



Content Analysis of Journal of Pediatric Nephrology

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Abstract

This paper attempts to highlight the quantitative assessment of status of the Journal by way of analyzing the various features of Journal "Journal of pediatric nephrology". During 2011-2015 a total of 1491 Articles were published by researchers in various countries.

Keywords: Children, Chronic kidney disease (CKD), Nephrotic syndrome, Acute kidney injury, Hypertension, Pediatric, Dialysis, Kidney, Pediatrics, Renal transplantation.

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Introduction

In the past few decades the number of recorded communication messages has so increased, by exponential rate that three significant events have occurred. The document handling profession of librarianship has recently and rapidly matured into a major information processing profession where content analysis for retrieval purpose has rapidly become a major social profession. Another result has been the development of content analysis as a research method that complements other social science methods of investigation. The third event, yet to be realized in Librarianship is counseling analysis where the major technique of listening,

hypothesizing and responding are used to explore the patron's intentions and meaning and to analyze the effect of resources upon him

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2. DEFINITIONAL ANALYSIS

2.1 CONTENT ANALYSIS

“Content analysis is a research technique that has quantitative and qualitative characteristics. In the quantitative tradition, it is defined as “the objective, systematic and quantitative description of the manifest content of communication” ⁽¹⁾

2.2. JOURNAL

Many publications issued at stated intervals, such as magazines, or scholarly academic journals, or the record of the transactions of a society, are often called journals.

A serial appearing of intended to appear indefinitely at regular or stated intervals generally more frequently than annually, each issue of which is no. or dated consecutively and normally containing separate articles, stories or other writings.⁽²⁾

3. Journal of “Pediatric Nephrology”

Journal of "Pediatric Nephrology" publishes original clinical research and new or important clinical observations pertaining to any aspect of the wide spectrum of acute and chronic diseases that affect renal function in children as well as on hypertension and fluid and electrolyte metabolism. Studies may involve medical, surgical, nutritional, physiologic, biochemical, pathologic or immunologic aspects of disease, imaging techniques or consequences of renal failure. Such work is published either as a full length original contribution or a brief report. The journal also reviews important new developments or controversial issues in the field through invited contributions from recognized authorities and through summaries by its contributing editors of related literature. Special features include pathologic case conferences, a section on practical pediatric nephrology, letters to the editors and a question and answer forum.

4. OBJECTIVES

The main objective of the study is to analyze the content of World Journal of Microbiology and Biotechnology and make the quantitative assessment of status of the Journal by way of analyzing the following features of Journal.

1. To find out year-wise growth of publications,
2. To find out Geographical distribution of research output,
3. To find out the authorship and collaboration pattern in the publication,
4. To find out the extent of international collaboration,

5. To find out the most productive authors in the field,
6. To find out organization – wise distribution of publication,
7. To find out the channels of communications used by the scientists and
8. To find out the high frequency keywords appeared in the channels of communication.

5. HYPOTHESIS OF THE STUDY

The study consists of following hypothesis:

1. Authorship trend is towards multiple authored papers.
2. USA is the high productive country.

6. SCOPE & LIMITATION OF THE STUDY

Scope of study is restricted to the World Journal of Microbiology and Biotechnology published during 2011 to 2015. The papers presented in the Journal are analyzed using content analysis technique.

The present study is limited to the total numbers of 1491 papers published during 2011 to 2015.

7. RESEARCH METHODOLOGY

Research Methodology is defined as

The analysis of the principles of methods, rules, and postulates employed by a discipline;

The systematic study of methods that are, can be, or have been applied within a discipline; or A particular procedure or set of procedures. It is the ways to systematically solve the research problem. Here we are using the Analysis of Document” by using content analysis.

8. DATA COLLECTION

There are several ways of collecting the appropriate data which differs considerably in context of money, time & other resources at the disposal of the researcher. The task of data collection in research methodology begins after the problem of research has been defined and the research design chalked out. Here the source of data collection is primary source “World Journal of Microbiology and Biotechnology”.

9. DATA ANALYSIS

Data analysis is the act of transforming data with the aim of extracting useful information and facilitating conclusions. Depending on the type of data and the question, this might include application of statistical methods, curve fitting, selecting or discarding certain subsets based on specific criteria, or other techniques. In contrast to Data mining, data analysis is usually more narrowly intended as not aiming to the discovery of unforeseen patterns hidden in the data, but to the verification or disproval of an existing model, or to the extraction of parameters necessary to adapt a theoretical model to (experimental) reality.

9.1. YEAR-WISE PUBLICATION PRODUCTIVITY AND COLLABORATION RATE

The word publication means the act of publishing. Productivity refers to measures of output from production processes, per unit of input. Collaboration is a recursive process where two or more people or organizations work together toward an intersection of common goals

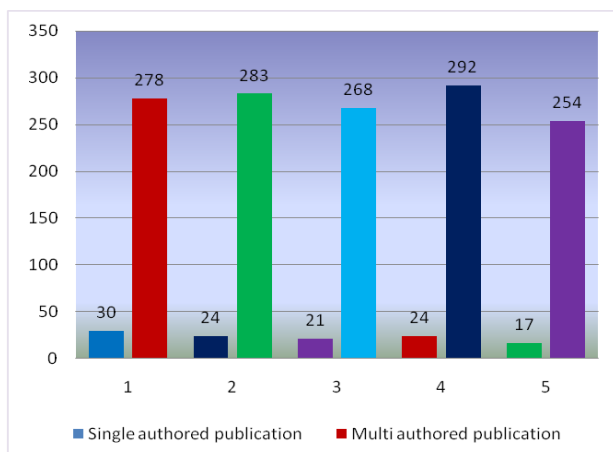


Figure 1: Year-Wise Publication Productivity and Collaboration Rate

It can be observed from figure No. 1 that during 2011-2015 a total of 1491 Articles were published in the Journal of “Pediatric Nephrology” by researchers in various countries.

9.2. GEOGRAPHICAL DISTRIBUTION OF RESEARCH OUTPUT

Geographical distribution of research output means the article published from different countries. In political geography and international politics, a country is a political division of a geographical entity. Frequently, but not exclusively, a sovereign territory, the term is most commonly associated with the notions of both state and nation, and also with government.

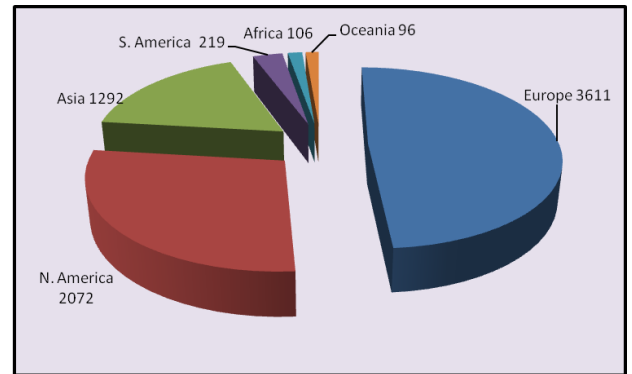


Figure 2: Country-Wise Distribution of Articles

It can be observed from Figure No. 2 that, there were as many as 69 countries carrying out research and produced 7396 articles. Table no.2 provides ranked List of countries contributing to this field, the number of publications of each country and their share in percentages. USA is the top producing country with 1724 publications (6.40) of the total output. Therefore, the hypothesis, “USA is the high productive country” (**Hypotheses No.2**) is valid. It can be stated that China being the publishing country the output is more than other country.

9.3. AUTHORSHIP AND COLLABORATION TREND:

Gupta, D.K.⁽⁴⁾ Authorship is an observable phenomenon reflecting the contemporary scholarly practices clearly showing the communication, productivity and collaborative patterns and influences among researchers even though their quantities and qualities are not well understood.

Collaboration in research is said to have taken place when 2 or more persons work together on a scientific problem of project and effort, both physical and intellectual.

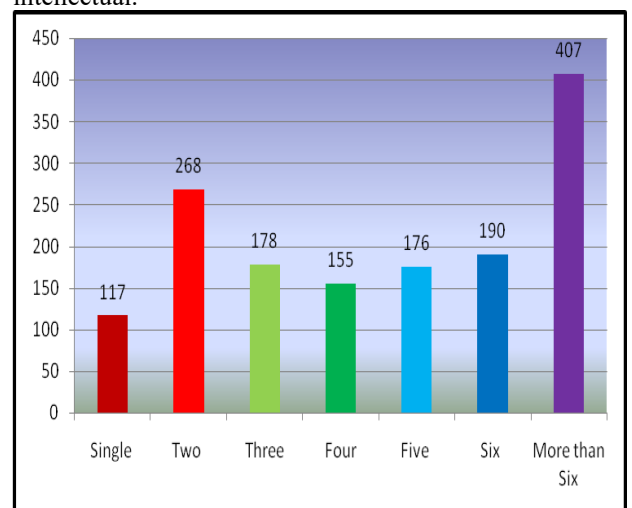


Figure No. 3: Authorship and Collaboration Trend

It can be observed from Figure No.3 that, year-wise authorship and collaboration trend is given in table 3. Authorship trend is towards multiple-authored papers. Single authored papers accounted for 7.85 %. **There fore, the hypothesis, “Authorship trend is towards multiple authored papers. (Hypothesis No.1) is valid.**

The International collaborative production of articles is the simultaneous action of many people who try to combine their ideas to make a new one. In fact “[collaborative](#)” is the process where two or more people work together toward a common goal and they don’t required leadership.

9.4. INTERNATIONAL COLLABORATION PATTERNS OF ARTICLES

Table 1 : International Collaboration Pattern of Articles

No. of Countries			
Year	Single	Collabroration	Total No. of Publications
2011	282	26	308
2012	281	26	307
2013	254	35	289
2014	288	28	316
2015	249	22	271
Total	1354	137	1491
%	90.81	9.19	100

The distribution of the collaboration of the various countries and their institutions respectively are given in the further table.

9.5. MOST PRODUCTIVE AUTHOR

An author is defined both as "the person who originates or gives existence to anything" and as "one who sets forth written statements" in the Oxford English Dictionary.^[24]

Table No. 2: Most Productive Author

Sr.No.	Name Of Auther	Name Of Country	No. of Publication	Rank
1	Rukshana Shroff	UK	25	1
2	Detlef Böckenhauer	UK	20	2
3	Kjell Tullus	UK	20	2
4	Bradley A. Warady	USA	18	3
5	Kazumoto Iijima	Japan	16	4
6	Anna Wasilewska	Poland	15	5
7	Christoph Licht	Canada	15	5
8	Lesley Rees	UK	15	5
9	Stuart L. Goldstein	USA	15	5
10	Claus Peter Schmitt	Germany	14	6
11	Franz Schaefer	Germany	14	6
12	Guido Filler	Canada	14	6
13	Hae Il Cheong	South Korea	14	6
14	Alberto Edefonti	Nicaragua	13	7

15	Koichi Nakanishi	Japan	13	7
16	Norishige Yoshikawa	Japan	12	8
17	Shuichiro Fujinaga	Japan	12	8
18	Stephen D. Marks	UK	12	8
19	Hee Kyung Kang	Korea	11	9
20	Susan L. Furth	USA	11	9
21	Tim Ulinski	France	11	9
22	Ana Cristina Simões e Silva	Brazil	10	10
23	Dieter Haffner	Germany	10	10
24	Hiroshi Kaito	Japan	10	10
25	Howard Trachtman	USA	10	10
26	Isidro B. Salusky	USA	10	10
27	Jérôme Harambat	Netherland	10	10
28	Joseph T. Flynn	UK	10	10
29	Mark Mitsnefes	USA	10	10
30	Markus J. Kemper	Germany	10	10
31	Michel Fischbach	France	10	10
32	Robert H. Mak	USA	10	10
33	Shuichi Ito	Japan	10	10
34	Uwe Querfeld	Germany	10	10
35	Alan R. Watson	UK	9	11
36	Alejandro Balestracci	Argentina	9	11
37	Kandai Nozu	Japan	9	11
38	Lars Pape -	Germany	9	11
39	Pierre Cochat	France	9	11
40	Prasad Devarajan	USA	9	11
41	Betti Schaefer	Germany	8	12
42	Eduardo A. Oliveira	Brazil	8	12
43	Eduardo H. Garin	USA	8	12
44	Gema Ariceta	Spain	8	12
45	Johan Vande Walle	Belgium	8	12
46	Koichi Kamei	Japan	8	12
47	Mario G. Bianchetti	Switzerland	8	12
48	Mesiha Ekim	Turkey	8	12
49	Michael Zappitelli	Canada	8	12
50	Yuko Shima	Japan	8	12
73	Author publishing sevan paper (7X23)		161	13
74	Author publishing six paper (6X41)		246	14
75	Author publishing Five paper (5X66)		330	15

76	Author publishing Four paper (4X107)		428	16
77	Author publishing Three paper (3X227)		681	17
78	Author publishing Two paper (2X744)		1488	18
79	Author publishing single paper (1X3489)		3488	19
Total			7396	

It can be observed from Table No. 2 that, the most productive authors are Rukshana Shroff (UK) who had the highest number (25) of the publication. Detlef Böckenhauer & Kjell Tullus (UK) 20 Publications. Bradley A. Warady (USA) and Kazumoto Iijima (Japan) with 16 Publications each. and 3488 authors with single publication.

9.6. DISTRIBUTION OF LITERATURE IN VARIOUS CHANNELS OF COMMUNICATION

Channel, in communications, refers to the medium used to convey information from a sender (or transmitter) to a receiver. Researchers communicated their publication through variety of communication channels.

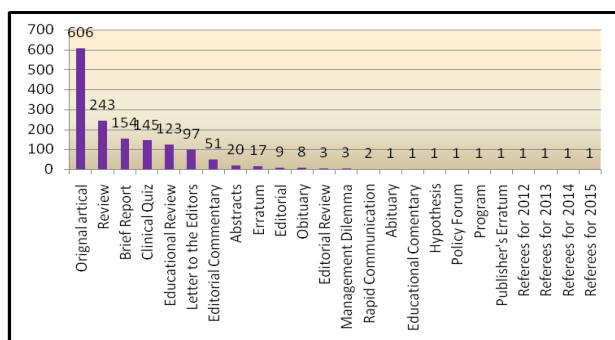


Figure No: 4 Distribution of literature in various Channels of Communication

It can be observed from Figure No. 4 that, 40.36% of the Literature was published in Original article. and the review (16.30%). The total content of Journal of "Pediatric Nephrology" that is Editorial, Erratum, Brief Reports, Abstract, Letter to the Editore etc. is analyzed.

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