Global Literature of Thyroid Cancer during 2010-2015: A Scientometric Study

B. Santhi
Ph.D Research Scholar
Periyar University, Salem-11

M. Jayaprakash
Research Supervisor
Periyar University, Salem-11
Email:sharavi1978@gmail.com

Abstract

This paper presents the Scientometric analysis of International contributions to T the disease of Thyroid cancer during the year in 2010-2015. The data for the study has been downloaded from the web of knowledge database. The downloaded 13321 data were analyzed with the bibexcel tool. Scientometrics has typically been defined as the Quantitative study of Science and Technology: Scientometric methods are used at regular intervals for the Research Assessment Exercise (RAE) to determine the allocation of funding to research institutions. The focus of Scientometrics is the measurement of science and is therefore concerned with the growth, structure; interrelationship and productivity of scientific disciplines (Hood & Wilson, 2001a, 291). The research, analysis and discus on the yearly publication, authorship pattern, language wise, document type and country wise.

Keywords

Scientometric,;Thyroid Cancer; Bib excel tool; Collaboration Pattern; Web of Knowledge

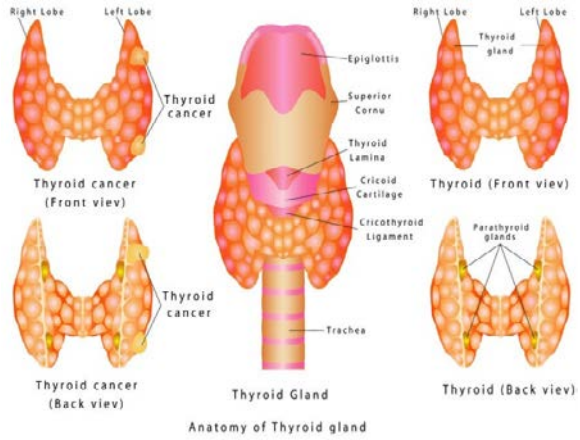
Electronic access

The journal is available at www.jalis.in

Journal of Advances in Library and Information Science
ISSN: 2277-2219 Vol. 6. No.1. 2017. pp.18-23

INTRODUCTION: Thyroid Cancer

Thyroid cancer disease is rare type of cancer. Cancer begins in the front the neck just below the larynx. It is made up to 2 main lobes. This cancer is butterfly or bow tie shaped. Compared to other cancers thyroid cancer is much less common. Swollen lymph nodes in the neck. Unexpected finding when thyroid cancer removed during an operation for another reason. It is very important to know however, that having a lump in the thyroid is quite common and most lumps are not thyroid cancer. In fact only about 1 person in 20 presenting with a thyroid lump will have thyroid cancer is will always be called thyroid cancer. The most common cancer that invades in throat and neck cancers. The most type of primary thyroid cancer as the cause of the lump. The other lumps will be begin and hence will not contain treatment depends on the type, location, size and extent of the tumour. Surgery is the primary treatment. Although amputation of a limb is sometimes necessary for primary thyroid cancer, chemotherapy has made limp sparing surgery possible in many cases, radio Iodine may also be used.



Anatomy of Thyroid gland

SCIENTOMETRIC

Scientometric analysed can reveal a lot about research trends. Ideally, such analyses should be performed on all journals covering a well defined field. In Geography however, the literature is rather poor in such estimations, with the exception of some studies which have attempted to make scientometric assessments at the global level. Scientometric is referred to as a science about science; it is a distinct,

recognized and well-established scholarly field with its own identity, history, theories and methodologies.

SOURCES OF DATA COLLECTION

The study is confined period of six years from 2010 to 2015. Coverage in the database web of knowledge. The key word "Thyroid Cancer" is used to download the results. The results 12801 were saved in the text file format. The data were analysed with tool box named to bib excel. This is developed by olle person. This software is very useful for analysing bibliographical data.

METHODOLOGY

The data was collected from Web of knowledge pertain to period from 2010-2015. Twelve thousand eight hundred and one articles have been selected for the study. These data were organized, calculated, tabulated, analysed and presented by using simple arithmetic and statistical methods in order to arrive for its results.

REVIEW OF LITERATURE

The Thyroid Cancer disease is a rare type of cancer. Cancer begins in the throat will always be called Thyroid Cancer, even if it spreads to necks. The most common cancer that invades include prostate, Lung, and breast cancers. The most type of primary Thyroid Cancer is which develops in new tissue in grooving bines. Treatment depends on the type, location, size, and extent of the tumour. Surgery is often the primary treatment. Although amputation of a limb is sometimes necessary for primary Thyroid Cancer, chemotherapy has made limb sparing surgery possible in many cases, radiation may also be used. The study is confined period of six years from 2010 to 2015. Coverage in the database web of knowledge. The key word "Thyroid Cancer" is used to download the results. The results 12801 were saved in the text file format. The data were analyzed with tool box named to bib excel. This is developed by olle person. This software is very useful for analyzing bibliographical data.

Scientometric is complex of quantitative method which is used to investigate to process of science. Jeyshankar and Vellaichamy (2015) were analyzed Indian research output in Lung Cancer. Macias – Chapula and Muangos Nolasco (1998) Analyzed AIDS document produced in sub- Saharan Africa. Senthilkumar, V., Jayaraj,J., and Snjeevi, K. (2015) Analyzed research output in Thyroid Cancer. Vishwanathan et al (2015) has analyzed the research output on cervical cancer. Thanuskodi (2011) has studied the articles presented in Library Herald Journal for the period between 2006-2010. Further studied the authorship pattern, research contribution, etc.

To analyze the year wise of contributions in Thyroid Cancer To analyze the Relative Growth Rate and Doubling Time research during 2000-2015 To Analyze the Language wise Contribution in Thyroid Cancer. To examine the Author wise Contribution in Thyroid Cancer to analyze the Collaboration pattern country wise use the pajeck software. To analyze the Document type wise distribution in Thyroid Cancer.

OBJECTIVE OF THE STUDY

1. To analyze the year wise of contributions in Thyroid Cancer
2. To analyze the Relative Growth Rate and Doubling Time research during 2010-2015
3. To Analyze the Language wise Contribution in Thyroid Cancer.
4. To examine the Author wise Contribution in Thyroid Cancer
5. To analyze the Collaboration pattern country wise use the pajeck software.
6. To analyze the Document type wise distribution in Thyroid Cancer.

ANALYSIS AND DISCUSSIONS:

Year wise Distribution of Thyroid cancer research during 2010-2015

The year wise distribution articles published from 2010-2015 in web of knowledge is presented in the table 1.

Table : 1 Year wise Distribution of Thyroid cancer research output

S. No	Publication Year	Records	%
1	2010	1360	10.62
2	2011	1788	13.96
3	2012	2070	16.17
4	2013	2267	17.73
5	2014	2534	19.79
6	2015	2782	21.73
	Total	**12801**	**100**

It is seen that the total no of articles is 12801 majority numbers of articles published in the year 2015 with 2782 (21.73%) articles. However 2534 (19.79%) of

them were published in the year 2014, 2267 (17.73%) of them were published in the year 2013, however 2070 (16.17%) of them were published in the year 2012, 1788 (13.96%) of them were published in the year 2011. Were 1360 (10.62%) of them were published in the year 2010 respectively.

T

Table 2: Relative Growth Rate and Doubling Time research during the year 2010-2015

S.No	Publication Year	Total no of Records	Cumulative No. of Articles	W1	W2	RGR	Doubling Time (DT)
1	2010	1360	1360		7.21		
2	2011	1788	3148	7.46	8.05	0.59	1.17
3	2012	2070	5218	7.63	8.55	0.92	0.75
4	2013	2267	7485	7.72	8.92	1.2	0.57
5	2014	2534	10019	7.83	9.21	1.38	0.50
6	2015	2782	12801	7.93	9.45	1.52	0.45

The Relative Growth Rate [RGR] and doubling time [DT] of citations are derived and presented in Table 2. It can be noticed that relative growth of publication [R (c)] Decreased from the rate (0.48) in 2010 to (0.18) 2015. The mean relative growth for six years (i.e. 2010-2015) showed a growth rate of (0.23) whereas the corresponding doubling time for different years [Dt (c)] gradually increased from (1.44) in 2000 to (3.85) in 2014. The mean doubling time for the fifteen years (i.e. 2010-2015) was only 3.03 which was increased to corresponding doubling time was increased

Author Wise Distribution of Thyroid cancer research during 2010-2015.

The study of authorship pattern or productivity is one of the important aspects in the bibliometric analysis. Generally it is necessary to concentrate on authorship pattern to assess the research contributions in a field and Thyroid Cancer research is not an exception. The authorship pattern in analyzed to determine the type of research and their percentage. It is found from the table 3. The Six authors article contributes in Schlumberger.M is the out of 824 in first position 111 (13.47%). The Seven author's article contributes 102 numbers (12.38%) and occupies the second position followed by the four author's article contributing 91 numbers (11.04%) and occupy third position. The tenth position of Giovanella.L is 65 (7.89%) records out of 824 records in research.

Table: 3 Top 10 Author Wise Distribution of Thyroid cancer Output

S.No	Author	Records	%
1	Schlumberger M	111	13.47
2	Tuttle RM	102	12.38
3	Chen H	91	11.04
4	Kim JH	84	10.19
5	Elisei R	82	9.95
6	Nikiforov YE	75	9.10
7	Sherman SI	75	9.10
8	Dralle H	71	8.62
9	Lee J	68	8.25
10	Giovanella L	65	7.89
Total		**824**	**100**

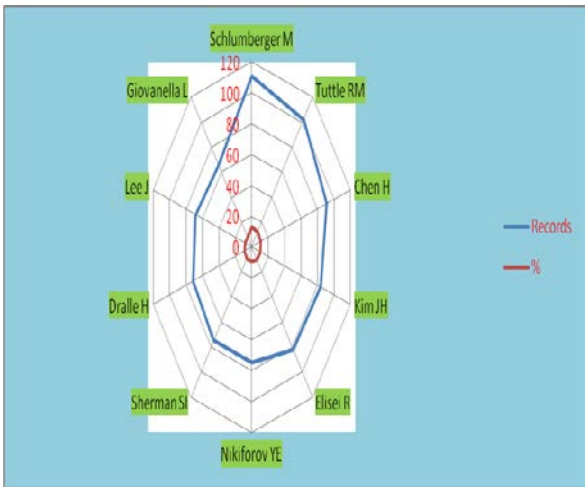


Figure: 2 Top 10 Author Wise Output

4.During the study period, out of 12797 publications, most of the publication 9623(75.19%) was found an article followed by1391 (10.87%) review, followed by 827(6.47%) meeting abstract and other type of publications like conference paper, editorial material, letter, News item, Correction were below 9(0.07%) article Book Chapter in table 4. It makes to understand that most preferred publishing channel of the researches was journal articles.

Table 4: Document wise distribution of Thyroid cancer research Output

S. No	Document Type	No. of Papers	%
1	Article	9623	75.19
2	Review	1391	10.87
3	Meeting Abstract	827	6.47
4	Editorial Material	486	3.79
5	Letter	272	2.13
6	Article; Proceedings Paper	115	0.89
7	Correction	31	0.25
8	News Item	29	0.23
9	Review; Book Chapter	14	0.11
10	Article; Book Chapter	9	0.07
	Total	**12797**	**100**

5. Distribution of contribution of thyroid cancer by top10 country wise is presented in table 5. It is seen from the table that USA has produced (3975) records ranking in first position in out of 11340, Italy (1435) in the second and the People R China (1367) in the third position respectively. Canada (393) has been last ranked in out of 11340 records top 10 country wise output.

Table 5: Top ten 10 Country Collaboration Output

S.No	Country	Records	%
1	USA	3975	35.05
2	Italy	1435	12.65
3	Peoples R China	1367	12.05
4	South Korea	1127	9.94
5	Germany	842	7.43
6	Japan	644	5.68
7	France	619	5.46
8	UK	541	4.77
9	Turkey	397	3.50
10	Canada	393	3.47
Total		**11340**	**100**

6. The distribution of Thyroid Cancer disease article by language is shown in table 6. The scholarly communication is through English language in almost top 10 the countries, irrespective of the native language of the country. This phenomenon is not an exception to the subject of the Thyroid Cancer article which published about (97.41%) of the research output in English. Then followed by French (0.91%) as to second position respectively. English language is Total Local Citation studies 37704 (99.55) is the top 10 language is the first place in out of 12781 Records. And Hungarian language is lat place of the total local citation studies. Also English Language is Total Global Citation Studies 131170 (99.66%) is the first place. And last place is Turkish language is total global citation studies. Therefore, from the above analysis, it is inferred that the English language is dominating in the scholarly communicating of Thyroid Cancer research.

Table 6: Top ten 10 Language Wise Output

S.No	Language	Records	%	TLCS	%	TGCS	%
1	English	12450	97.41	37704	99.55	131170	99.66
2	French	116	0.91	50	0.13	175	0.13
3	German	87	0.68	57	0.15	123	0.09
4	Spanish	71	0.56	20	0.05	60	0.05
5	Korean	18	0.14	14	0.04	28	0.02
6	Portuguese	13	0.10	2	0.005	7	0.005
7	Italian	10	0.08	14	0.04	29	0.02
8	Turkish	7	0.05	1	0.002	2	0.001
9	Polish	6	0.05	11	0.03	24	0.02
10	Hungarian	5	0.04	0	0	3	0.002
Total		**12781**	**100**	**37873**	**100**	**131621**	**100**

7. Distribution of Institution wise of thyroid cancer by presented in table 7. It is seen from the table that NCI has produced (289) records ranking in first position out of 2143, Univ Texas MD Anderson Cancer (278) in the second and the Mem Sloan Ketterring Cancer (265) in the third position respectively. Mayo Clin (152) is last ranked out of 2143 institution in Institution wise Thyroid Cancer in 2005 to 2015 Research.

Table :7 Top 10 Institution Wise Thyroid Cancer Research Distribution

S.NO	INSTITUTION	RECS	%
1	NCI	289	13.49
2	Univ Texas MD Anderson Canc Ctr	278	12.97
3	Mem Sloan Kettering Canc Ctr	265	12.37
4	Harvard Univ	222	10.36
5	Yonsei Univ	219	10.22
6	Univ Pisa	201	9.38
7	Johns Hopkins Univ	184	8.59
8	Univ Roma La Sapienza	174	8.12
9	Seoul Natl Univ	159	7.42
10	Mayo Clin	152	7.09
Total		**2143**	**100**

8. Distribution of Journal wise of thyroid cancer by presented in table 8. It is seen from the table that Thyroid has produced 633(20.05%) records ranking in first position in out of 2527, Journal of Clinical endocrinology & Metabolism417 (16.50%) in the second and the European Journal of Nuclear Medicine and Molecular Imaging279 (11.04%) in the third position respectively. Endocrine is the139 (5.50%) of last ranked in Journal wise Thyroid Cancer in 2010 to 2015 Research.

Table: 8 Top 10 Journal Wise Research Distribution

S.No.	Journal	RECS	%
1	Thyroid	633	20.05
2	Journal Of Clinical Endocrinology & Metabolism	417	16.50
3	European Journal Of Nuclear Medicine And Molecular Imaging	279	11.04
4	Plos One	260	10.29
5	Annals Of Surgical Oncology	188	7.44
6	Journal Of Clinical Oncology	157	6.21
7	Surgery	153	6.05
8	Clinical Nuclear Medicine	151	5.98
9	Endocrine-Related Cancer	150	5.94
10	Endocrine	139	5.50
Total		**2527**	**100**

FINDINGS OF THE STUDY

The scientometric analysis of thyroid cancer studies from 2010-2015for period of study. The journal has published 12781 articles during the period of study. It is found that the number of contributions. The study found that the total source wise distribution for this period downloaded data was web of knowledge. As the major portion research publications around 9000 covered by thyroid cancer research and so on.

CONCLUSION

Concluding results from the analysis of collecting data appended 12781 of Thyroid Cancer is presented in a manner corresponding to objective of the study. I could be deducted, that in general there is a progressive increase in the number of publications of research on Thyroid Cancer disease. The mean relative growth for the total year's percentage of 0.23. The Corresponding Doubling time for different years [DT (a)] gradually increased from 3.03 in 2010-2015.The highest percentage of publication has been published in the year 2015 (21.73%). The lowest percentage of Thyroid Cancer research articles have been published in the year 2010 (10.62%). English 12450 (97.41%) is the most important language found during the study undertaken. The other languages France, German, Japanese, etc. Majority of the paper have published in reputed journals like a man in throat and mouth cancer research and so on. During the study period contribution of researcher in terms of publications is not significant.

REFERENCES

1. C. Sathiya priya, (2016),A Scientometric Study On Bone Cancer Research During The Year 2000-2014, 5(12).
2. Jeyshankar,R. and Vellaichamy, A. (2015)" Research productivity on Lung Cancer by Indian Scientist during 1984 – 2013". Productivity, 56(1), 24-35.
3. Grace,M, Jeyshankar,R. (2015). "Scientometric Analysis of Infertility Literature: An Indian Perspective". *Journal of Indian Library Association*, 51(3),24-26.
4. Selvi, M. and Dhanavandan, S.(2015). "An analysis of the Research Publication output on Gen omes- A Study", *Information retrieval. & Mgt.*3 (5) 23-25.
5. Velmurugan, C., & Radhakrishnan, N. (2015). Journal of Information Literacy: A Scientometric Profile, *Journal of Information Sciences and Application*, 3 (1), 1-9.
6. Thirumagal, A. and Niruba S.S. (2013). "Mapping of scholarly output in could Computing: A Bibliometric study". *SRELS Journal of information management*, 50(5): 667-678.
7. Viswanatham, V., Tamizhchelvan, M and Chithra, V. (2015). "A Bibliometric analysis on Cervical Cancer", International Journal of Information Retrieval & Management, 3 (5): 15-19.
8. Pharmacognosy (2015, October 15). Retrieved from: https://en.wikipedia.org/wiki/Pharmacognosy
.