

University of Nebraska - Lincoln

DigitalCommons@University of Nebraska - Lincoln

Library Philosophy and Practice (e-journal)

Libraries at University of Nebraska-Lincoln

Summer 5-2-2020

METRIC ANALYSIS OF LITERATURE IN THE FIELD OF COMMUNITY HEALTH NURSING (1999 – 2018)

Jagannathan Ramakrishnan Dr

The Tamil nadu Dr. M.G.R. Medical University, Chennai, dhanaram@yahoo.com

Jayaraman Selvamani Dr

The Tamil nadu DR. M.G.R.Medical University, Chennai, jayamselvamani@gmail.com

Kotti Thavamani Dr

The Tamil nadu Dr. M.G.R Medical University, Chennai, kottithavam@gmail.com

Follow this and additional works at: <https://digitalcommons.unl.edu/libphilprac>



Part of the [Library and Information Science Commons](#)

Ramakrishnan, Jagannathan Dr; Selvamani, Jayaraman Dr; and Thavamani, Kotti Dr, "METRIC ANALYSIS OF LITERATURE IN THE FIELD OF COMMUNITY HEALTH NURSING (1999 – 2018)" (2020). *Library Philosophy and Practice (e-journal)*. 4123.

<https://digitalcommons.unl.edu/libphilprac/4123>

METRIC ANALYSIS OF LITERATURE IN THE FIELD OF COMMUNITY HEALTH NURSING (1999 – 2018)

Dr. J. Ramakrishnan*

Dr. J. Selvamani**

Dr. K. Thavamani***

*S.G. Deputy Librarian, ** Assistant Librarian and ***S.G. Library Assistant,
Regional Medical Library, The Tamil Nadu Dr. M.G.R. Medical University, Guindy,
Chennai – 600 032.

This paper presents a metric analysis of Community Health Nursing, the records published during the year 1999 to 2018 in the MEDLINE data which are covered in the Pubmed. It is noticed that from 1999 onwards there is a gradual increase except for some years and also observed that a total of 39140 records in the field of Community Health Nursing. It was found that 51.78% was journal articles, 21.79% was Research Support, Non U.S. Gov't and 9.07% was Review. English language (95.56%) is dominated in almost all the countries irrespective of the native language of the country. This is followed by French (0.91%) and Japanese (0.89%) as second and third positions respectively. It is seen that the United States is the major publisher, followed by England, Australia, Netherlands, etc. In total productivity, India ranks in the 11th position. 221 journals are identified as primary journals in the field of Community Health Nursing. It also shows that the United States published 42.53% out of 221 journals followed by England published 24.89% in the second position. Australia and Canada are in the third and fourth positions respectively. Activity Index is greater than 100 in the study period of seven years out of twenty years, which reveals that those years higher activity of Community Health Nursing research than the World's average.

Key Words: Metric analysis, Community Health Nursing, Bradford's law of scattering, Activity Index

INTRODUCTION:

Metrics in Information science is the study dealing with the quantification of written communication to measure the published knowledge. It helps to study the pattern of growth of literature, inter-relationship among different branches of knowledge, productivity, authorship pattern, and degree of collaboration, the pattern of collection building, and their use. Metric studied like Scientometrics/Bibliometric techniques are 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 Scientometrics/Bibliometrics and its related topics¹.

In this paper, an attempt has been made to identify the primary journals in the field of Community Health Nursing and also to compare India's performance with the world's performance using metric techniques.

REVIEW OF LITERATURE:

There are number of studies in the field of health sciences have used the metric technique like Bradford law²⁻⁷. Schloman has used the Bradford law in the literature of allied health⁸. Ramesh Babu and Ramakrishnan⁹ have used Bradford law to identify the core journals in the field of Hepatitis (1984-2003). Patra and Prakash Chand¹⁰ have used Bradford's law of scattering to identify core journals in the field of HIV/AIDS research in India. Ramakrishnan, Ravisankar and Thavamani¹¹ studied the core journals and their countries in the field of Dengue Literature.

COMMUNITY HEALTH NURSING:

Community Health Nursing is the synthesis of nursing and public health practice applied to promote and protect the health of the population and it combines all the basic elements of professional, clinical nursing with public health and community practice.¹² An enormous number of articles, papers, reports and so on are being published in the field of Community Health Nursing, it is necessary to study quantitatively the output of literature by applying metric techniques. The metric study helps to identify primary journals in the field of Community Health Nursing and also to compare India's performance with the world's performance.

OBJECTIVES OF THE STUDY

The Objectives of this study are:

1. To study the Number of literature published in the field of Community Health Nursing.
2. To analyse the publication types of literature in the field of Community Health Nursing.
3. To study the languages covered in the literature in the field of Community Health Nursing.
4. To study the country of literature published in the field of Community Health Nursing.
5. To identify the primary journals and their countries in the field of Community Health Nursing.
6. To compare India's performance with the world's performance in the field of Community Health Nursing.

METHODOLOGY:

The records available from the years 1999 to 2018 in the field of Community Health Nursing in the MEDLINE data which are covered in Pubmed¹³ were searched and bibliographic details were collected. The collected records were converted into FoxPro and loaded in SPSS for the purpose of this study. The keyword 'Community Health Nursing' has been used for extracting the number of records available in the database. The data was scrutinized to identify primary journals in the field of Community Health Nursing and also to compare India's performance with the world's performance. Bradford's¹⁴ law of scattering has been used to bring the core journals in the field of 'Community Health Nursing' and Activity Index¹⁵⁻¹⁹ has been used to compare India's performance with the world's performance.

QUANTUM OF RESEARCH PRODUCTIVITY:

In Table-1, it is observed that a total of 39140 records in the field of Community Health Nursing is covered for a period of twenty years from 1999 to 2018. It is found that the maximum number of 3813 records was published during the year 2018, followed by 3497 in the year 2017 and 3160 in the year 2016. On the whole, it is noticed that from the year 1999 onwards there is a gradual increase in Community Health Nursing research productivity every year except for some years. (Fig.1)

Table-1: Quantum of Literature published in Community Health Nursing

| S.No. | Year | Frequency | % | Cumulative % |
|-------|------|-----------|-----|--------------|
| 1 | 1999 | 1481 | 3.8 | 3.8 |
| 2 | 2000 | 1430 | 3.7 | 7.4 |
| 3 | 2001 | 1320 | 3.4 | 10.8 |
| 4 | 2002 | 1224 | 3.1 | 13.9 |
| 5 | 2003 | 1378 | 3.5 | 17.5 |
| 6 | 2004 | 1473 | 3.8 | 21.2 |
| 7 | 2005 | 1548 | 4 | 25.2 |
| 8 | 2006 | 1664 | 4.3 | 29.4 |

| | | | | |
|--------------|------|--------------|------------|------|
| 9 | 2007 | 1678 | 4.3 | 33.7 |
| 10 | 2008 | 1608 | 4.1 | 37.8 |
| 11 | 2009 | 1582 | 4 | 41.9 |
| 12 | 2010 | 1708 | 4.4 | 46.2 |
| 13 | 2011 | 1596 | 4.1 | 50.3 |
| 14 | 2012 | 1692 | 4.3 | 54.6 |
| 15 | 2013 | 1895 | 4.8 | 59.5 |
| 16 | 2014 | 2464 | 6.3 | 65.8 |
| 17 | 2015 | 2929 | 7.5 | 73.2 |
| 18 | 2016 | 3160 | 8.1 | 81.3 |
| 19 | 2017 | 3497 | 8.9 | 90.3 |
| 20 | 2018 | 3813 | 9.7 | 100 |
| Total | | 39140 | 100 | |

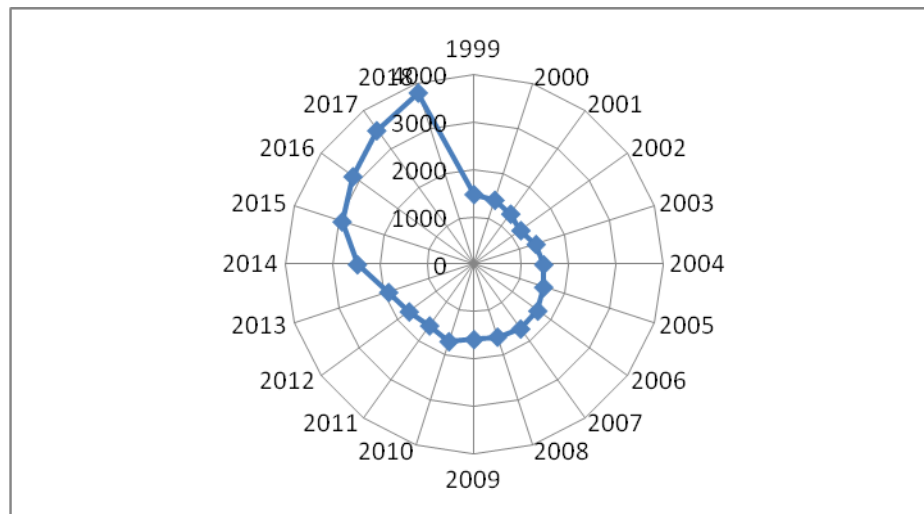


Figure-1:Year-wise Productivity of Community Health Nursing Research

PUBLICATION TYPES DISTRIBUTION:

Table-2 reveals the distribution in the field of Community Health Nursing research output according to various publication types of MEDLINE. It was found that 51.78% is journal articles, 21.79% is Research Support, Non U.S. Gov't and 9.07% is Review. The literature published as other bibliographic forms such as Research Support, N.I.H., Extramural, Research Support, U.S. Gov't, P.H.S., Systematic Review,

Randomized Controlled Trial, Editorial, Validation Studies, Research Support, U.S. Gov't, Non P.H.S., News, Multicenter Study, Interview, Letter, Comment, Observational Study, etc. is 17.36%. (Fig.2)

Table-2: Publication Types of Community Health Nursing Research

| S.N. | Pub. Type | No. of records | % | Cumulative % |
|------|--|----------------|-------|--------------|
| 1. | Journal Article | 20268 | 51.78 | 51.78 |
| 2. | Research Support, Non U.S. Gov't | 8529 | 21.79 | 73.57 |
| 3. | Review | 3549 | 9.07 | 82.64 |
| 4. | Research Support, N.I.H., Extramural | 1337 | 3.42 | 86.06 |
| 5. | Research Support, U.S. Gov't, P.H.S. | 1162 | 2.97 | 89.03 |
| 6. | Systematic Review | 715 | 1.83 | 90.85 |
| 7. | Randomized Controlled Trial | 496 | 1.27 | 92.12 |
| 8. | Editorial | 475 | 1.21 | 93.33 |
| 9. | Validation Studies | 413 | 1.06 | 94.39 |
| 10. | Research Support, U.S. Gov't, Non P.H.S. | 382 | 0.98 | 95.37 |
| 11. | News | 338 | 0.86 | 96.23 |
| 12. | Multicenter Study | 332 | 0.85 | 97.08 |
| 13. | Interview | 230 | 0.59 | 97.66 |
| 14. | Letter | 168 | 0.43 | 98.09 |
| 15. | Comment | 160 | 0.41 | 98.50 |
| 16. | Observational Study | 142 | 0.36 | 98.87 |
| 17. | Book | 55 | 0.14 | 99.01 |
| 18. | Portrait | 49 | 0.13 | 99.13 |
| 19. | Legal Case | 47 | 0.12 | 99.25 |
| 20. | Introductory Journal Article | 46 | 0.12 | 99.37 |
| 21. | Congress | 40 | 0.10 | 99.47 |
| 22. | Personal Narrative | 35 | 0.09 | 99.56 |
| 23. | Meta Analysis | 27 | 0.07 | 99.63 |
| 24. | Published Erratum | 27 | 0.07 | 99.70 |
| 25. | Case Reports | 21 | 0.05 | 99.75 |
| 26. | Practice Guideline | 20 | 0.05 | 99.80 |
| 27. | Book Chapter | 14 | 0.04 | 99.84 |
| 28. | Research Support, N.I.H., Intramural | 14 | 0.04 | 99.87 |
| 29. | Historical Article | 8 | 0.02 | 99.90 |
| 30. | Pragmatic Clinical Trial | 7 | 0.02 | 99.91 |
| 31. | Address | 6 | 0.02 | 99.93 |
| 32. | Lecture | 6 | 0.02 | 99.94 |
| 33. | Retracted Publication | 6 | 0.02 | 99.96 |
| 34. | Twin Study | 5 | 0.01 | 99.97 |
| 35. | Bibliography | 3 | 0.01 | 99.98 |

| | | | | |
|--------------|---------------------------|--------------|---------------|--------|
| 36. | Newspaper Article | 3 | 0.01 | 99.99 |
| 37. | English Abstract | 2 | 0.01 | 99.99 |
| 38. | Overall | 1 | 0.00 | 99.99 |
| 39. | Retraction of Publication | 1 | 0.00 | 100.00 |
| 40. | Video Audio Media | 1 | 0.00 | |
| Total | | 39140 | 100.00 | |

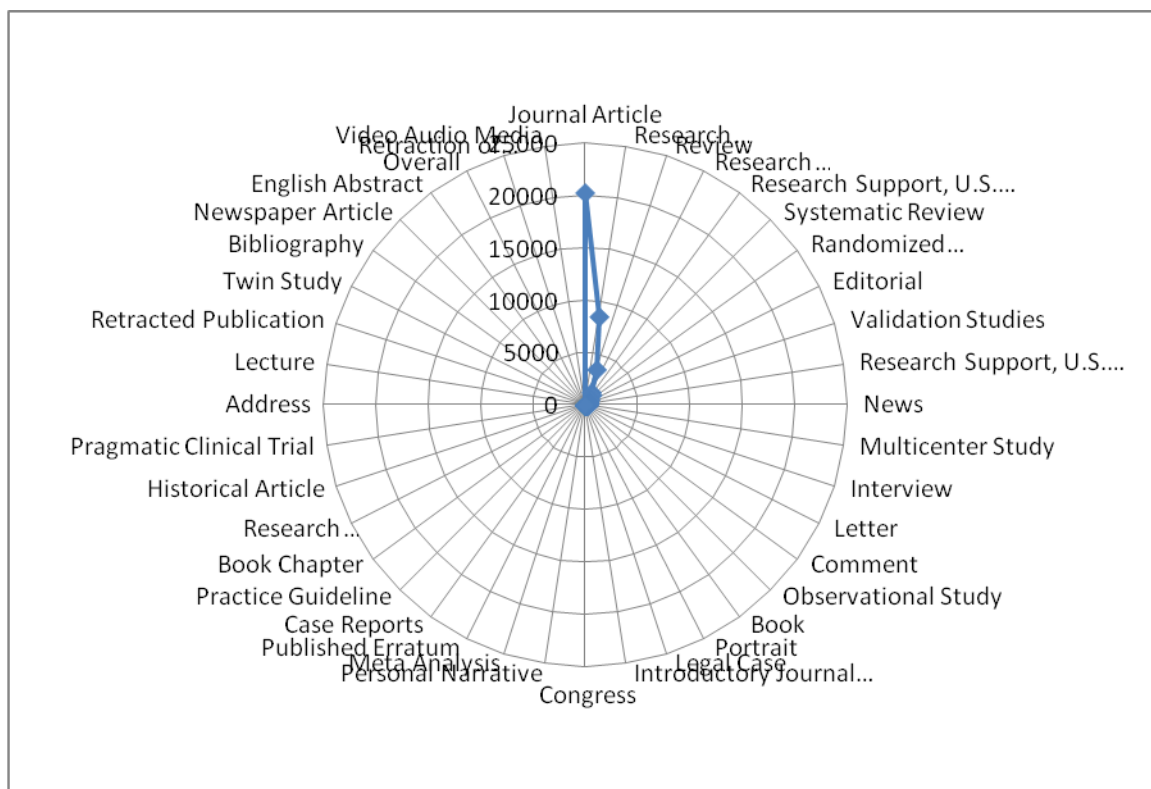


Figure-2:Publication Types of Community Health Nursing Research

DISTRIBUTION OF RESEARCH PRODUCTION BY LANGUAGE:

The distribution of Community Health Nursing literature by language-wise is present in Table-3. The English language has been used in almost all countries irrespective of their native language of the country. 95.56% of the research output is published in English. This is followed by French (0.91%) and Japanese (0.89%) as second and third positions respectively. Therefore, it is inferred that the English

language is dominating in the scholarly communication of Community Health Nursing Research (Figure-3).

Table-3: Distribution of Research Production by Language

| S.No. | Language | No. of records | % | Cumulative Records | Cumulative % |
|--------------|------------|----------------|---------------|--------------------|--------------|
| 1. | English | 37403 | 95.56 | 37403 | 95.56 |
| 2. | French | 356 | 0.91 | 37759 | 96.47 |
| 3. | Japanese | 349 | 0.89 | 38108 | 97.36 |
| 4. | German | 272 | 0.69 | 38380 | 98.06 |
| 5. | Portuguese | 177 | 0.45 | 38557 | 98.51 |
| 6. | Spanish | 171 | 0.44 | 38728 | 98.95 |
| 7. | Chinese | 129 | 0.33 | 38857 | 99.28 |
| 8. | Korean | 127 | 0.32 | 38984 | 99.60 |
| 9. | Italian | 42 | 0.11 | 39026 | 99.71 |
| 10. | Norwegian | 29 | 0.07 | 39055 | 99.78 |
| 11. | Dutch | 15 | 0.04 | 39070 | 99.82 |
| 12. | Swedish | 15 | 0.04 | 39085 | 99.86 |
| 13. | Danish | 13 | 0.03 | 39098 | 99.89 |
| 14. | Polish | 13 | 0.03 | 39111 | 99.93 |
| 15. | Hebrew | 8 | 0.02 | 39119 | 99.95 |
| 16. | Hungarian | 7 | 0.02 | 39126 | 99.96 |
| 17. | Greek | 5 | 0.01 | 39131 | 99.98 |
| 18. | Afrikaans | 2 | 0.01 | 39133 | 99.98 |
| 19. | Russian | 2 | 0.01 | 39135 | 99.99 |
| 20. | Czech | 1 | 0.00 | 39136 | 99.99 |
| 21. | Croatian | 1 | 0.00 | 39137 | 99.99 |
| 22. | Lithuanian | 1 | 0.00 | 39138 | 99.99 |
| 23. | Rumanian | 1 | 0.00 | 39139 | 100.00 |
| 24. | Turkish | 1 | 0.00 | 39140 | 100.00 |
| Total | | 39140 | 100.00 | | |

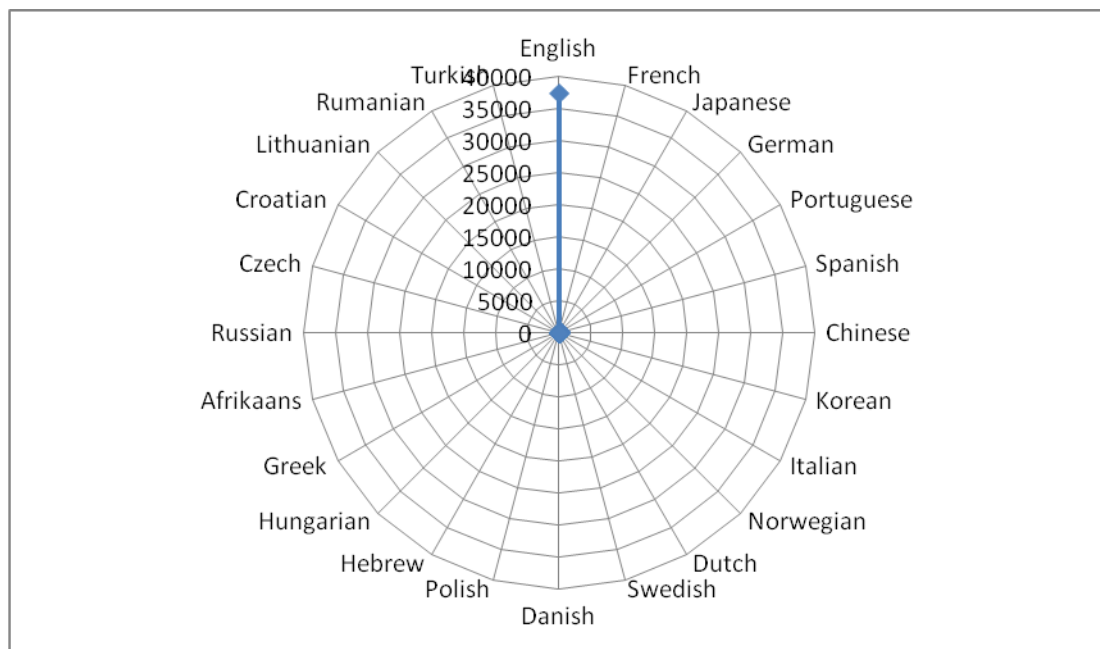


Figure-3: Distribution of Research Production by Language

QUANTUM OF RESEARCH OUTPUT ACCORDING TO COUNTRY

The country-wise production is presented in Table-4. It is seen that the United States is the major publisher, followed by England, Australia, Netherlands, Canada, Scotland, Japan, Switzerland, Germany, New Zealand, India, etc. In total productivity, India ranks in the 11th position.

Table-4: Quantum of Research Output According to Country-wise

| S.No. | Country | No. of records | % | Cumulative Records | Cumulative % |
|-------|---------------|----------------|-------|--------------------|--------------|
| 1. | United States | 15886 | 40.59 | 15886 | 40.59 |
| 2. | England | 14311 | 36.56 | 30197 | 77.15 |
| 3. | Australia | 1371 | 3.50 | 31568 | 80.65 |
| 4. | Netherlands | 1017 | 2.60 | 32585 | 83.25 |
| 5. | Canada | 705 | 1.80 | 33290 | 85.05 |
| 6. | Scotland | 614 | 1.57 | 33904 | 86.62 |
| 7. | Japan | 534 | 1.36 | 34438 | 87.99 |
| 8. | Switzerland | 504 | 1.29 | 34942 | 89.27 |

| | | | | | |
|--------------|---------------------------|--------------|---------------|-------|--------|
| 9. | Germany | 471 | 1.20 | 35413 | 90.48 |
| 10. | New Zealand | 350 | 0.89 | 35763 | 91.37 |
| 11. | India | 320 | 0.82 | 36083 | 92.19 |
| 12. | China (Republic : 1949-) | 319 | 0.82 | 36402 | 93.00 |
| 13. | France | 315 | 0.80 | 36717 | 93.81 |
| 14. | Iran | 314 | 0.80 | 37031 | 94.61 |
| 15. | Brazil | 279 | 0.71 | 37310 | 95.32 |
| 16. | Korea (South) | 259 | 0.66 | 37569 | 95.99 |
| 17. | Ireland | 237 | 0.61 | 37806 | 96.59 |
| 18. | South Africa | 160 | 0.41 | 37966 | 97.00 |
| 19. | Spain | 147 | 0.38 | 38113 | 97.38 |
| 20. | Sweden | 139 | 0.36 | 38252 | 97.73 |
| 21. | Egypt | 106 | 0.27 | 38358 | 98.00 |
| 22. | Italy | 80 | 0.20 | 38438 | 98.21 |
| 23. | China | 75 | 0.19 | 38513 | 98.40 |
| 24. | Denmark | 49 | 0.13 | 38562 | 98.52 |
| 25. | Poland | 46 | 0.12 | 38608 | 98.64 |
| 26. | Norway | 39 | 0.10 | 38647 | 98.74 |
| 27. | Southampton (UK) | 36 | 0.09 | 38683 | 98.83 |
| 28. | Thailand | 34 | 0.09 | 38717 | 98.92 |
| 29. | Uganda | 34 | 0.09 | 38751 | 99.01 |
| 30. | Nigeria | 30 | 0.08 | 38781 | 99.08 |
| 31. | Pakistan | 27 | 0.07 | 38808 | 99.15 |
| 32. | Austria | 22 | 0.06 | 38830 | 99.21 |
| 33. | Nepal | 21 | 0.05 | 38851 | 99.26 |
| 34. | Saudi Arabia | 19 | 0.05 | 38870 | 99.31 |
| 35. | Greece | 18 | 0.05 | 38888 | 99.36 |
| 36. | Singapore | 18 | 0.05 | 38906 | 99.40 |
| 37. | United Arab Emirates | 17 | 0.04 | 38923 | 99.45 |
| 38. | Israel | 16 | 0.04 | 38939 | 99.49 |
| 39. | Rockville (MD) | 14 | 0.04 | 38953 | 99.52 |
| 40. | Colombia | 12 | 0.03 | 38965 | 99.55 |
| 41. | Croatia | 12 | 0.03 | 38977 | 99.58 |
| 42. | Malawi | 12 | 0.03 | 38989 | 99.61 |
| 43. | Malaysia | 11 | 0.03 | 39000 | 99.64 |
| 44. | Ethiopia | 10 | 0.03 | 39010 | 99.67 |
| 45. | Kenya | 10 | 0.03 | 39020 | 99.69 |
| 46. | Other countries | 120 | 0.31 | 39140 | 100.00 |
| Total | | 39140 | 100.00 | | |

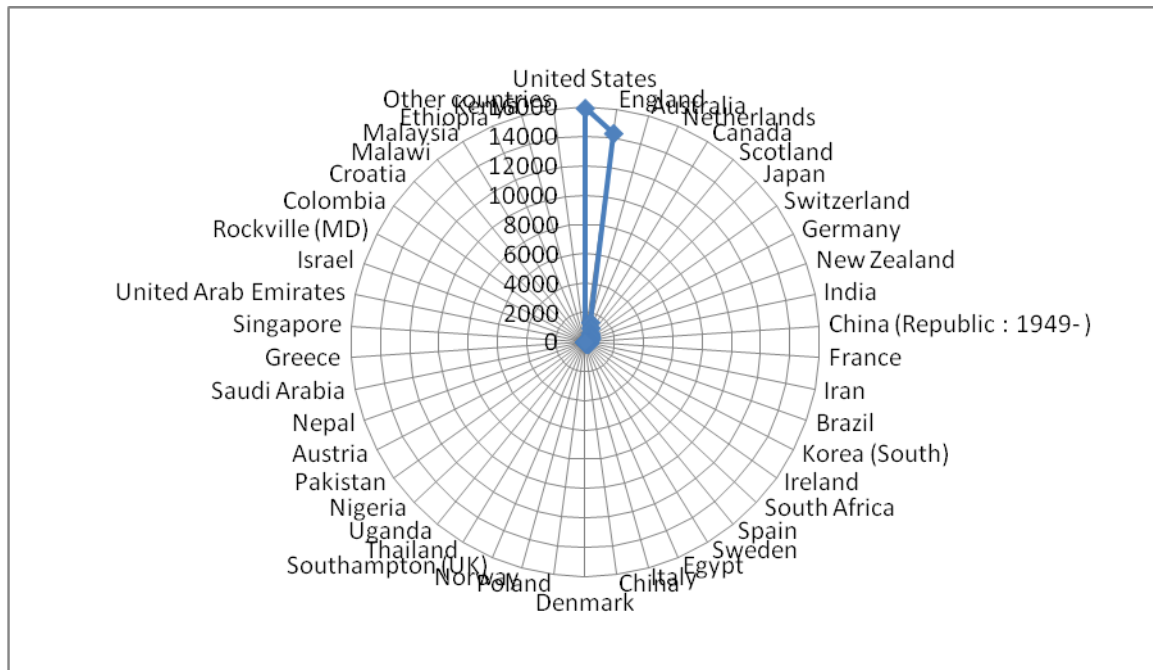


Figure-4: Quantum of Research Output According to Country-wise

DISTRIBUTION OF JOURNALS BASED ON BRADFORD LAW

In the Bradford Law, the journals which covered journal article are grouped into three zones producing a similar number of articles. The distribution of journal by zone wise is given in Table-5. It is seen from Table-5 that 33 primary journals grouped in zone-1 and published 6764 journal articles accounting for one-third of the total output. Similarly, the second zone comprises 188 journals that have published 6925 journal articles and 2077 journals grouped in the third zone and published 6579 journal articles. (Fig.3)

Table-5: Distribution by Zone of cited journals and Papers

| S.No. | Zone | No. of Journals | | No. of Journal articles | |
|-------|--------------|-----------------|---------------|-------------------------|---------------|
| | | No. | (%) | No. | (%) |
| 1 | Zone-1 | 33 | 1.44 | 6764 | 33.37 |
| 2 | Zone-2 | 188 | 8.18 | 6925 | 34.17 |
| 3 | Zone-3 | 2077 | 90.38 | 6579 | 32.46 |
| | Total | 2298 | 100.00 | 20268 | 100.00 |

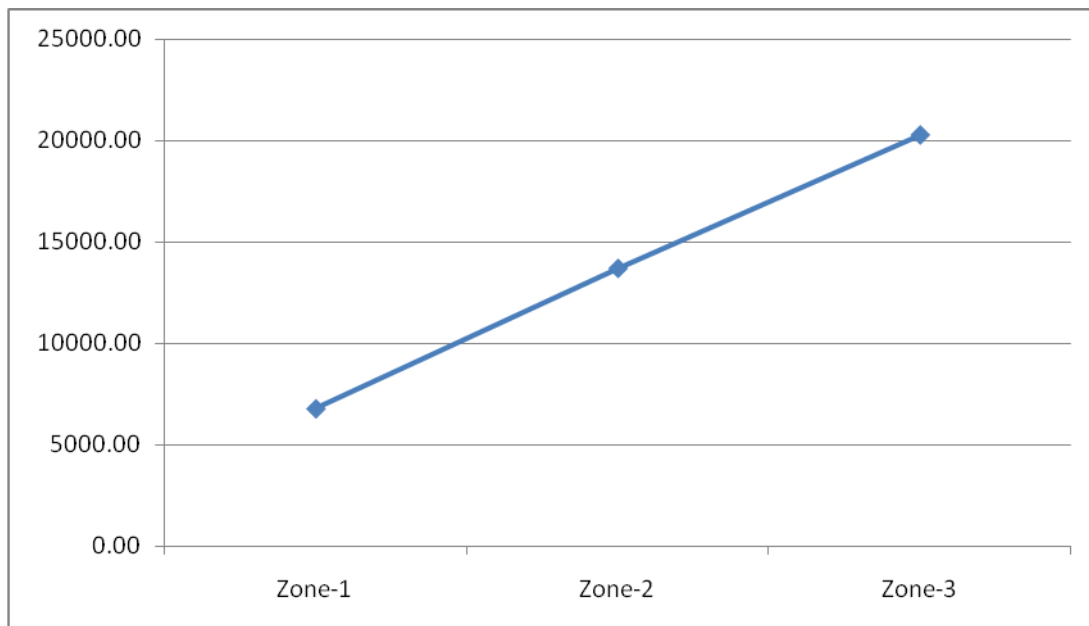


Figure-5:Distribution of Journals by Zones

PRIMARY JOURNALS IN COMMUNITY HEALTH NURSING RESEARCH

There are 221 journals contributed journal article for Zone-1 and Zone-2. Those journals are identified as primary journals in the field of Community Health Nursing. Primary journals along with the country of origin based on the research output in the field of Community Health Nursing during the study period has been presented in Table-6. There are 2298 journals that contributed to 20268 journal articles. The highly productive journals up to ten ranks are as follows:

1. 'British Journal of Community Nursing' published in England with 1097 contributions amounting to 5.41% of total contributions.
2. 'Community Practitioner' published in England with 502 contributions amounting to 2.48%.

3. 'Nursing Times' published in England with 448 contributions amounting to 2.21%.
4. 'Nursing Standard' published in England with 427 contributions amounting to 2.11%.
5. 'Home Healthcare Nurse' published in the United States with 409 contributions amounting to 2.02%.
6. 'Journal of Clinical Nursing' published in England with 265 contributions amounting to 1.31%.
7. 'Journal of Advanced Nursing' published in England with 249 contributions amounting to 1.23%.
8. 'Journal of Psychiatric and Mental Health Nursing' published in England with 241 contributions amounting to 1.19%.
9. 'Public Health Nursing' published in the United States with 223 contributions amounting to 1.10%.
10. 'Journal of Community Health Nursing' published in the United States with 202 contributions amounting to 1.00%.

Out of the top ten ranks, England is dominating in the first four ranks, the fifth rank by the United States, sixth to eighth ranks once again dominated by England, ninth and tenth ranks by the United States.

Table-6: Primary Journals in Community Health Nursing Research

| S.No. | Name of the Journal | No. of Records | % | Country of origin |
|--------------|--|-----------------------|----------|--------------------------|
| 1. | British Journal of Community Nursing | 1097 | 5.41 | England |
| 2. | Community Practitioner | 502 | 2.48 | England |
| 3. | Nursing Times | 448 | 2.21 | England |
| 4. | Nursing Standard | 427 | 2.11 | England |
| 5. | Home Healthcare Nurse | 409 | 2.02 | United States |
| 6. | Journal of Clinical Nursing | 265 | 1.31 | England |
| 7. | Journal of Advanced Nursing | 249 | 1.23 | England |
| 8. | Journal of Psychiatric and Mental Health Nursing | 241 | 1.19 | England |
| 9. | Public Health Nursing | 223 | 1.10 | United States |
| 10. | Journal of Community Health Nursing | 202 | 1.00 | United States |
| 11. | British Journal of Nursing | 195 | 0.96 | England |
| 12. | Issues in Mental Health Nursing | 172 | 0.85 | England |
| 13. | The Journal of Nursing Education | 172 | 0.85 | United States |
| 14. | Health & Social Care in the Community | 160 | 0.79 | England |
| 15. | Nurse Education Today | 158 | 0.78 | Scotland |
| 16. | Nurse Educator | 131 | 0.65 | United States |
| 17. | GanTo Kagaku Ryoho. Cancer & Chemotherapy | 127 | 0.63 | Japan |
| 18. | Contemporary Nurse | 126 | 0.62 | United States |
| 19. | Home Healthcare Now | 112 | 0.55 | United States |
| 20. | International Journal of Community Based Nursing and Midwifery | 111 | 0.55 | Iran |
| 21. | Journal of Christian Nursing | 111 | 0.55 | United States |
| 22. | International Journal of Mental Health Nursing | 109 | 0.54 | Australia |
| 23. | The Journal of Nursing Administration | 100 | 0.49 | United States |
| 24. | Hu Li ZaZhiThe Journal of Nursing | 99 | 0.49 | China (Republic : 1949 |
| 25. | International Journal of Palliative Nursing | 99 | 0.49 | England |
| 26. | Caring | 95 | 0.47 | United States |
| 27. | Community Nurse | 92 | 0.45 | England |
| 28. | The American Journal of Nursing | 91 | 0.45 | United States |
| 29. | Studies in Health Technology and Informatics | 89 | 0.44 | Netherlands |
| 30. | Nurse Education in Practice | 89 | 0.44 | Scotland |
| 31. | Journal of Professional Nursing | 89 | 0.44 | United States |

| S.No. | Name of the Journal | No. of Records | % | Country of origin |
|-------|--|----------------|------|------------------------|
| 32. | Plos One | 89 | 0.44 | United States |
| 33. | Journal of Psychosocial Nursing and Mental Health Services | 85 | 0.42 | United States |
| 34. | Nursing Older People | 84 | 0.41 | England |
| 35. | Curationis | 82 | 0.40 | South Africa |
| 36. | International Nursing Review | 78 | 0.38 | England |
| 37. | Archives of Psychiatric Nursing | 76 | 0.37 | United States |
| 38. | Journal of Interprofessional Care | 74 | 0.37 | England |
| 39. | [Nihon KoshuEiseiZasshi] Japanese Journal of Public Health | 73 | 0.36 | Japan |
| 40. | Journal of the American Medical Directors Association | 71 | 0.35 | United States |
| 41. | Journal of Transcultural Nursing | 71 | 0.35 | United States |
| 42. | BMC Public Health | 70 | 0.35 | England |
| 43. | International Journal of Nursing Studies | 70 | 0.35 | England |
| 44. | Nursing Management | 70 | 0.35 | England |
| 45. | Family & Community Health | 69 | 0.34 | United States |
| 46. | Nursing Education Perspectives | 69 | 0.34 | United States |
| 47. | Nursing & Health Sciences | 68 | 0.34 | Australia |
| 48. | The Canadian Nurse | 68 | 0.34 | Canada |
| 49. | Nursing New Zealand | 67 | 0.33 | New Zealand |
| 50. | Midwifery | 67 | 0.33 | Scotland |
| 51. | BMC Health Services Research | 66 | 0.33 | England |
| 52. | Krankenpflege. SoinsInfirmiers | 64 | 0.32 | Switzerland |
| 53. | International Journal of Nursing Practice | 63 | 0.31 | Australia |
| 54. | Journal of Nursing Management | 63 | 0.31 | England |
| 55. | Geriatric Nursing | 63 | 0.31 | United States |
| 56. | BMC Nursing | 61 | 0.30 | England |
| 57. | Rural and Remote Health | 60 | 0.30 | Australia |
| 58. | RevistaBrasileira De Enfermagem | 60 | 0.30 | Brazil |
| 59. | Iranian Journal of Nursing and Midwifery Research | 60 | 0.30 | Iran |
| 60. | Journal of Gerontological Nursing | 59 | 0.29 | United States |
| 61. | Taiwanese Journal of Obstetrics & Gynecology | 58 | 0.29 | China (Republic : 1949 |
| 62. | Australian Nursing Journal | 57 | 0.28 | Australia |
| 63. | PflegeZeitschrift | 57 | 0.28 | Germany |

| S.No. | Name of the Journal | No. of Records | % | Country of origin |
|-------|--|----------------|------|------------------------|
| 64. | Clinical Nurse Specialist CNS | 56 | 0.28 | United States |
| 65. | Nursing | 56 | 0.28 | United States |
| 66. | Soins; La Revue De Reference Infirmiere | 55 | 0.27 | France |
| 67. | Journal of Continuing Education in Nursing | 55 | 0.27 | United States |
| 68. | NASN School Nurse (Print) | 55 | 0.27 | United States |
| 69. | TaehanKanhoHakhoeChi | 54 | 0.27 | Korea (South) |
| 70. | Archives of Gerontology and Geriatrics | 54 | 0.27 | Netherlands |
| 71. | RevistaDa EscolaDe EnfermagemDa U S P | 52 | 0.26 | Brazil |
| 72. | BMJ Open | 52 | 0.26 | England |
| 73. | Professional Case Management | 52 | 0.26 | United States |
| 74. | The Journal of School Nursing | 52 | 0.26 | United States |
| 75. | International Journal of Older People Nursing | 51 | 0.25 | England |
| 76. | The Journal of Nursing Research : JNR | 49 | 0.24 | China (Republic : 1949 |
| 77. | Journal of Korean Academy of Nursing | 49 | 0.24 | Korea (South) |
| 78. | Nursing Science Quarterly | 49 | 0.24 | United States |
| 79. | Journal of the American Geriatrics Society | 48 | 0.24 | United States |
| 80. | Nursing Administration Quarterly | 48 | 0.24 | United States |
| 81. | Nursing Management | 48 | 0.24 | United States |
| 82. | Journal of Community Health | 47 | 0.23 | Netherlands |
| 83. | Australian Nursing & Midwifery Journal | 45 | 0.22 | Australia |
| 84. | Journal of Pediatric Nursing | 45 | 0.22 | United States |
| 85. | Journal of Nursing Scholarship | 44 | 0.22 | United States |
| 86. | RevistaLatino | 43 | 0.21 | Brazil |
| 87. | Computers, Informatics, Nursing : CIN | 43 | 0.21 | United States |
| 88. | Mcen. The American Journal of Maternal Child Nursing | 43 | 0.21 | United States |
| 89. | Nursing Outlook | 43 | 0.21 | United States |
| 90. | Health Care for Women International | 41 | 0.20 | England |
| 91. | PaediatricNursing | 41 | 0.20 | England |
| 92. | The Journal of Family Health Care | 41 | 0.20 | England |
| 93. | Journal for Nurses in Staff Development : JNSD | 41 | 0.20 | United States |
| 94. | Oncology Nursing Forum | 41 | 0.20 | United States |
| 95. | Journal of Wound Care | 40 | 0.20 | England |
| 96. | The Practising Midwife | 40 | 0.20 | England |

| S.No. | Name of the Journal | No. of Records | % | Country of origin |
|-------|--|----------------|------|-------------------|
| 97. | Community Mental Health Journal | 40 | 0.20 | United States |
| 98. | Journal of Nursing Care Quality | 40 | 0.20 | United States |
| 99. | Journal of Obstetric, Gynecologic, and Neonatal Nursing : JOGNN | 40 | 0.20 | United States |
| 100 | Revue De L'infirmiere | 39 | 0.19 | France |
| 101 | Soins. Gerontologie | 39 | 0.19 | France |
| 102 | Soins. Psychiatrie | 39 | 0.19 | France |
| 103 | Applied Nursing Research : ANR | 39 | 0.19 | United States |
| 104 | JB Library of Systematic Reviews | 38 | 0.19 | Australia |
| 105 | Nursing Forum | 38 | 0.19 | United States |
| 106 | The Canadian Journal of Nursing Research = Revue Canadienne De Recherche En | 38 | 0.19 | United States |
| 107 | Electronic Physician | 37 | 0.18 | Iran |
| 108 | Asian Nursing Research | 37 | 0.18 | Korea (South) |
| 109 | Ans. Advances in Nursing Science | 37 | 0.18 | United States |
| 110 | Journal of the American Academy of Nurse Practitioners | 37 | 0.18 | United States |
| 111 | Nursing Children and Young People | 36 | 0.18 | England |
| 112 | Professional Nurse | 36 | 0.18 | England |
| 113 | Home Healthcare Nurse Manager | 36 | 0.18 | United States |
| 114 | Journal of Holistic Nursing | 36 | 0.18 | United States |
| 115 | The Gerontologist | 36 | 0.18 | United States |
| 116 | Australian Health Review | 35 | 0.17 | Australia |
| 117 | Nursing Leadership | 35 | 0.17 | Canada |
| 118 | The Health Service Journal | 35 | 0.17 | England |
| 119 | Nihon Ronen IgakkaiZasshi. Japanese Journal of Geriatrics | 35 | 0.17 | Japan |
| 120 | AAOHN Journal | 35 | 0.17 | United States |
| 121 | The American Journal of Hospice & Palliative Care | 35 | 0.17 | United States |
| 122 | The Australian Journal of Rural Health | 34 | 0.17 | Australia |
| 123 | Aging & Mental Health | 34 | 0.17 | England |
| 124 | BMC Research Notes | 34 | 0.17 | England |
| 125 | Scandinavian Journal of Caring Sciences | 34 | 0.17 | Sweden |
| 126 | Journal of Emergency Nursing: JEN | 34 | 0.17 | United States |
| 127 | Nursing Inquiry | 33 | 0.16 | Australia |

| S.No. | Name of the Journal | No. of Records | % | Country of origin |
|-------|---|----------------|------|-------------------|
| 128 | The ABNF Journal | 33 | 0.16 | United States |
| 129 | Collegian (Royal College of Nursing, Australia) | 32 | 0.16 | Australia |
| 130 | BMC Pregnancy and Childbirth | 32 | 0.16 | England |
| 131 | Nursing Ethics | 32 | 0.16 | England |
| 132 | International Journal of Environmental Research and Public Health | 32 | 0.16 | Switzerland |
| 133 | Journal of Wound, Ostomy, and Continence Nursing | 32 | 0.16 | United States |
| 134 | Pediatric Nursing | 32 | 0.16 | United States |
| 135 | BMC Geriatrics | 31 | 0.15 | England |
| 136 | Holistic Nursing Practice | 31 | 0.15 | United States |
| 137 | Geriatrics & Gerontology International | 30 | 0.15 | Japan |
| 138 | American Journal of Infection Control | 30 | 0.15 | United States |
| 139 | Journal of the American Association of Nurse Practitioners | 30 | 0.15 | United States |
| 140 | Journal of Palliative Medicine | 29 | 0.14 | United States |
| 141 | MedsurgNursing | 29 | 0.14 | United States |
| 142 | The Journal of Cardiovascular Nursing | 29 | 0.14 | United States |
| 143 | PflegeAktuell | 28 | 0.14 | Germany |
| 144 | EnfermeriaClinica | 28 | 0.14 | Spain |
| 145 | Frontiers in Public Health | 28 | 0.14 | Switzerland |
| 146 | Home Care Provider | 28 | 0.14 | United States |
| 147 | Nursing Economic\$ | 28 | 0.14 | United States |
| 148 | Western Journal of Nursing Research | 28 | 0.14 | United States |
| 149 | Disability and Rehabilitation | 27 | 0.13 | England |
| 150 | International Journal of Nursing Education Scholarship | 27 | 0.13 | Germany |
| 151 | Beginnings (American Holistic Nurses' Association) | 27 | 0.13 | United States |
| 152 | The Nurse Practitioner | 27 | 0.13 | United States |
| 153 | JMIR Research Protocols | 26 | 0.13 | Canada |
| 154 | Iranian Journal of Public Health | 26 | 0.13 | Iran |
| 155 | Pflege | 26 | 0.13 | Switzerland |
| 156 | Clinical Journal of Oncology Nursing | 26 | 0.13 | United States |
| 157 | Perspectives in Psychiatric Care | 26 | 0.13 | United States |
| 158 | Policy, Politics & Nursing Practice | 26 | 0.13 | United States |

| S.No. | Name of the Journal | No. of Records | % | Country of origin |
|-------|---|----------------|------|-------------------|
| 159 | The Journal of the Association of Nurses in AIDS Care : JANAC | 26 | 0.13 | United States |
| 160 | International Journal of Geriatric Psychiatry | 25 | 0.12 | England |
| 161 | Journal of Aging & Social Policy | 25 | 0.12 | England |
| 162 | Cancer Nursing | 25 | 0.12 | United States |
| 163 | Healthcare Quarterly (Toronto, Ont.) | 24 | 0.12 | Canada |
| 164 | Eastern Mediterranean Health Journal = La Revue De Sante De La Mediterranee | 24 | 0.12 | Egypt |
| 165 | Nursing Research And Practice | 24 | 0.12 | Egypt |
| 166 | Reproductive Health | 24 | 0.12 | England |
| 167 | Creative Nursing | 24 | 0.12 | United States |
| 168 | Journal of Public Health Management and Practice : JPHMP | 24 | 0.12 | United States |
| 169 | European Journal of Cardiovascular Nursing | 23 | 0.11 | England |
| 170 | Nurse Researcher | 23 | 0.11 | England |
| 171 | Public Health | 23 | 0.11 | Netherlands |
| 172 | European Journal of Oncology Nursing | 23 | 0.11 | Scotland |
| 173 | Canadian Journal of Public Health = Revue Canadienne De SantePublique | 23 | 0.11 | Switzerland |
| 174 | Journal of Forensic Nursing | 23 | 0.11 | United States |
| 175 | Research in Nursing & Health | 23 | 0.11 | United States |
| 176 | BMC Palliative Care | 22 | 0.11 | England |
| 177 | Dementia (London, England) | 22 | 0.11 | England |
| 178 | Home Health Care Services Quarterly | 22 | 0.11 | England |
| 179 | Kinderkrankenschwester: Organ Der SektionKinderkrankenpflege | 22 | 0.11 | Germany |
| 180 | TidsskriftFor Den Norske Laegeforening : Tidsskrift For PraktiskMedicin, Ny | 22 | 0.11 | Norway |
| 181 | RevistaDe Enfermeria (Barcelona, Spain) | 22 | 0.11 | Spain |
| 182 | Rehabilitation Nursing | 22 | 0.11 | United States |
| 183 | Social Science & Medicine (1982) | 21 | 0.10 | England |
| 184 | The Nursing Journal of India | 21 | 0.10 | India |
| 185 | Patient Preference and Adherence | 21 | 0.10 | New Zealand |
| 186 | Journal of the American Psychiatric Nurses Association | 21 | 0.10 | United States |
| 187 | Nursing and Health Care Perspectives | 21 | 0.10 | United States |
| 188 | RevistaGaucha De Enfermagem | 20 | 0.10 | Brazil |

| S.No. | Name of the Journal | No. of Records | % | Country of origin |
|-------|--|----------------|------|-------------------|
| 189 | BMC Psychiatry | 20 | 0.10 | England |
| 190 | American Journal of Public Health | 20 | 0.10 | United States |
| 191 | Care Management Journals | 20 | 0.10 | United States |
| 192 | Journal of Immigrant and Minority Health | 20 | 0.10 | United States |
| 193 | Journal of Midwifery & Women's Health | 20 | 0.10 | United States |
| 194 | Journal of National Black Nurses' Association : JNBNA | 20 | 0.10 | United States |
| 195 | The Journal of Perinatal Education | 20 | 0.10 | United States |
| 196 | Canadian Family Physician MedecinDe FamilleCanadien | 19 | 0.09 | Canada |
| 197 | Australasian Psychiatry : Bulletin of Royal Australian and New Zealand College Of..... | 19 | 0.09 | England |
| 198 | Journal of Child and Adolescent Psychiatric Nursing | 19 | 0.09 | England |
| 199 | Journal of Child Health Care | 19 | 0.09 | England |
| 200 | Journal of Education and Health Promotion | 19 | 0.09 | India |
| 201 | Iranian Red Crescent Medical Journal | 19 | 0.09 | Iran |
| 202 | Patient Education and Counseling | 19 | 0.09 | Ireland |
| 203 | Japan Journal of Nursing Science : JJNS | 19 | 0.09 | Japan |
| 204 | Dimensions of Critical Care Nursing : DCCN | 19 | 0.09 | United States |
| 205 | Heart & Lung | 19 | 0.09 | United States |
| 206 | Journal of Pediatric Health Care | 19 | 0.09 | United States |
| 207 | The Journal of Neuroscience Nursing | 19 | 0.09 | United States |
| 208 | The Journal of School Health | 19 | 0.09 | United States |
| 209 | Worldviews on Evidence | 19 | 0.09 | United States |
| 210 | Australasian Journal on Ageing | 18 | 0.09 | Australia |
| 211 | Alberta RN | 18 | 0.09 | Canada |
| 212 | Health Promotion International | 18 | 0.09 | England |
| 213 | International Journal of Integrated Care | 18 | 0.09 | England |
| 214 | International Journal of Mental Health Systems | 18 | 0.09 | England |
| 215 | Palliative Medicine | 18 | 0.09 | England |
| 216 | Primary Health Care Research & Development | 18 | 0.09 | England |
| 217 | Journal of Multidisciplinary Healthcare | 18 | 0.09 | New Zealand |
| 218 | Journal of Addictions Nursing | 18 | 0.09 | United States |
| 219 | Nursing Research | 18 | 0.09 | United States |
| 220 | The Journals of Gerontology | 18 | 0.09 | United States |

| S.No. | Name of the Journal | No. of Records | % | Country of origin |
|-------|--------------------------------------|----------------|------|-------------------|
| 221 | The Nursing clinics of North America | 18 | 0.09 | United States |

DISTRIBUTION OF JOURNALS BY COUNTRY-WISE IN ZONES:

The distribution of journals by country of origin in zones-1 and 2 are shown in the Tables-7,8 and combined of Zone-1 & Zone 2 in Table-9 respectively.

DISTRIBUTION OF JOURNALS BY COUNTRY IN THE FIRST ZONE:

The United States with the main contributions, published 14 journals (42.42%) out of 33 journals in zone-1 followed by England published 12 journals (36.36%) in the second position and Scotland published 2 journals (6.06%) in the third position. (Fig.6)

Table-7: Distribution of Journals by country in the First Zone

| S. No. | Country of origin | Total No. of Journals | % | Cumulative Total | Cumulative % |
|--------------|----------------------|-----------------------|---------------|------------------|--------------|
| 1. | United States | 14 | 42.42 | 14 | 42.42 |
| 2. | England | 12 | 36.36 | 26 | 78.79 |
| 3. | Scotland | 2 | 6.06 | 28 | 84.85 |
| 4. | Australia | 1 | 3.03 | 29 | 87.88 |
| 5. | China (Republic:1949 | 1 | 3.03 | 30 | 90.91 |
| 6. | Iran | 1 | 3.03 | 31 | 93.94 |
| 7. | Japan | 1 | 3.03 | 32 | 96.97 |
| 8. | Netherlands | 1 | 3.03 | 33 | 100.00 |
| Total | | 33 | 100.00 | | |

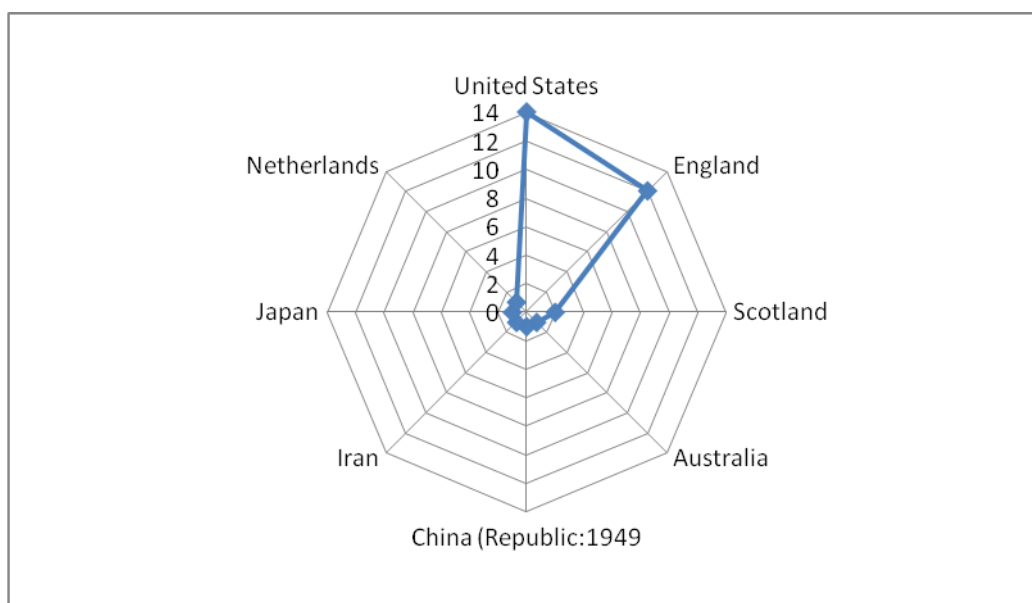


Figure-6:Distribution of Journals by country in the First Zone

DISTRIBUTION OF JOURNALS BY COUNTRY IN THE SECOND ZONE:

The distributions of journals by country of origin in zone-2 are presented in the Tables-8. In zone-2, United States published 80 journals (42.55%) out of 188 journals followed by England published 43 journals (22.87%) in the second position. Australia published 11 journals (5.85%), Canada published 6 journals (3.19%), and Switzerland published 5 journals (2.66%) are in the third, fourth and fifth positions respectively. (Fig.7)

Table-8: Distribution of Journals by country in the Second Zone

| S. No. | Country of origin | Total No. of Journals | % | Cumulative Total | Cumulative % |
|--------|-------------------|-----------------------|-------|------------------|--------------|
| 1. | United States | 80 | 42.55 | 80 | 42.55 |
| 2. | England | 43 | 22.87 | 123 | 65.43 |
| 3. | Australia | 11 | 5.85 | 134 | 71.28 |
| 4. | Canada | 6 | 3.19 | 140 | 74.47 |
| 5. | Switzerland | 5 | 2.66 | 145 | 77.13 |
| 6. | Brazil | 4 | 2.13 | 149 | 79.26 |
| 7. | France | 4 | 2.13 | 153 | 81.38 |
| 8. | Germany | 4 | 2.13 | 157 | 83.51 |
| 9. | Iran | 4 | 2.13 | 161 | 85.64 |

| S. No. | Country of origin | Total No. of Journals | % | Cumulative Total | Cumulative % |
|--------------|------------------------|-----------------------|---------------|------------------|--------------|
| 10. | Japan | 4 | 2.13 | 165 | 87.77 |
| 11. | Korea (South) | 3 | 1.60 | 168 | 89.36 |
| 12. | Netherlands | 3 | 1.60 | 171 | 90.96 |
| 13. | New Zealand | 3 | 1.60 | 174 | 92.55 |
| 14. | China (Republic : 1949 | 2 | 1.06 | 176 | 93.62 |
| 15. | Egypt | 2 | 1.06 | 178 | 94.68 |
| 16. | India | 2 | 1.06 | 180 | 95.74 |
| 17. | Scotland | 2 | 1.06 | 182 | 96.81 |
| 18. | Spain | 2 | 1.06 | 184 | 97.87 |
| 19. | Ireland | 1 | 0.53 | 185 | 98.40 |
| 20. | Norway | 1 | 0.53 | 186 | 98.94 |
| 21. | South Africa | 1 | 0.53 | 187 | 99.47 |
| 22. | Sweden | 1 | 0.53 | 188 | 100.00 |
| Total | | 188 | 100.00 | | |

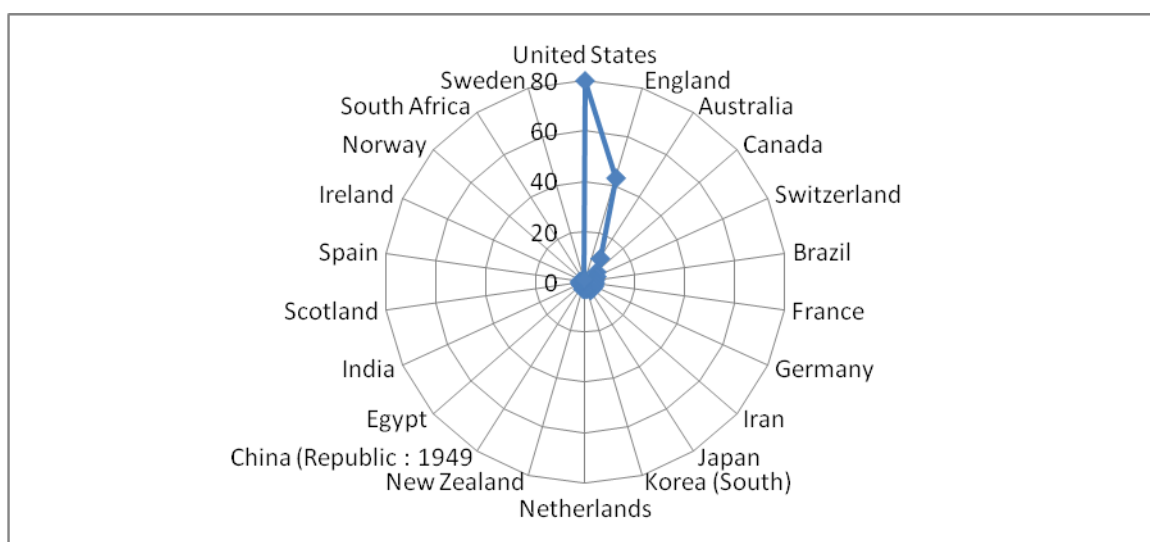


Figure-7: Distribution of Journals by country in the Zone-2

DISTRIBUTION OF JOURNALS BY COUNTRY IN THE COMBINED OF FIRST & SECOND ZONES:

The distribution of journals by country of origin in zone-1 and zone-2 combined are presented in the Tables-9. It also shows that the United States published 94 journals (42.53%) out of 221 journals in the first position

followed by England published 55 journals (24.89%) in the second position. Australia published 12 journals (5.43%) and Canada published 6 journals (2.71%) are in the third and fourth positions respectively. (Fig.8)

It exposes that these countries are the primary producers of literature on Community Health Nursing. The trend may be understood as the research on Community Health Nursing may be concentrated in these countries. Perhaps the MEDLINE database has covered more journals published from these countries.

Table-9: Distribution of Journals by country in the Combined of First & Second Zones

| S. No. | Country of origin | Total No. of Journals | % | Cumulative Total | Cumulative % |
|--------------|-------------------------|-----------------------|---------------|------------------|--------------|
| 1. | United States | 94 | 42.53 | 94 | 42.53 |
| 2. | England | 55 | 24.89 | 149 | 67.42 |
| 3. | Australia | 12 | 5.43 | 161 | 72.85 |
| 4. | Canada | 6 | 2.71 | 167 | 75.57 |
| 5. | Iran | 5 | 2.26 | 172 | 77.83 |
| 6. | Japan | 5 | 2.26 | 177 | 80.09 |
| 7. | Switzerland | 5 | 2.26 | 182 | 82.35 |
| 8. | Brazil | 4 | 1.81 | 186 | 84.16 |
| 9. | France | 4 | 1.81 | 190 | 85.97 |
| 10. | Germany | 4 | 1.81 | 194 | 87.78 |
| 11. | Netherlands | 4 | 1.81 | 198 | 89.59 |
| 12. | Scotland | 4 | 1.81 | 202 | 91.40 |
| 13. | China (Republic : 1949) | 3 | 1.36 | 205 | 92.76 |
| 14. | Korea (South) | 3 | 1.36 | 208 | 94.12 |
| 15. | New Zealand | 3 | 1.36 | 211 | 95.48 |
| 16. | Egypt | 2 | 0.90 | 213 | 96.38 |
| 17. | India | 2 | 0.90 | 215 | 97.29 |
| 18. | Spain | 2 | 0.90 | 217 | 98.19 |
| 19. | Ireland | 1 | 0.45 | 218 | 98.64 |
| 20. | Norway | 1 | 0.45 | 219 | 99.10 |
| 21. | South Africa | 1 | 0.45 | 220 | 99.55 |
| 22. | Sweden | 1 | 0.45 | 221 | 100.00 |
| Total | | 221 | 100.00 | | |

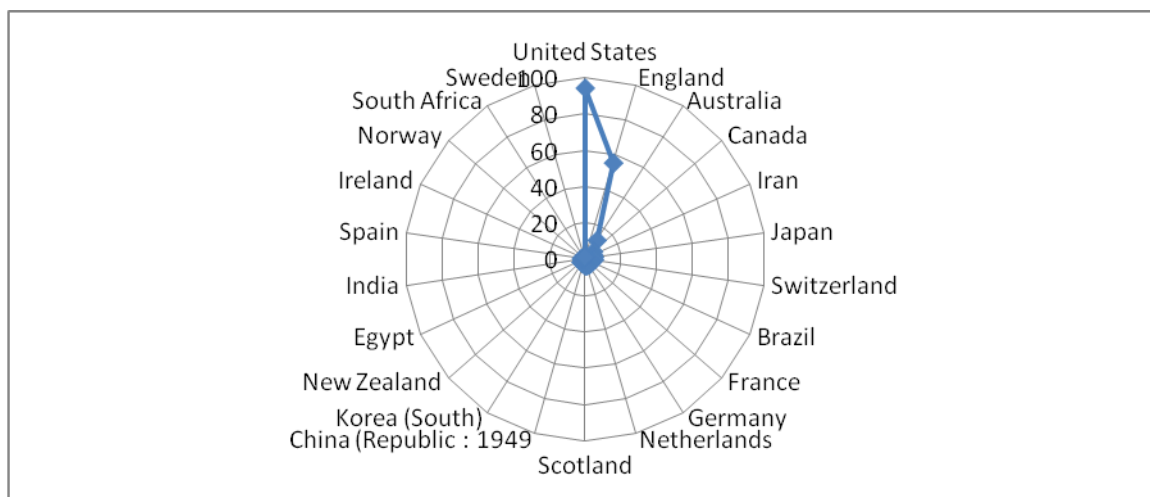


Figure-8: Distribution of Journals by country in zone-1 and zone-2 combined

ACTIVITY INDEX

In Table-10, the Activity Index for India has been calculated to analyse India's research performance. The data tells that, Activity Index is greater than 100 in the study period of seven years out of twenty years, which reveals that those years higher activity of Community Health Nursing research than the World's average. In the years, where the Activity Index is fewer than 100, it reflects the lower activity of Community Health Nursing research than the world average. The Activity Index (AI) for India was highest in the year 2014 (213.45).

The graph (Figure-9) which indicates that the world output on Community Health Nursing raised almost the uniform rate by year after year and it was highest records in the year 2018. In the case of Indian output (Figure-10) the growth reaches in an inconsistent manner and reaches its highest record in the year 2018. In other words, the year 2018 has marked the maximum quantum of research output in the field of Community Health Nursing in the world and as well as in India.

Table-10: World and Indian output in Community Health Nursing

| S.No. | Year | World Output | Indian Output | Activity Index |
|--------------|------|--------------|--------------------|-----------------|
| 1 | 1999 | 1481 | 5 | 41.29 |
| 2 | 2000 | 1430 | 5 | 42.77 |
| 3 | 2001 | 1320 | 2 | 18.53 |
| 4 | 2002 | 1224 | 1 | 9.99 |
| 5 | 2003 | 1378 | 3 | 26.63 |
| 6 | 2004 | 1473 | 7 | 58.13 |
| 7 | 2005 | 1548 | 8 | 63.21 |
| 8 | 2006 | 1664 | 6 | 44.10 |
| 9 | 2007 | 1678 | 6 | 43.74 |
| 10 | 2008 | 1608 | 3 | 22.82 |
| 11 | 2009 | 1582 | 6 | 46.39 |
| 12 | 2010 | 1708 | 14 | 100.26 |
| 13 | 2011 | 1596 | 12 | 91.96 |
| 14 | 2012 | 1692 | 14 | 101.20 |
| 15 | 2013 | 1895 | 13 | 83.91 |
| 16 | 2014 | 2464 | 43 | 213.45 |
| 17 | 2015 | 2929 | 42 | 175.39 |
| 18 | 2016 | 3160 | 42 | 162.57 |
| 19 | 2017 | 3497 | 42 | 146.90 |
| 20 | 2018 | 3813 | 46 | 147.56 |
| Total | | 39140 | 320(0.82%)* | 100.00** |

* Percentage of world output

** Average of Activity Index

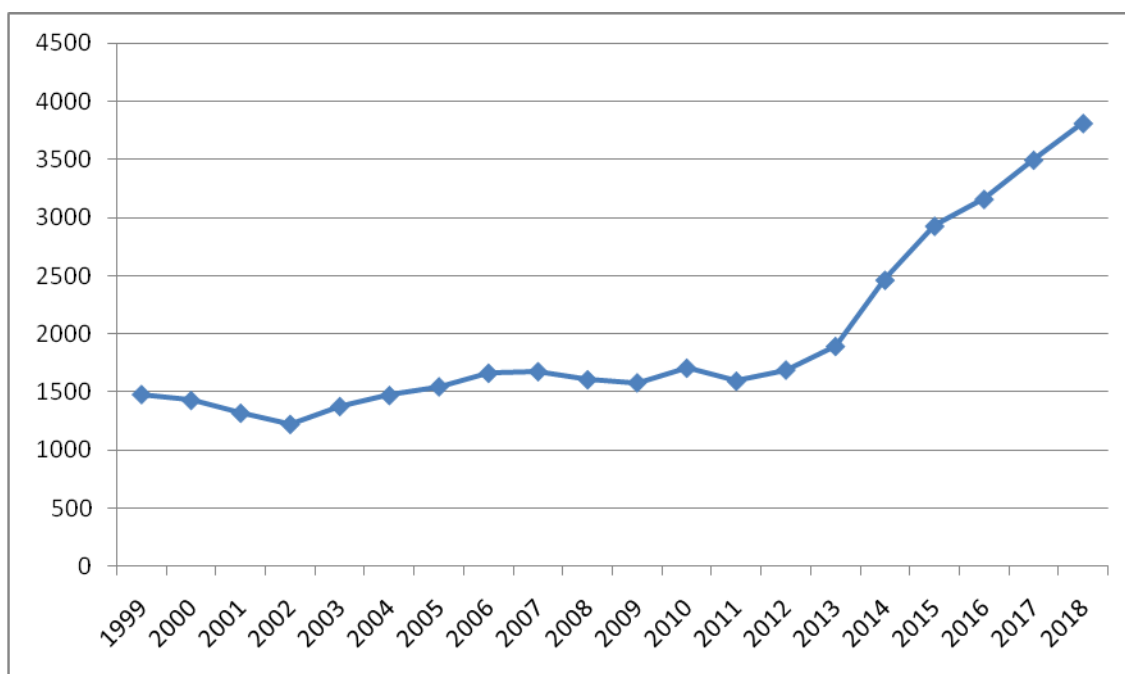


Figure-7: World Output of Community Health Nursing research during 1999-2018

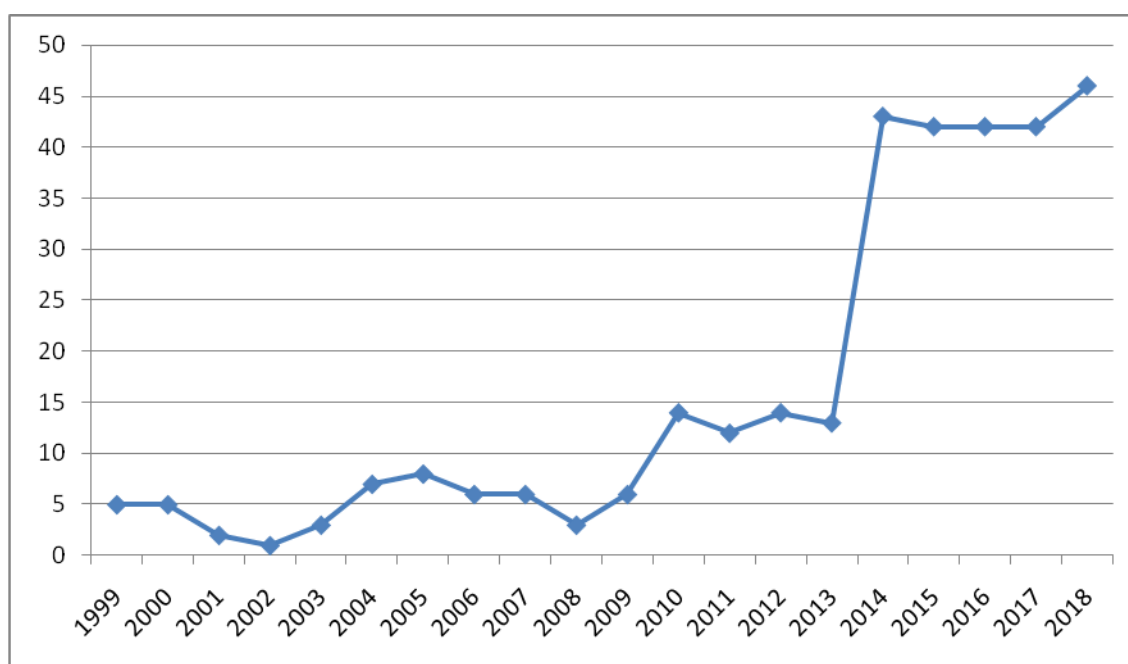


Figure-8: Indian Output of Community Health Nursing research during 1999-2018

CONCLUSION:

In the field of Nursing, the results indicate that Community Health Nursing literature studies are growing year after year except for some years. It also shows that the maximum number of records covered by the journal articles in the field of Community Health Nursing. United States records in the field of Community Health Nursing literature have covered the maximum numbers of records followed by England. Further the research productivity of Community Health Nursing confirms the implications of Bradford's Law of Scattering.

Reference:

1. Devarajan, G (Ed), *Bibliometric Studies*. 1997. ESS ESS Publication; New Delhi p 1-9.
2. Hook S A, Wagner C E, Mapping the literature of dental assisting, *Bulletin of Medical Library Association*, 87(3) (1999) 277-82.
3. Walcott B M, Mapping the literature of diagnostic medical sonography, *Bulletin of Medical Library Association*, 87(3) (1999) 287-91.
4. Wakiji E M, Mapping the literature of physical therapy, *Bulletin of Medical Library Association*, 85(3) (1997) 284-88.
5. Burnham J E, Mapping the literature of radiologic technology, *Bulletin of Medical Library Association*, 85(3) (1997) 289-92.
6. Reed K L, Mapping the literature of occupational therapy, *Bulletin of Medical Library Association*, 87 (3) (199) 298-04.
7. Delwiche F A, Mapping the literature of clinical laboratory science, *Bulletin of Medical Library Association*, 91(3) (2003) 303-10.
8. Schloman B E, Mapping the literature of allied health: project overview, *Bulletin of Medical Library Association*, 85 (3) (1997) 271-77.
9. Ramesh Babu B and Ramakrishnan J, Indian contributions to the field of hepatitis (1984-2003): A Scientometric Study. In: Third International Conference on Webometrics, Informetrics, Scientometrics Science and Society & Eighth

- COLLNET Meeting. 2007. ICAR Symposium Hall, National Agriculture Science Complex; New Delhi (India). pp.22-32.
10. Patra S K and Prakash Chand, HIV/AIDS Research in India: A bibliometric study, *Library and Information Science Research*. 29 (2007) 124-134.
 11. Ramakrishnan J, Ravisankar G and Thavamani K. (2018). Primary Journals and their Countries in the Field of Dengue Literature: An Analysis. *Library Philosophy and Practice (e-journal)* at University of Nebraska - Lincoln. Paper 1810. <https://digitalcommons.unl.edu/libphilprac/1810>.
 12. https://www.cartercenter.org/resources/pdfs/health/ephti/library/lecture_notes/nursing_students/comm_hlth_nsg_final.pdf.
 13. www.pubmed.com.
 14. Bradford S C. Documentation. Crosby, 1948. Lockwood; London.
 15. Frame J D. Mainstream research in Latin America and Caribbean. *Interciencia*, 2 (1977) 143-148.
 16. Price, D De Solla. The analysis of scientometrics for policy implications. *Scientometrics*, 3 (1981) 47-54.
 17. Karki, M M S and Garg, K C. Bibliometrics of Alkaloid Chemistry research in India. *Journal of Chemical Information and Computer Science*, 37 (1997) 157-161.
 18. Bharvi Dutt, Garg, K.C and Anita Bali. Scientometrics of the international journal Scientometrics. *Scientometrics*, 56 (1)(2003) 81-93.
 19. Garg, K.C and Padhi, P. Scientometric Study of Laser Patent Literature. *Scientometrics*, 43 (3)(1998) 443-454.