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PRIMARY JOURNALS AND THEIR COUNTRIES IN THE FIELD OF DENGUE LITERATURE: AN ANALYSIS

Kotti Thavamani
Regional Medical Library, The Tamilnadu Dr. M.G.R Medical University, No. 69, Anna salai, Guindy. Chennai – 600 032.,
kottithavam@gmail.com

PRIMARY JOURNALS AND THEIR COUNTRIES IN THE FIELD OF DENGUE LITERATURE: AN ANALYSIS

Dr. J. Ramakrishnan* Dr. G. Ravi Sankar** Dr. K. Thavamani***

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

Abstract: Presents a bibliometric analysis of the literature in the field of Dengue as indexed the MEDLINE data which covered in the Pubmed for the period 2008 to 2017. It is noticed that total of 11826 records on literature of Dengue are covered for a period of ten years from 2008 to 2017. It is also noticed that the maximum number of records (1810) was published during year 2016, followed by 1540 in 2017 and 1520 in 2015. It was found that Journal Article (41.4%), Research Support, Non-U.S. Gov't (33.81%), Review (10.69%), Letter (3.61%), and Research Support, U.S. Gov't Non-P.H.S. (2.86%). 37 primary journals grouped in zone 1 published 1675 articles accounting for one third of the total output. Similarly the second zone comprises of 143 journals and 904 journals grouped in third zone. Of the 37 titles in zone-1, 12 are associated with United States and followed by England (9), Netherlands (5), India (4), Brazil (2), China (1), Germany (1), Japan (1), Sweden (1) and Thailand (1). In zone-1 & 2 ; out of 180 journals, 51 frequently cited journals are United States, this is followed by the countries i.e. England (33), India (19), Netherlands (11), Brazil (9), Switzerland (9), France (6), Japan (4), China (3), Egypt (3), Germany (3), Pakistan (3), Singapore (3), Colombia (2), Italy (2), Malaysia (2), Thailand (2), Argentina (1), Australia(1), Austria (1), Canada (1), Chile (1), Cuba (1), Indonesia (1), Iran (1), Jamaica (1), Mexico (1), Peru (1), Philippines (1), Poland (1), Sri Lanka (1) and Sweden (1).

Keywords: Dengue, Bradford's Law and Primary journals

1. INTRODUCTION

The term bibliometrics was introduced only in 1969. It indicates a new discipline and employs quantitative methods for analyzing various aspects of written documents. It applies mathematical and statistical analysis to bibliographical units.[1] 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.[2] Scientometrics investigates quantitative aspects of science; it is the quantitative of the Science of Science, of Scientific Communication Studies and Science Policy Studies.[3]

In this paper an attempt has been made to bring the primary journals in the field of Dengue and its subject-wise coverage of journals.

2. REVIEW OF LITERATURE

Several studies on mapping have analyzed allied health journal citations to determine lists of primary journals in their fields.[4-16] Ramakrishnan and Rajendran[17] studied on Hepatitis B. Krishnamoorthy, Ramakrishnan and Devi[18] studied on diabetes, Ramesh Babu and Ramakrishnan[19] studied on Indian Contributions to the field of HIV/AIDS. Ramakrishnan and Thavamani[20] studied on Hepatitis C and they identified core journals.

The review of literature on primary journals analysis revealed that so far no quantitative study on "Dengue" was conducted. Hence the present study.

3. DENGUE

Dengue fever is a mosquito-borne tropical disease caused by the dengue virus. Symptoms typically begin three to fourteen days after infection. This may include a high fever, headache, vomiting, muscle and joint pains, and a characteristic skin rash. Recovery generally takes two to seven days. A vaccine for dengue fever has been approved and is commercially available in a

number of countries. Other methods of prevention are by reducing mosquito habitat and limiting exposure to bites. Dengue has become a global problem since the Second World War and is common in more than 110 countries. Each year between 50 and 528 million people are infected and approximately 10,000 to 20,000 die.[21]

4. OBJECTIVES OF THE STUDY

The Objectives of this study are:

1. To study the Number of literature published in the field of Dengue.
2. To identify the primary journals and their countries in the field of Dengue Literature.

5. METHODOLOGY

The records published during the year 2008 to 2017 in the field of Dengue in the MEDLINE data which are covered in the Pubmed (www.pubmed.com) which is a free resource that is developed and maintained by the National Center for Biotechnology Information (NCBI), at the U.S. National Library of Medicine (NLM), located at the National Institutes of Health (NIH) was searched and bibliographic details like author, title, publication type, language, year; address of the contributors, country of publications, source etc. were collected.

The retrieved records were converted into FoxPro and loaded in SPSS for the purpose of analysis. The keyword 'Dengue' has been used for extracting the number of records available in the above said database. The data thus collected from the source database on the literary production of 'Dengue' for the period 2008 - 2017 has been analysed by using bibliometric technique such as Bradford's Law of Scattering.[22]

This study is confined to a period of ten years from the year 2008 to 2017 in the field of Dengue in the MEDLINE data which are covered in the Pubmed only.

6. ANALYSIS AND INTERPRETATION OF DATA

Data collected from the source database namely MEDLINE on the literary production of 'Dengue' for the period 2008-2017 has been analysed by using the bibliometric technique such as Bradford's Law of Scattering.

6.1 QUANTUM OF DENGUE RESEARCH PRODUCTIVITY

The research output on literature of Dengue in the database is presented in Table-1. It is noticed that total of 11826 records on literature of Dengue are covered for a period of ten years from 2008 to 2017. It is also noticed that the maximum number of records (1810) was published during year 2016, followed by 1540 in 2017 and 1520 in 2015. On the whole, it is observed that from the year 2008 onwards there is a gradual increase of Dengue research productivity every year except the year 2017 i.e. 1540 records at the time of retrieved the data from the database, but it may be expected, more data may be included in future. (Fig.1)

Table 1
Number of Literature published in Dengue

S. No.	Year	Frequency	%
1.	2008	654	5.5
2.	2009	732	6.2
3.	2010	794	6.7
4.	2011	940	7.9
5.	2012	1065	9
6.	2013	1296	11
7.	2014	1475	12.5
8.	2015	1520	12.9
9.	2016	1810	15.3
10.	2017	1540	13
Total		**11826**	**100**

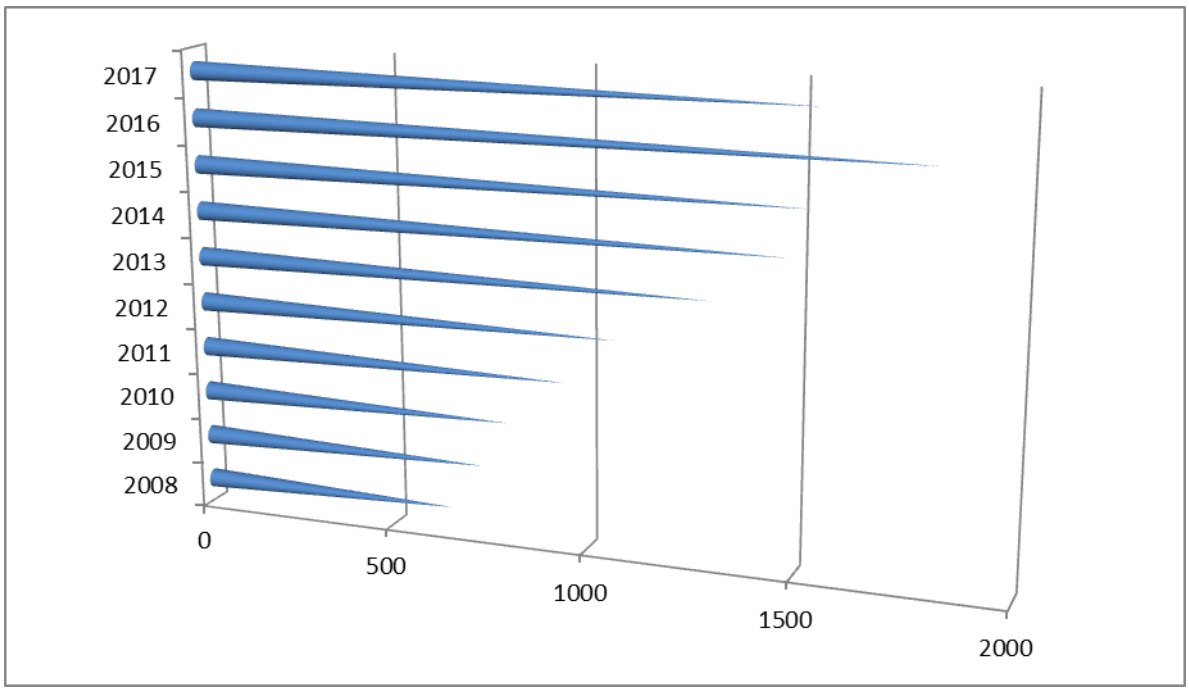

Figure 1 Number of Literature published in 'Dengue' Year wise

6.2 PUBLICATION TYPES DISTRIBUTION OF DENGUE RESEARCH

Table 2 reveals the distribution of the 'Dengue' research output according to various publication types of MEDLINE. It was found that Journal Article (41.4%), Research Support, Non-U.S. Gov't (33.81%), Review (10.69%), Letter (3.61%), Research Support, U.S. Gov't Non-P.H.S. (2.86%), Research Support, N.I.H., Extramural(2.65%), Research Support, U.S. Gov't P.H.S. (0.85%), Editorial (0.77), News (0.58), Research Support, N.I.H., Intramural (0.41%), Published Erratum (0.32%), Validation Studies (0.3%), Randomized Controlled Trial (0.25%), Observational Study (0.23%), Comment (0.2%), Introductory Journal Article (0.18%), Multicenter Study (0.15%), English Abstract (0.14%), Case Reports (0.13%), Congresses (0.08%), Video-Audio Media (0.06%), Retraction of Publication (0.05%), Meta-Analysis (0.04%), Book (0.03%), Retracted Publication (0.03%), Book Chapter (0.03%), Interview (0.03%), Portraits (0.03%), Historical Article (0.02%), Practice Guideline (0.02%),

Bibliography (0.01%), Lectures (0.01%), Newspaper Article (0.01%), Personal Narratives (0.01%) and Technical Report (0.01%). (Fig.2)

Table 2
Publication Types of Dengue Research

S.No.	Pub. Type	No. of records	%
1.	Journal Article	4896	41.4
2.	Research Support, Non-U.S. Gov't	3998	33.81
3.	Review	1264	10.69
4.	Letter	427	3.61
5.	Research Support, U.S. Gov't Non-P.H.S.	338	2.86
6.	Research Support, N.I.H., Extramural	313	2.65
7.	Research Support, U.S. Gov't P.H.S.	100	0.85
8.	Editorial	91	0.77
9.	News	68	0.58
10.	Research Support, N.I.H., Intramural	49	0.41
11.	Published Erratum	38	0.32
12.	Validation Studies	36	0.3
13.	Randomized Controlled Trial	31	0.25
14.	Observational Study	27	0.23
15.	Comment	24	0.2
16.	Introductory Journal Article	23	0.18
17.	Multicenter Study	18	0.15
18.	English Abstract	16	0.14
19.	Case Reports	15	0.13
20.	Congresses	10	0.08
21.	Video-Audio Media	7	0.06
22.	Retraction of Publication	6	0.05
23.	Meta-Analysis	5	0.04
24.	Book	4	0.03
25.	Retracted Publication	4	0.03
26.	Book Chapter	3	0.03
27.	Interview	3	0.03
28.	Portraits	3	0.03
29.	Historical Article	2	0.02
30.	Practice Guideline	2	0.02
31.	Bibliography	1	0.01
32.	Lectures	1	0.01
33.	Newspaper Article	1	0.01
34.	Personal Narratives	1	0.01
35.	Technical Report	1	0.01
Total		**11826**	**100.00**

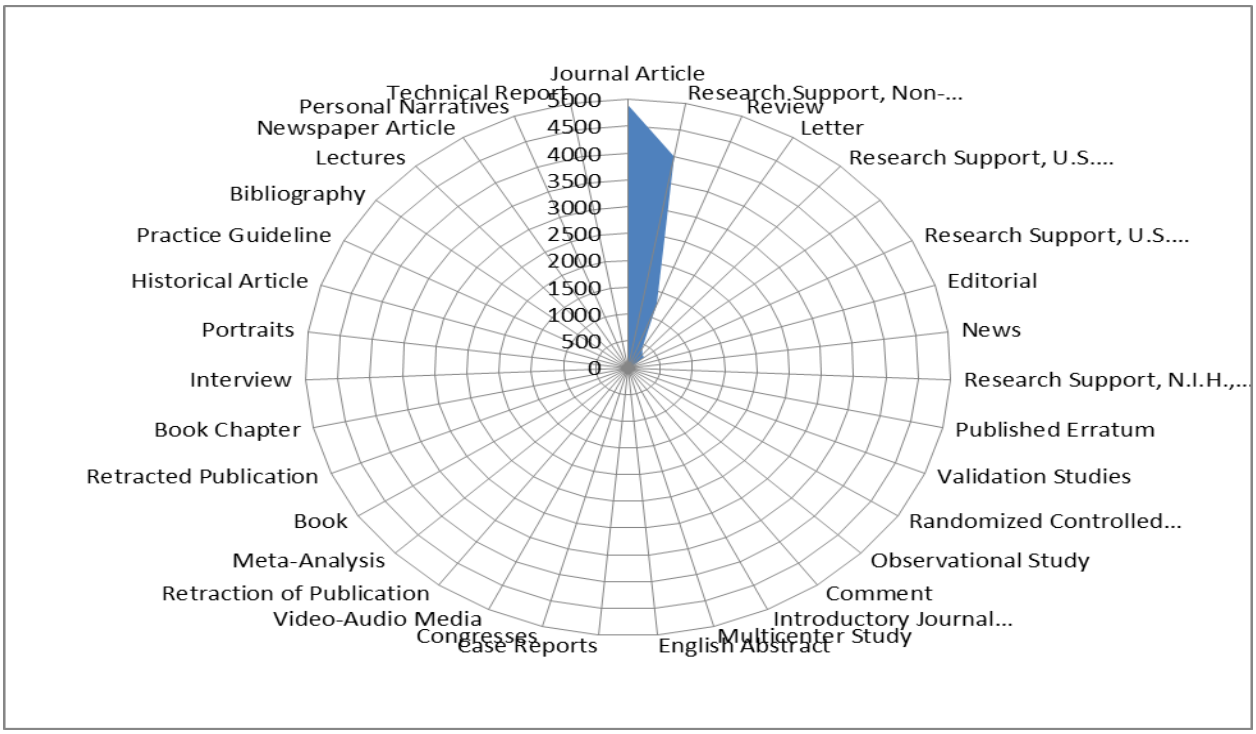

Figure 2 Publication Types of Dengue Research

6.3 DISTRIBUTION OF JOURNALS IN DENGUE BASED ON BRADFORD LAW OF SCATTERING

As per the Bradford Law, the journals are grouped into three zones producing similar number of articles. The distribution of journal by zone wise is given in the Table 3. It is seen that 37 primary journals grouped in zone 1 published 1675 papers accounting for one third of the total output. Similarly the second zone comprises of 143 journals published 1656 papers and 904 journals grouped in third zone published 1565 papers. The Bradford's Law states that the number of periodicals in zones, the first zone and second zone will be 1: n: n2…… Accordingly the relationship is the zone will be 37: 143: 904. On comparison with the data in Table 3, it is

clear that the trend of research publication confirms the implication of Bradford's Law (Figure 3).

Table 3: Distribution by Zone of cited journals and papers in Dengue

Zone	No. of Journals		No. of Papers	
	No.	(%)	No.	(%)
Zone 1	37	3.41	1675	34.21
Zone 2	143	13.19	1656	33.82
Zone 3	904	83.39	1565	31.96
Total	**1084**	**100.00**	**4896**	**100.00**

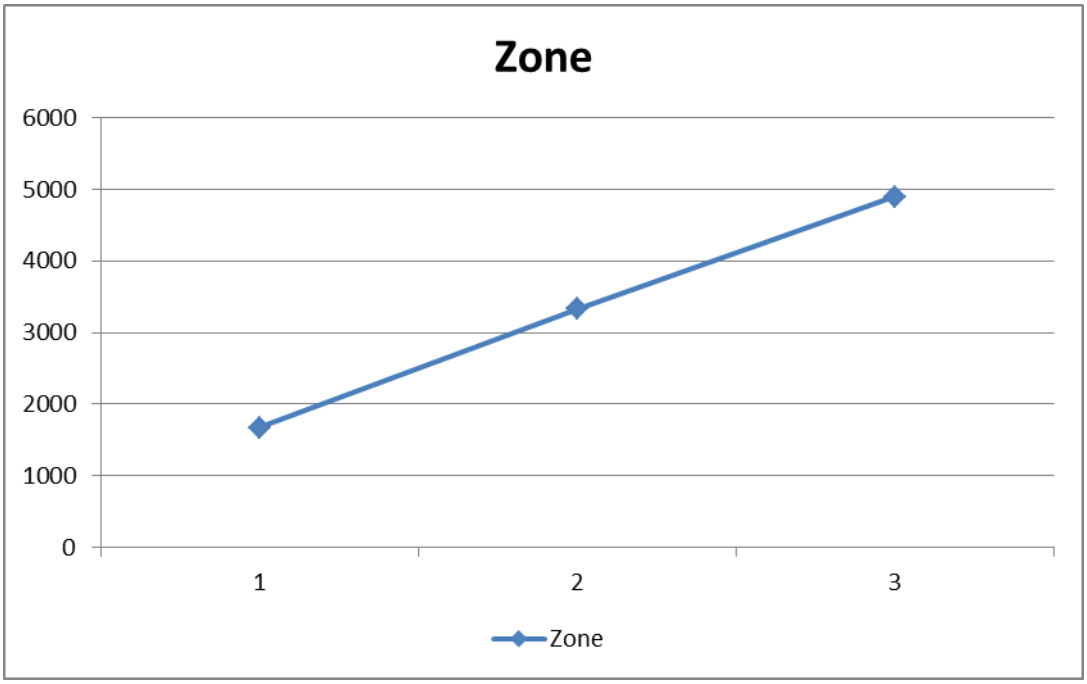

Figure 3 Distributions of Journals by Zones

6.3.1 COUNTRY WISE COVERAGE OF ZONE-1 JOURNALS IN DENGUE

Table-4 shows that the most frequently cited journals are United States titles with 32.43%. Of the 37 titles in zone-1, 12 are associated with United States and followed by England (9), Netherlands (5), India (4), Brazil (2), China (1), Germany (1), Japan (1), Sweden (1) and Thailand (1). (Fig.-4)

Table-4: Country wise coverage of Zone-1 journals in Dengue

S. No.	Country	Frequency	%
1.	United States	12	32.43
2.	England	9	24.32
3.	Netherlands	5	13.51
4.	India	4	10.81
5.	Brazil	2	5.41
6.	China	1	2.70
7.	Germany	1	2.70
8.	Japan	1	2.70
9.	Sweden	1	2.70
10.	Thailand	1	2.70
Total		37	100.00

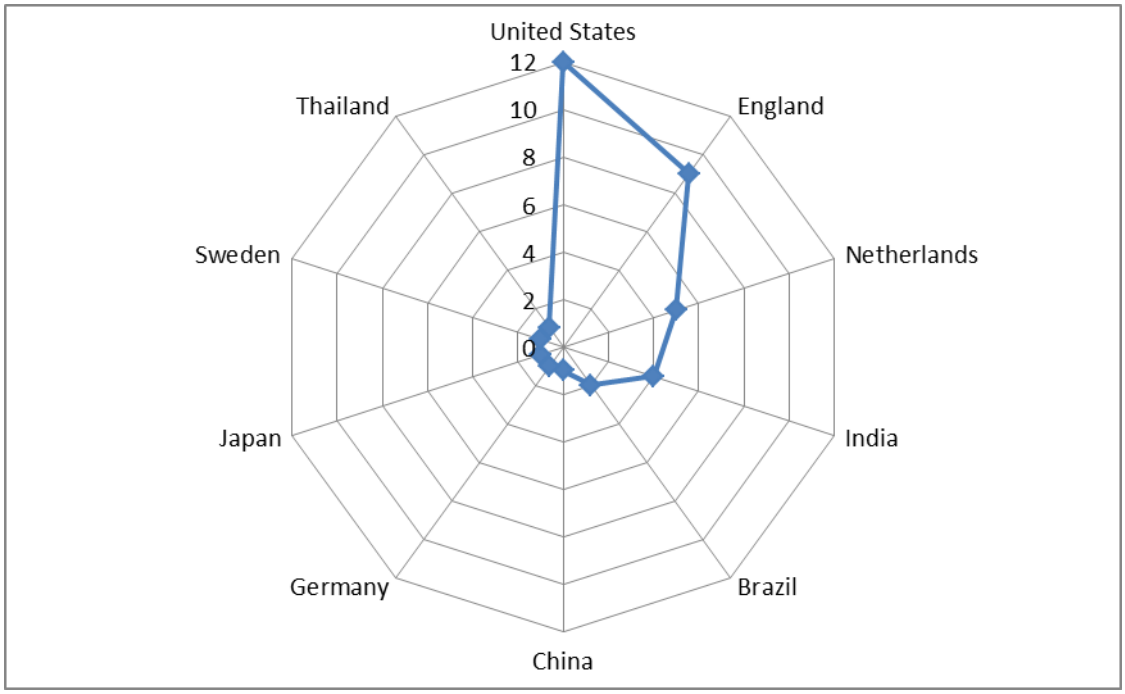

Figure-4 Country-wise coverage of Zone-1 journals in Dengue

6.3.2 COUNTRY WISE COVERAGE OF ZONE-2 JOURNALS IN DENGUE

Table-5 shows that in zone-2 ; out of 143 journals, 39 frequently cited journals are United States, this is followed by the countries i.e. England (24), India (15), Switzerland (9), Brazil (7), France (6), Netherlands (6), Egypt (3), Japan (3), Pakistan (3), Singapore (3), China (2), Colombia (2), Germany (2), Italy (2), Malaysia (2), Argentina (1), Australia (1), Austria (1), Canada (1), Chile (1), Cuba (1), Indonesia (1), Iran (1), Jamaica (1), Mexico (1), Peru (1), Philippines (1), Poland (1), Sri Lanka (1) and Thailand (1). (Fig.-5)

Table-5: Country wise coverage of Zone-2 journals in Dengue

S. No.	Country	Frequency	%	Cumulative %
1.	United States	39	27.26	27.26
2.	England	24	16.77	44.03
3.	India	15	10.48	54.51
4.	Switzerland	9	6.29	60.8
5.	Brazil	7	4.9	65.7
6.	France	6	4.2	69.9
7.	Netherlands	6	4.2	74.1
8.	Egypt	3	2.1	76.2
9.	Japan	3	2.1	78.3
10.	Pakistan	3	2.1	80.4
11.	Singapore	3	2.1	82.5
12.	China	2	1.4	83.9
13.	Colombia	2	1.4	85.3
14.	Germany	2	1.4	86.7
15.	Italy	2	1.4	88.1
16.	Malaysia	2	1.4	89.5
17.	Argentina	1	0.7	90.2
18.	Australia	1	0.7	90.9
19.	Austria	1	0.7	91.6
20.	Canada	1	0.7	92.3
21.	Chile	1	0.7	93
22.	Cuba	1	0.7	93.7
23.	Indonesia	1	0.7	94.4
24.	Iran	1	0.7	95.1
25.	Jamaica	1	0.7	95.8
26.	Mexico	1	0.7	96.5
27.	Peru	1	0.7	97.2
28.	Philippines	1	0.7	97.9

29.	Poland	1	0.7	98.6
30.	Sri Lanka	1	0.7	99.3
31.	Thailand	1	0.7	100
Total		**143**	**100**	

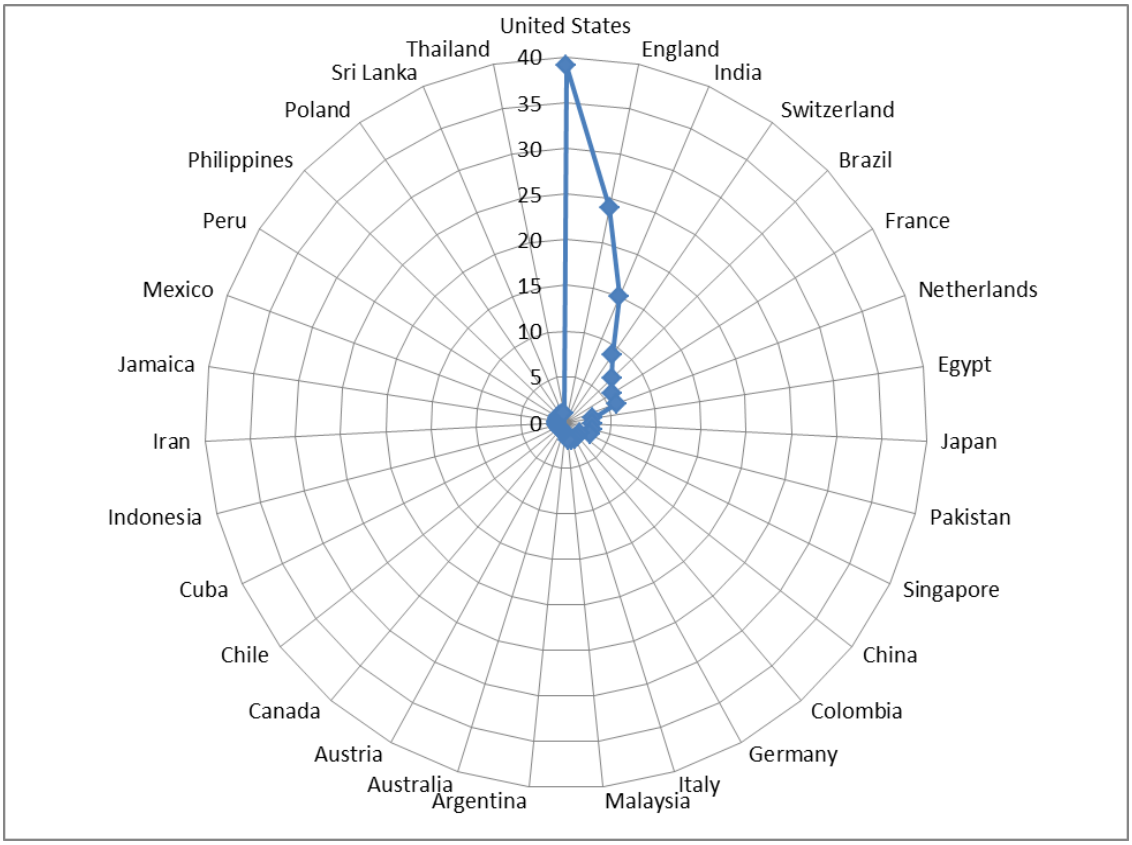

Figure-5: Country wise coverage of Zone-2 journals in Dengue

6.3.3 COUNTRY WISE COVERAGE OF ZONE-1 & 2 JOURNALS IN DENGUE

Table-6 shows that in zone-1 & 2 ; out of 180 journals, 51 frequently cited journals are United States, this is followed by the countries i.e. England (33), India (19), Netherlands (11), Brazil (9), Switzerland (9), France (6), Japan (4), China (3), Egypt (3), Germany (3), Pakistan (3), Singapore (3), Colombia (2), Italy (2), Malaysia (2), Thailand (2), Argentina (1), Australia(1), Austria (1), Canada (1), Chile (1), Cuba (1), Indonesia (1), Iran (1), Jamaica (1), Mexico (1), Peru (1), Philippines (1), Poland (1), Sri Lanka (1) and Sweden (1). (Fig.-6)

Table-6: Country wise coverage of Zone1 & 2 journals in Dengue

S. No.	Country	Frequency	Percent	Cumulative Percent
1.	United States	51	28.31	28.33
2.	England	33	18.32	46.63
3.	India	19	10.55	57.18
4.	Netherlands	11	6.1	63.28
5.	Brazil	9	5	68.28
6.	Switzerland	9	5	73.28
7.	France	6	3.32	76.6
8.	Japan	4	2.21	78.81
9.	China	3	1.67	80.48
10.	Egypt	3	1.67	82.15
11.	Germany	3	1.67	83.82
12.	Pakistan	3	1.67	85.49
13.	Singapore	3	1.67	87.16
14.	Colombia	2	1.11	88.27
15.	Italy	2	1.11	89.38
16.	Malaysia	2	1.11	90.49
17.	Thailand	2	1.11	91.6
18.	Argentina	1	0.56	92.16
19.	Australia	1	0.56	92.72
20.	Austria	1	0.56	93.28
21.	Canada	1	0.56	93.84
22.	Chile	1	0.56	94.4
23.	Cuba	1	0.56	94.96
24.	Indonesia	1	0.56	95.52
25.	Iran	1	0.56	96.08
26.	Jamaica	1	0.56	96.64
27.	Mexico	1	0.56	97.2
28.	Peru	1	0.56	97.76
29.	Philippines	1	0.56	98.32
30.	Poland	1	0.56	98.88
31.	Sri Lanka	1	0.56	99.44
32.	Sweden	1	0.56	100
Total		**180**	**100**	

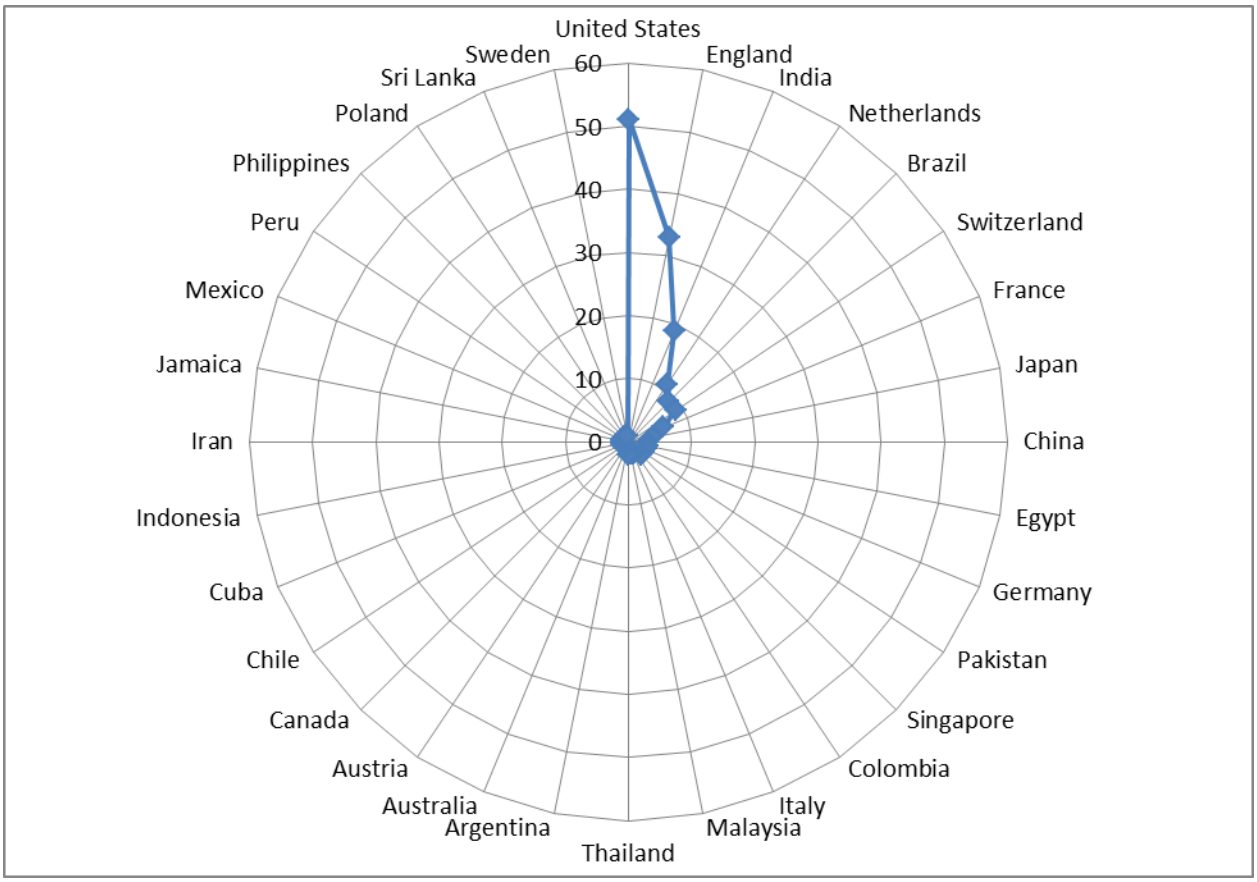

Figure-6: Country wise coverage of Zone1 & 2 journals in Dengue

7.4 RANKING OF JOURNALS IN DENGUE RESEARCH

Ranking of the journals along with the country of origin based on the research output on 'Dengue' for the year 2008-2017 is given in Table 7. The highly prime journals up to five ranks are as follows:

1. 'PLoS neglected tropical diseases' published from United States with 150 contributions amounting to 3.06% of total contributions.
2. 'The American journal of tropical medicine and hygiene' published from United States with 126 contributions amounting to 2.57%.
3. 'PloS one' published from United States with 98 contributions amounting to 2%.

4. ‘Scientific reports’ published from England with 86 contributions amounting to 1.76%.

5. ‘Parasites & vectors’ published from England with 62 contributions amounting to 1.27%.

6. ‘The Journal of the Association of Physicians of India’ published from India with 62 contributions amounting to 1.27%.

Out of the top five ranks United States is dominating the first three ranks, England contributes to the fourth position and fifth positions shared by England and India.

Table 7: Ranking of Journals in Dengue Research

S. No.	Name of the Journal	No. of Records	%	Country of origin
1.	PLoS neglected tropical diseases	150	3.06	United States
2.	The American journal of tropical medicine and hygiene	126	2.57	United States
3.	PloS one	98	2.00	United States
4.	Scientific reports	86	1.76	England
5.	Parasites & vectors	62	1.27	England
6.	The Journal of the Association of Physicians of India	62	1.27	India
7.	Acta tropica	58	1.18	Netherlands
8.	BMC infectious diseases	55	1.12	England
9.	Journal of medical entomology	53	1.08	England
10.	Journal of virology	51	1.04	United States
11.	Revista da Sociedade Brasileira de Medicina Tropical	45	0.92	Brazil
12.	Journal of vector borne diseases	45	0.92	India
13.	Euro surveillance : bulletin Europeen sur les maladies transmissibles = European	45	0.92	Sweden
14.	The Southeast Asian journal of tropical medicine and public health	45	0.92	Thailand
15.	Emerging infectious diseases	44	0.90	United States
16.	Parasitology research	40	0.82	Germany

S. No.	Name of the Journal	No. of Records	%	Country of origin
17.	Journal of clinical and diagnostic research : JCDR	37	0.76	India
18.	Antiviral research	37	0.76	Netherlands
19.	Asian Pacific journal of tropical medicine	36	0.74	China
20.	Vaccine	35	0.71	Netherlands
21.	Epidemiology and infection	34	0.69	England
22.	Journal of medical virology	34	0.69	United States
23.	MMWR. Morbidity and mortality weekly report	31	0.63	United States
24.	Tropical doctor	30	0.61	England
25.	Tropical medicine and health	30	0.61	Japan
26.	The Journal of infectious diseases	29	0.59	United States
27.	Journal of clinical virology : the official publication of the Pan American	28	0.57	Netherlands
28.	Journal of travel medicine	26	0.53	England
29.	Travel medicine and infectious disease	26	0.53	Netherlands
30.	Journal of the American Mosquito Control Association	26	0.53	United States
31.	BMC research notes	25	0.51	England
32.	Tropical medicine & international health : TM & IH	25	0.51	England
33.	The Journal of communicable diseases	25	0.51	India
34.	Memorias do Instituto Oswaldo Cruz	24	0.49	Brazil
35.	Global health action	24	0.49	United States
36.	Methods in molecular biology (Clifton, N.J.)	24	0.49	United States
37.	Virology	24	0.49	United States
38.	BMC public health	23	0.47	England
39.	Cadernos de saude publica	23	0.47	Brazil
40.	International journal of infectious diseases : IJID : official publication of the	23	0.47	Canada
41.	Journal of tropical medicine	23	0.47	Egypt
42.	JPMA. The Journal of the Pakistan	23	0.47	Pakistan

S. No.	Name of the Journal	No. of Records	%	Country of origin
	Medical Association			
43.	The Journal of general virology	23	0.47	England
44.	Archives of virology	22	0.45	Austria
45.	Biomedica : revista del Instituto Nacional de Salud	21	0.43	Colombia
46.	BMJ case reports	21	0.43	England
47.	Indian journal of critical care medicine : peer-reviewed, official publication of	21	0.43	India
48.	Infection, genetics and evolution : journal of molecular epidemiology and	21	0.43	Netherlands
49.	Journal of infection in developing countries	21	0.43	Italy
50.	Revista do Instituto de Medicina Tropical de Sao Paulo	21	0.43	Brazil
51.	Tropical biomedicine	21	0.43	Malaysia
52.	Revista cubana de medicina tropical	20	0.41	Cuba
53.	Transactions of the Royal Society of Tropical Medicine and Hygiene	20	0.41	England
54.	Frontiers in microbiology	19	0.39	Switzerland
55.	Virology journal	19	0.39	England
56.	Indian journal of pediatrics	18	0.37	India
57.	International journal of environmental research and public health	18	0.37	Switzerland
58.	Journal of global infectious diseases	18	0.37	India
59.	Journal of infection and public health	18	0.37	England
60.	The Lancet. Infectious diseases	18	0.37	United States
61.	Japanese journal of infectious diseases	17	0.35	Japan
62.	Journal of virological methods	17	0.35	Netherlands
63.	PLoS pathogens	17	0.35	United States
64.	Revista de salud publica (Bogota, Colombia)	17	0.35	Colombia
65.	Revista panamericana de salud publica = Pan American journal of public health	17	0.35	United States
66.	Transfusion	17	0.35	United States

S. No.	Name of the Journal	No. of Records	%	Country of origin
67.	Western Pacific surveillance and response journal : WPSAR	17	0.35	Philippines
68.	Proceedings of the National Academy of Sciences of the United States of America	16	0.33	United States
69.	Vector borne and zoonotic diseases (Larchmont, N.Y.)	16	0.33	United States
70.	Biochemical and biophysical research communications	15	0.31	United States
71.	Clinical and vaccine immunology : CVI	15	0.31	United States
72.	Genome announcements	15	0.31	United States
73.	Human vaccines & immunotherapeutics	15	0.31	United States
74.	Indian pediatrics	15	0.31	India
75.	Medical journal, Armed Forces India	15	0.31	India
76.	Virus research	15	0.31	Netherlands
77.	Clinical infectious diseases : an official publication of the Infectious Diseases	14	0.29	United States
78.	Revista de saude publica	14	0.29	Brazil
79.	The Ceylon medical journal	14	0.29	Sri
80.	The Medical journal of Malaysia	14	0.29	Malaysia
81.	Annals of Indian Academy of Neurology	13	0.27	India
82.	Bioinformation	13	0.27	Singapore
83.	Communicable diseases intelligence quarterly report	13	0.27	Australia
84.	Environmental science and pollution research international	13	0.27	Germany
85.	Indian journal of medical microbiology	13	0.27	India
86.	Journal of the College of Physicians and Surgeons--Pakistan : JCPSP	13	0.27	Pakistan
87.	Journal of the Medical Association of Thailand = Chotmaihet thangphaet	13	0.27	Thailand
88.	Lancet (London, England)	13	0.27	England
89.	The Indian journal of medical research	13	0.27	India

S. No.	Name of the Journal	No. of Records	%	Country of origin
90.	Viral immunology	13	0.27	United States
91.	Diagnostic microbiology and infectious disease	12	0.25	United States
92.	Frontiers in immunology	12	0.25	Switzerland
93.	Infectious diseases of poverty	12	0.25	England
94.	Journal of clinical microbiology	12	0.25	United States
95.	Medecine tropicale : revue du Corps de sante colonial	12	0.25	France
96.	Nature communications	12	0.25	England
97.	Releve epidemiologique hebdomadaire	12	0.25	Switzerland
98.	Revista peruana de medicina experimental y salud publica	12	0.25	Peru
99.	Biosensors & bioelectronics	11	0.22	England
100.	Journal of the Indian Medical Association	11	0.22	India
101.	Journal of theoretical biology	11	0.22	England
102.	Mathematical biosciences	11	0.22	United States
103.	PeerJ	11	0.22	United States
104.	PLoS currents	11	0.22	United States
105.	Salud publica de Mexico	11	0.22	Mexico
106.	Viruses	11	0.22	Switzerland
107.	Cell host & microbe	10	0.20	United States
108.	IDCases	10	0.20	Netherlands
109.	Journal of Ayub Medical College, Abbottabad : JAMC	10	0.20	Pakistan
110.	Journal of family medicine and primary care	10	0.20	India
111.	Journal of tropical pediatrics	10	0.20	England
112.	mBio	10	0.20	United States
113.	Medecine et maladies infectieuses	10	0.20	France
114.	WHO South-East Asia journal of public health	10	0.20	India
115.	Antimicrobial agents and chemotherapy	9	0.18	United States
116.	Ciencia & saude coletiva	9	0.18	Brazil
117.	EBioMedicine	9	0.18	Netherlands
118.	Evolutionary applications	9	0.18	England

S. No.	Name of the Journal	No. of Records	%	Country of origin
119.	F1000Research	9	0.18	England
120.	Insects	9	0.18	Switzerland
121.	Intervirology	9	0.18	Switzerland
122.	Journal of neurosciences in rural practice	9	0.18	India
123.	Kansenshogaku zasshi. The Journal of the Japanese Association for Infectious	9	0.18	Japan
124.	Medical and veterinary entomology	9	0.18	England
125.	Revista chilena de infectologia : organo oficial de la Sociedad Chilena de	9	0.18	Chile
126.	The West Indian medical journal	9	0.18	Jamaica
127.	Value in health : the journal of the International Society for Pharmacoeconomics	9	0.18	United States
128.	Archives de pediatrie : organe officiel de la Societe francaise de pediatrie	8	0.16	France
129.	Bulletin de la Societe de pathologie exotique (1990)	8	0.16	France
130.	Infection	8	0.16	Germany
131.	Internal medicine (Tokyo, Japan)	8	0.16	Japan
132.	Journal of medical case reports	8	0.16	England
133.	Journal of the Egyptian Society of Parasitology	8	0.16	Egypt
134.	Nature immunology	8	0.16	United States
135.	Pest management science	8	0.16	England
136.	Przeglad epidemiologiczny	8	0.16	Poland
137.	The Brazilian journal of infectious diseases : an official publication of the	8	0.16	Brazil
138.	Virusdisease	8	0.16	India
139.	BMC genomics	7	0.14	England
140.	Cell reports	7	0.14	United States
141.	Current infectious disease reports	7	0.14	United States
142.	Epidemiologia e servicos de saude : revista do Sistema Unico de Saude do Brasil	7	0.14	Brazil

S. No.	Name of the Journal	No. of Records	%	Country of origin
143.	Expert review of anti-infective therapy	7	0.14	England
144.	Geospatial health	7	0.14	Italy
145.	Indian journal of pathology & microbiology	7	0.14	India
146.	International health	7	0.14	England
147.	Journal of arthropod-borne diseases	7	0.14	Iran
148.	Journal of immunology (Baltimore, Md. : 1950)	7	0.14	United States
149.	Journal of medicinal chemistry	7	0.14	United States
150.	Journal of neurovirology	7	0.14	United States
151.	Journal of vector ecology : journal of the Society for Vector Ecology	7	0.14	United States
152.	Microbes and infection	7	0.14	France
153.	North American journal of medical sciences	7	0.14	India
154.	Pathogens and global health	7	0.14	England
155.	Science (New York, N.Y.)	7	0.14	United States
156.	Zhonghua liu xing bing xue za zhi = Zhonghua liuxingbingxue zazhi	7	0.14	China
157.	Acta medica Indonesiana	6	0.12	Indonesia
158.	Arquivos de neuro-psiquiatria	6	0.12	Brazil
159.	Asian Pacific journal of tropical medicine	6	0.12	China
160.	BioMed research international	6	0.12	United States
161.	Bulletin of entomological research	6	0.12	England
162.	Bulletin of mathematical biology	6	0.12	United States
163.	Bulletin of the World Health Organization	6	0.12	Switzerland
164.	Case reports in infectious diseases	6	0.12	Egypt
165.	European journal of medicinal chemistry	6	0.12	France
166.	Frontiers in physiology	6	0.12	Switzerland
167.	Human immunology	6	0.12	United States
168.	Journal of the Formosan Medical Association = Taiwan yi zhi	6	0.12	Singapore
169.	Journal of the Pediatric Infectious Diseases Society	6	0.12	England
170.	MEDICC review	6	0.12	United States

S. No.	Name of the Journal	No. of Records	%	Country of origin
171.	Medicina	6	0.12	Argentina
172.	mSphere	6	0.12	United States
173.	Ocular immunology and inflammation	6	0.12	England
174.	Open forum infectious diseases	6	0.12	United States
175.	PLoS medicine	6	0.12	United States
176.	Science translational medicine	6	0.12	United States
177.	Singapore medical journal	6	0.12	Singapore
178.	The Pediatric infectious disease journal	6	0.12	United States
179.	The Science of the total environment	6	0.12	Netherlands
180.	Virus genes	6	0.12	United States

8. CONCLUSION:

In the field of medicine, the results show that Dengue literature is growing year after except the year 2017. United States records on Dengue literature covered maximum numbers followed by England. Further the research productivity of Dengue confirms the implications of Bradford's Law of Scattering.

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Author's Profile

I am Dr. J. Ramakrishnan, presently working as Deputy Librarian in the Tamil Nadu Dr. M.G.R. Medical University, Chennai, India. I have got totally 23 years of experience in this University. Before I joined this University, I have got one year experience as a Librarian in Hindustan Institute of Engineering Technology, Chennai, and two year experience as a Graduate Trainee in Council of Scientific and Industrial Research, Madras Complex and two years experience as a Librarian in Soundarajaja Vidyalaya, Dindugal, Tamil Nadu. I did my B.Sc., in Madras University and M.A. in Annamalai University in Tamil Nadu, India. I did my Post Graduate Diploma in Library and Information Science in Madras Christian College, Chennai. I did my Bachelor's Degree and Post Graduate Degree in Library and Information Science in Madras University. I was awarded Ph.D. Degree for my thesis on "SCIENTOMETRIC ANALYSIS OF LITERATURE ON HEPATITIS: A STUDY BASED ON BIBLIOGRAPHIC DATABASES" under the guidance and supervision of Prof. B. Ramesh Babu, Department of Information Science, University of Madras, Chennai, India. I have published more than 40 articles, most of them in reputed journals. I am a life member of Madras Library Association (MALA) and *Medical Library Association of India* (MLAI).

Dr.G.Ravi Sankar holds,M.A.,M.Lis and Ph.D., degrees in Library and Information Science in Madras Universities. Currently he is working as a Deputy Librarian in the Tamil Nadu Dr.M.G.R.Medical University, Guindy, Chennai-32.He has published articles in festschrifts and conference proceedings and attended many conferences, seminars and workshops. His PhD Thesis Title is "ICT FACILITIES AND SERVICES IN LIBRARIES OF MEDICAL EDUCATION INSTITUTIONS IN TAMIL NADU: AN ANALYTICAL

STUDY" under the supervision of Dr B.RAMESH BABU**,** Professor, Department of Information Science, University of Madras, Chennai.

 Dr. K. Thavamani, is presently working as Selection Grade Library Assistant in the Regional Medical Library, The Tamil nadu Dr. M.G.R. Medical University, Chennai – 32. I have been trained by Indian Institute of Technology Madras, Library IIT(M) Chennai. I have been two decades of experience in the field of Library and Information Science (LIS). I hold PhD (LIS) from Bharathidasan University, Trichy, and Master Degree in LIS from Annamalai University, Chidambaram, and Master Degree in Political Science from Presidency College, (University of Madras) Chennai.

I have been participated and presented papers in more than 50 International, National and Regional Conferences/ Seminars/ workshops, and published many papers in Conference proceedings. Published 45 research papers in peer reviewed international (35) and national (10) journals, and also contributed 7 chapters in edited books.

Life time Library professional body members in SALIS, MALA APLA, IALA and ILA.