Vinayagamoorthy, University Librarian, Bharathiar University, Coimbatore-641 046,

E-mail: vinumoorthy@yahoo.com

(Received on 17.02.2010, accepted on 09.03.2010)

HERBAL LITERATURE: A BRIEF

Herbal plants are the local heritage with global importance. World is endowed with a rich wealth of medicinal plants. Herbs have always been the principal form of medicine in

India and presently they are becoming popular throughout the developed world. Medicinal plants play an important role in the lives of rural people, particularly in remote parts of developing countries with inadequate health facilities. The herbs provide the starting material for the isolation or synthesis of conventional drugs. Ayurveda and Siddha are the two systems of naturopathy using herbal medicines in India. In Ayurveda about 2,000 plant species are considered to have medicinal value, while the Chinese pharmacopoeia lists over 5,700 traditional medicines, most of which are of plant origin. About 500 herbs are still employed within conventional medicine, although whole plants are rarely used.

Indeed, well into the 20th century much of the pharmacopoeia of scientific medicine was derived from the herbal lore of native peoples. Many drugs, including strychnine, aspirin, vincristine, taxol, curare, and ergot, are of herbal origin. About one-quarter of the prescription drugs dispensed by community pharmacies in the United States contain at least one active ingredient derived from plant material (Farnsworth and Morris, 1976)⁴.

LITERATURE REVIEW

An attempt was made by Macias-Chapula (2003)⁵ to identify the patterns of the growth in AIDS literature, as well as the types of documents published, authorship pattern, institutional affiliations of authors, and subject content. Hartinah et...al(2001)⁶ studied on nutrition problems in Indonesia published during the period 1979-2000, and discussed the authorship pattern, institutional affiliation, and the half-life of the literature on nutrition. Arunachalam and Gunasekaran(2002)⁷ have mapped Tuberculosis research in India and China and identified institutions and cities active in research, journals used to publish the findings, use of high impact journals, and extent of international collaboration. Divya Srivastava (2004)⁸ discussed the concept of collaboration and the methodology followed in studying research collaboration in the field of Biomedical Sciences in India. Bibliometric analysis of Medical

Informatics Literature has been made by Sundari Bai et. al (2004)⁹ with regard to Authorship pattern, Collaboration Index, Degree of Collaboration, Collaborative Coefficient and Country Wise Production. While Ramesh Babu and Ramakrishnan (2007)¹⁰ (2008)¹¹ studied the trends in the growth of literature on Hepatitis and National pattern of research output and priorities in Hepatitis. Ramakrishnan and Ramesh Babu(2007)¹² conducted the bibliometric analysis of literature on Hepatitis.

OBJECTIVES OF THE STUDY

The objectives of this paper are

1. To examine the growth of Indian literature on "herbal literature" covered in the database namely Biological Abstracts CD-ROM.
2. To identify the publication types, languages covered and country of publication covered in the herbal literature in the database, Biological Abstracts CD-ROM
3. To identify the core journals in the field of herbal literature through the application of Bradford's Law of scattering.

METHODOLOGY

There are various sources contributing to the research output in the field of Herbal literature. In this study, bibliographic records have been downloaded from the Biological Abstracts Database on CD ROM disks. The bibliographic data thus downloaded includes journal articles, books, conference proceedings, editorials, letters, News, comments etc. The three terms herbal, aromatic and medicinal plants are taken to be synonyms.

The fields selected for the download includes Author, Title, Source, Language, Country and Year. The size of the sample downloaded for the purpose is 3401. The study involves the analysis of behaviour of herbal literature output in its wholeness between a break free period of 1990 and 2004.