

Intervention of Yagya and Yoga for Diabetes management: Bibliometric Insights of the last three decades

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Received: 10.06.2024 Revised: 15.07.2024

ABSTRACT

Yoga and Yagya have been used holistically as a therapeutic approach, aimed to cure people of illness. At this outset, the current study intended to analyze various bibliometric endpoints for the intervention of Yagya and Yoga in the treatment of diabetes. Using a search query of relevant keywords, the dataset of published research articles was collected from the 'Dimention.ai' database from 1992 to 2021. The bibliometric analysis using VOS viewer exhibited the network and link strength between authors, countries, and organizations. Between 1992 and 2021, 11534 research publications on Yagya, Yoga, and diabetes were published, with the highest number of citations (79.12%) occurring between 2012 and 2021. During the study period, there was an overall linear increasing trend ($R^2= 0.9485$) in the number of published papers (1992-2021), which showcased the popularity of the research subject. Based on the number of publications, the United States (1672). Harvard University (174) in the United States is the first institution to publish maximum publications in the field of Yoga, Yagya, and diabetes. The journal 'Plos One,' (278) which has published the most papers, is followed by 'Diabetes,' which has published the second most papers (238). Network visualization reveals “Derosa, Giuseppe (211339)”, “United States (3217216)”, and “Harvard University (684504)” have maximum link strength respectively. Thus, it can be concluded that the growing knowledge of Yoga and Yagya to the public platform for the intervention of diabetes is a well-established fact and holistic attention is required for further development in this field.

Keywords: Bibliometric Analysis, Diabetes, International Collaboration, Yagya Therapy, Yoga

INTRODUCTION

Yoga began thousands of years ago in India as a philosophical or spiritual discipline aimed at releasing practitioners from pain or illness.^[1] Yoga has a variety of therapeutic benefits, including the relief of sadness and anxiety, the reduction of pain, and improved physical health, as well as the improves the quality of life in a variety of health problems.^[2] Patanjali, an Indian sage, recommended following the eight limbs of yoga to accomplish the ultimate goal of traditional yoga: the union of mind, body, and spirit. Yama and Niyama (an ethical code of conduct), Asana (physical postures), Pranayama (breath control), Pratyahara (withdrawal of the senses from external things to promote self-awareness), Dharana (concentration), Dhyana (meditation), and Samadhi (oneness with the object of meditation) are among the limbs.^[3]

Yoga has grown in popularity outside of India during the last fifty years. Not only Yoga but Yagya, which is a fire sacrifice, have primarily the purpose of creating harmony in the society and its environment. According to Bhagwat Geeta yoga is also a type of Yagya योगयज्ञस्तथापरे (yoga-yajñās tathāpare).^[4] Most patients' diseases worsen as they become older, and present treatments are insufficient, necessitating supportive and alternative measures. Yagya Therapy is one such traditional Indian

technique. Yagya has been used for health purposes since the Vedic era. Yagya was widely utilized in the Vedic period to prevent and cure numerous diseases and ailments, as well as to improve and maintain immunity in both individuals and crowds.^[5]

Diabetes is a metabolic disorder and a chronic health condition in which the pancreas produces either lesser amounts of insulin or no insulin, because of which the body is unable to use the blood sugar properly, resulting in high levels of sugar in the body.^[6] Globally, diabetes affects over 537 million adults aged between the age of 20 to 79 years and if current trends continue, this number will shoot to 643million by 2030 and 783 million by 2045.^[7] The American Diabetes Association encourages regular and continuing treatment for diabetics, as well as self-management education, to avoid acute problems and reduce long-term effects.^[8] Although diabetes can be controlled with medicine and lifestyle changes, however spiritual and psychological support are equally essential.^[9] To achieve wholeness, we must consider all aspects of our lives. Yoga and other mind-body activities, which have the potential to improve various aspects and focus on the mind and body's ability to improve physical and mental health are important in the management of this complex illness.^[10] One of the meta-

analyses which used the Cochrane methodology and GRADE approach analyzed data from 13 studies involving 1440 patients and showed that yoga improves the glycaemic and lipid parameters in T2DM.^[11] Moreover, considering the Yagya Therapy approach, a grained powder of anti-diabetic traditional herbs, in the presence of Mantras, is sacrificed in a fully lit Yagya fire, and the resulting herbal smoke is inhaled by the patient, delivering therapeutic benefit.^[12]

Bibliometric analysis is an important statistical tool to map the state of the art in a particular area of Scientific knowledge in a quantitative manner. It aids in determining the present status of study in a topic and expands our research horizons for the future.^[13] Bibliometric data can help regulators determine what factors correlate with scientific production and what tactics might be used to attract economically stimulating sectors to their nations^[14] In various research areas, a few bibliometric studies on worldwide yoga research have been published. Through bibliometric analysis, these studies provided a complete picture of existing yoga research evidence in the field of T2DM therapy.^[15] the trend of yoga research publications, and the types of research in yoga.^[16] A bibliometric examination of yoga's health effects uncovered 238 articles addressing cancer, heart illnesses, maternal health, and mental health, among other conditions.

Improvements in immunological health, mood, pain, anxiety, and auditory hallucinations were among the many benefits mentioned.^[17] Another major study on bibliometric analysis using Large-scale data analysis, bibliometric indicators, and density equalization showed several aspects of global scientific research on Yoga and diabetes, as well as the continued growth of publications in this field from 1975 to 2019. It was found that global research evidence on Yoga and diabetes has steadily increased in recent years.^[15] Bibliometric mapping is an important study topic in the realm of bibliometrics analysis. The building of bibliometric maps receives the greatest attention in bibliometric research. VOS viewer is a tool that was created to let people create and examine bibliometric maps. VOS viewers can show a map in a variety of ways, each stressing a distinct aspect of it. It offers zooming, scrolling, and searching capabilities, making it easier to examine a map in depth.^[18] We have used VOS viewer for the analysis part of this bibliometric analysis. However, the bibliometric analysis of studies considering the field of Yagya specifically is still lacking. So, this bibliometric analysis comprehensively identifies the role of Yagya and Yoga intervention in the management of diabetes, evaluating the available research data in this field. This study aims to look into Yagya and Yoga research findings, such as

papers and articles in multiple languages, as well as the number of articles published and citations, to figure out the source and research patterns of publications, as well as the countries that produce them in this mentioned field. The study of bibliometric characteristics of scientific yoga and Yajya research in diabetes management could help practitioners, therapists, and researchers gain a better understanding of the research field and learn more about current research trends, the impact of their work, and scientific collaboration. As a result, the goal of this study is to use a bibliographic analysis of articles to estimate the global research trends on Yajya and Yoga intervention in the management of diabetes.

MATERIALS AND METHODS

STUDY SELECTION

This study was conducted by using an electronic search engine “Dimention.ai”, selecting data from 1992 to 2021. All documents were searched either in their title or abstract by entering the keywords Yoga, Yajya, and Diabetes with the use of a bullion operator (OR/AND). The searched query used '("Yoga" OR "Yog" OR "Asana" OR "Pranayama" OR "Meditation" OR "Yajya" OR "Yajna" OR "Hawan" OR "Agnihotra" OR "homa" OR "Yagyopathy") AND ("diabetes" OR "Diabetes mellitus" OR "diabetic" OR "Hyperglycemia")'. The data selection

criteria were performed manually, including only the research articles, considering yoga and yajya intervention. All the Chapters, Books, Edited Books, Monographs, Paper prints, etc. were excluded.

ANALYSIS

To find prospective scientific papers on yoga intervention on students from 1992 to 2021, the "Preferred Reporting Items for Systematic Reviews and Meta-analyses" (PRISMA was used for this study (Figure 1). Through database searching, a total of 11839 records, based on title and abstract, were extracted as CSV files. The titles and abstracts of 11805 records were cleaned and analyzed after excluding 34 duplicate records. For this study, a total of 305 records of Chapters, Books, Edited Books, Monographs, and Paper Print were excluded and the final dataset of 11500 records was used to assess different bibliometric indices. We created a Word Cloud to represent our research (Figure 2). No ethics approval was required as this was an analysis of available published research. The bibliometric analysis was employed on the extracted dataset as per previously described methods. ^[19,20] Bibliometric analysis was performed using VOS viewer software (developed by the bibliometric department of Leiden University, Leiden, Netherlands), in which the focal point was on the “network” and “link

strength” between authors, countries, and organizations, while quantitative analysis was performed using basic Microsoft Excel tool.

RESULTS

Publication growth and citation analysis from 1992 to 2021 11534 was the total number of research articles on Yagya, Yoga, and diabetes research, published from 1992 to 2021. A linear increasing trend ($R^2=0.9485$) of published articles was observed during the studied period (Figure 3) with the highest number of scholarly articles (8193) published during the latest decade (2012-2021), followed by the second decade (2002-2011) with 3176 published articles and least number of scholarly articles (165) were published during the first decade (1992-2001) (Figure 4).

The maximum number of citations (79%) over the study period 2012-2021 was 201457 followed by 52008 citations in the years 2002-2011 and, the least number of citations (1%) recorded for the year 1992-2001 was 1161 (Figure 5). In comparison to recent years, the journal's early papers did not receive many citations, but the number of citations increased in a logarithmic fashion from 0 in 1992 to 4,874 citations in 2021, accumulating 254626 citations of articles on Yagya, Yoga, and diabetes research from 1992 to 2021 (Figure 6).

HIGHLY CONTRIBUTING COUNTRIES AND ORGANIZATIONS

The overall research output in the field of Yagya, Yoga, and diabetes research came from 125 different nations throughout the world. A total of 7216 research publications came from the top ten nations that published articles in this field. The US (23.17 %) was the most productive country in this field, followed by China (21.94 %), Japan (9.38 %), India (8.33 %), and Italy (8%) respectively (Figure 7). However, according to citations, publications from the United States have the highest number of citations (34.42%), followed by publications from Italy (11.57%) and the United Kingdom (11.30%). However, publications from China (11.14%) are ranked fourth, and Japan (8.70%) are ranked fifth. In terms of Citation per article in the top ten countries, the United Kingdom (43.88) ranks first followed by the United States (40.27), Italy (39.22), and Spain (26.57).

Table 1 shows the most productive organizations in the field of Yagya, Yoga, and diabetes research from 1992 to 2021. Out of the total of 4563 organizations, Harvard University in the United States ranked first with 16.96% of all publications, followed by Shanghai Jiao Tong University in China (13.45%), Tehran University of Medical Science in Iran (11.70%), University of Copenhagen in the United

States (10.04%), and Brigham and Women's Hospital in United State (8.77%) respectively (Figure 8). However, according to citations, the maximum number of citations came from Harvard University (21.25%), followed by Brigham and Women's Hospital (12.01%), Sungkyunkwan University (12.01%), the University of Toronto (10.39%), and Johns Hopkins University (9.50%) respectively. In terms of Citation per article in the top ten countries, the United Kingdom (43.88) ranked first followed by the United States (40.27), Italy (39.22), and Spain (26.57) respectively.

TOPMOST PRODUCTIVE AUTHOR IN THE FIELD OF YOGA-DIABETES

Table 2 shows the top ten most productive authors in Yagya, Yoga, and Diabetes research from 1992 to 2021. Out of a total of 56754 authors, Dr. Giuseppe Derosa (15.85%) from the University of Pavia, Italy, is the pioneer author, followed by Dr. Pamela Maffioli (12.32%) from the University of Pavia, Italy. Dr. Ling Li (10.21%) from Dr. Sheng Jing Hospital, China, ranked third and Dr. Bernard Zinman (9.51%) from the University of Toronto, Canada ranked fourth. Dr. Elena Fogari (9.15%) from the University of Pavia, Italy ranked fifth (Figure 9).

As a result of the number of citations, Bernard Zinman, (16.74%) from the University of Toronto, Canada ranked first,

Giuseppe Derosa (14.46%) from the University of Pavia, Italy ranked second, Ravi Retnakaran (12.91%) from Mount Sinai Hospital, Canada ranked third, Pamela Maffioli (9.99%) from University of Pavia, Italy ranked fourth and Vishwanathan Mohan (9.76%) from Madras Diabetes Research Foundation, India ranked fifth. In terms of the number of Citations per article Zinman, Bernard (55.19) from the University of Toronto, Mount Sinai Hospital, Canada ranked first followed by Retnakaran, Ravi (44.19) from Mount Sinai Hospital, Canada, Fogari, Elena (30.23) from University of Pavia, Italy.

MOST FREQUENTLY CITED ARTICLES

Table 3 shows the most frequently cited articles with more than 600 citations. The article which received the highest citations (16.90%.) was "*Homeostasis model assessment closely mirrors the glucose clamp technique in the assessment of insulin sensitivity: studies in subjects with various degrees of glucose tolerance and insulin sensitivity*," authored by Bonora et al. and published in the year 2000 in Diabetes Care. The article which received the second highest citations (15.65%. was "*Bariatric Surgery versus Intensive Medical Therapy in Obese Patients with Diabetes*," authored by Schauer et al. and published in the year 2000 in the New England Journal

of Medicine. The article which ranked third in the number of citations (15.45%) was “*New genetic loci implicated in fasting glucose homeostasis and their impact on type 2 diabetes risk*”, authored by Dupuis et al. and published in 2010 in Nature Genetics. The article which ranked fourth in the number of citations (8.67%) was “*Obstructive Sleep-apnea Is Independently Associated with Insulin Resistance*”, authored by Dupuis et al. and published in 2002 in Nature Genetics.

HIGHLY PRODUCTIVE JOURNALS

Table 4 shows the top 10 Journals that published research from 1992 to 2021, in the field of Yagya, Yoga, and Diabetes. Collectively, 2254 Indian and international journals published 11500 publications. More than ten publications on Yagya, Yoga, and Diabetes research were published in the top ten most productive journals. When the number of citations per article was compared, the rankings of journals differed. The “Plos One” published the most papers (16%), “Diabetes” published second-highest papers (13.69%), “Diabetes Research and Clinical Practice” published third-highest papers (12.54%), “Diabetes Care” Journal ranked fourth (12.08%) and “Diabetes & Metabolism” Journal has ranked fifth (8.98%). However according to the citation “Diabetes Care” Journal (34.35%) has the maximum citation followed by “Diabetologia” Journal

(13.39%), “Diabetes” Journal (12.78%), and the journal “Plos One” (12.62%) ranked fourth according to citation (Figure 11).

INTERNATIONAL COLLABORATION

International collaboration is shown in the domain of Authors, Countries, and Organizations. In the figures (12,13, and 14) representing these collaborations, the circle's size denotes a large number of publications, the colors indicate a cluster of collaboration, the lines indicate the links among items, the distance among items shows their relatedness, and the thickness of the lines denotes the strength of the collaboration. Bibliographic coupling of Authors with more than 8 documents and 1 citation in the database was investigated for their relatedness of shared references (Figure 12). A total of 6 clusters were identified with 311 items, whereas cluster number 1 has the maximum number of Authors with a total of one hundred thirty-six members, Cluster 2 has one hundred thirty-five members, cluster 3 has sixteen members, cluster 4 has thirteen members, cluster 5 has seven members and cluster 6 has only four members i.e., Chiostrri, Marco, Gensini, Gian Franco, Lazzeri, Chiara, and Valente, Serafina. As per the link strength is concerned, it is maximum in Derosa, Giuseppe (211339), followed by

Maffioli, Pamela (161345) and Fogari, Elena (139513) respectively.

Bibliographic coupling of Organizations with more than 8 documents and 1 citation in the database was investigated for their relatedness of shared references (Figure 13). A total of 8 clusters were identified with 707 items. Cluster number 1 has the maximum number of organizations with a total of 260 members, Cluster number 2 has

236 items, Cluster 3 have 96, cluster 4 has 39 items, cluster 5 has 28 items, cluster 6 has 23, cluster 7 has 18, and cluster 8 has total seven members. As per link strength is concerned, it is maximum at Harvard University (684504), followed by Brigham and Women's Hospital (413740) and the University of Copenhagen (407683) respectively.

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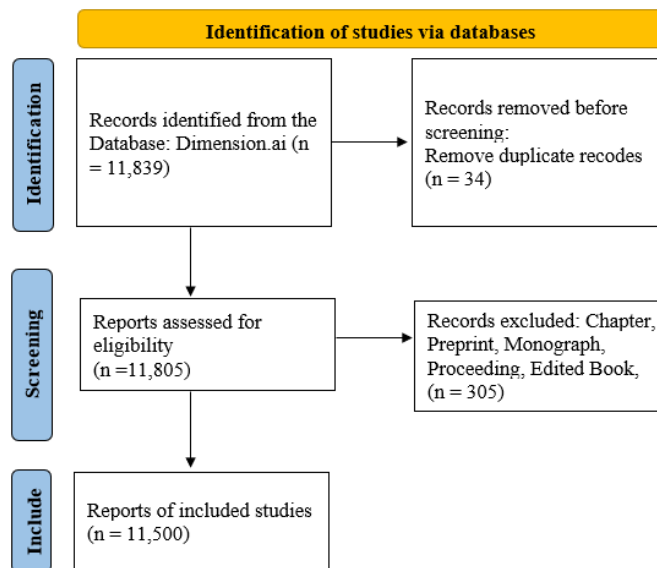


Figure 1. Flowchart of records through screening and selection process.



Figure 2. Word Cloud of Yagya-Yoga and Diabetes research.

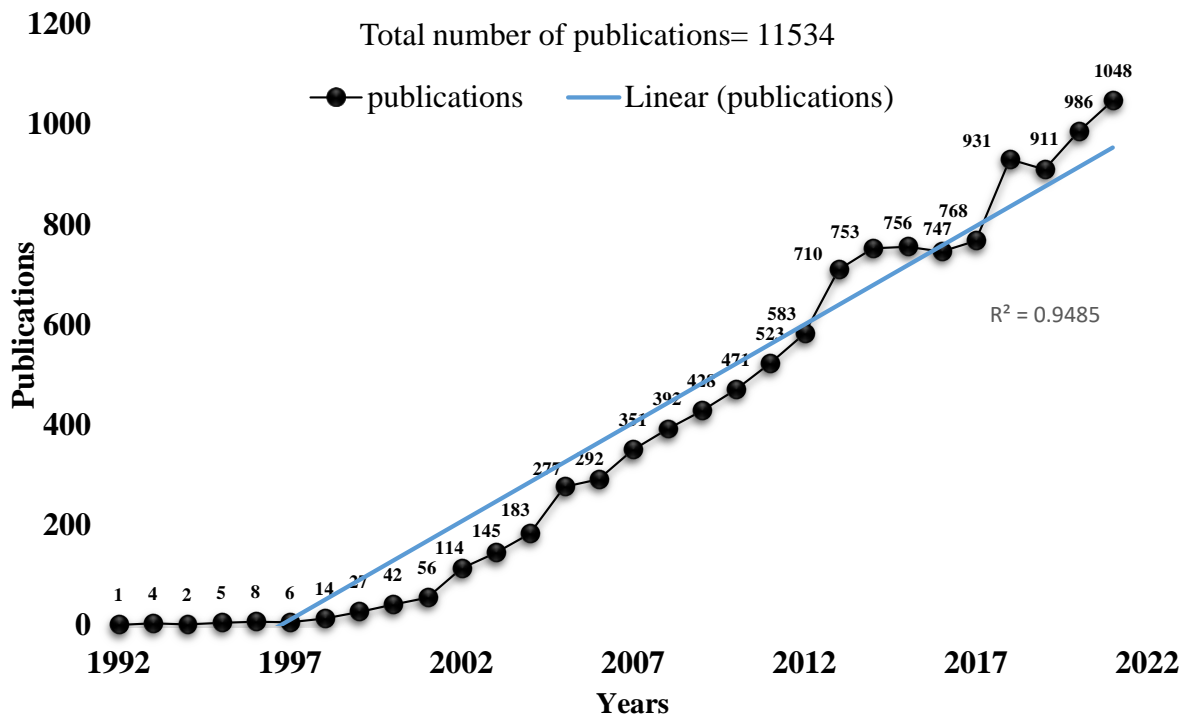


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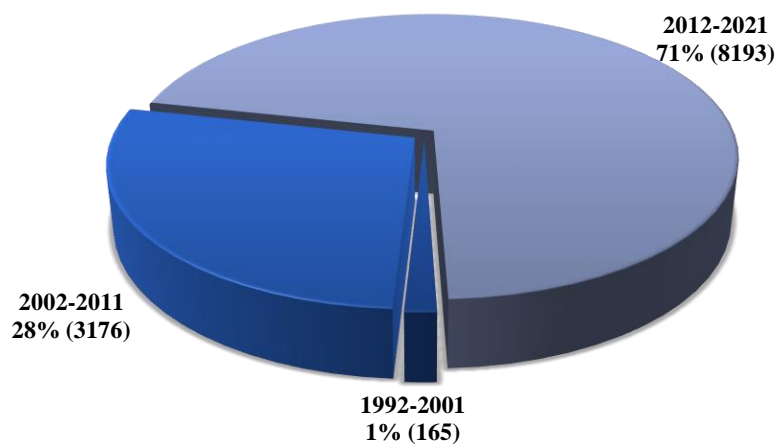


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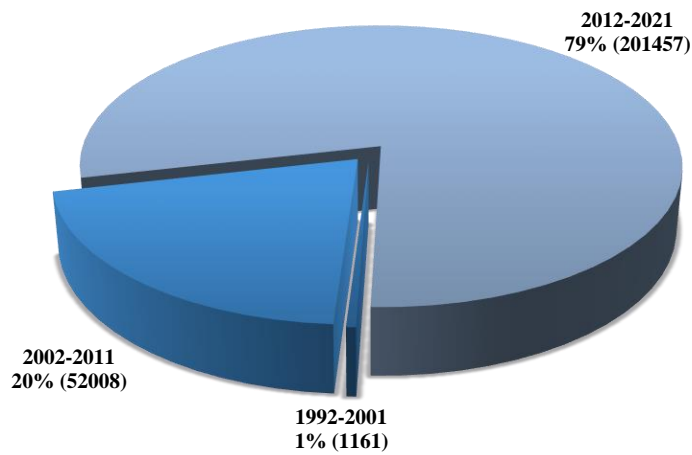


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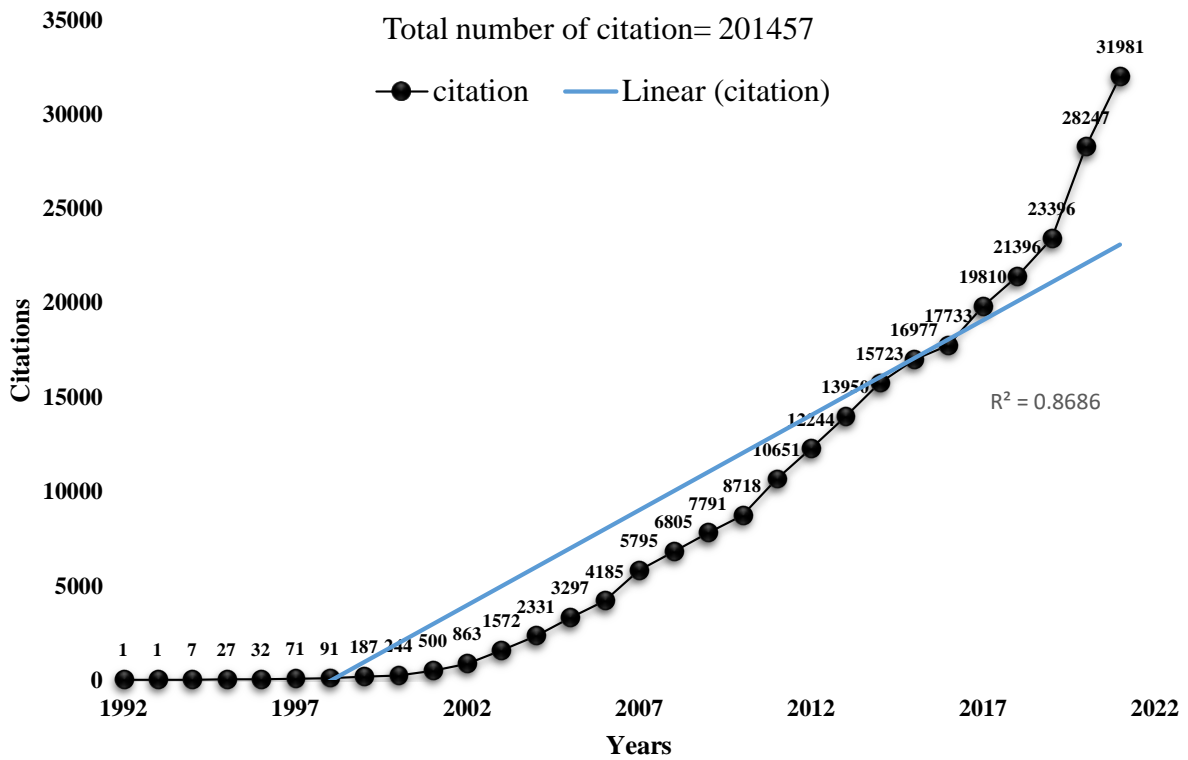


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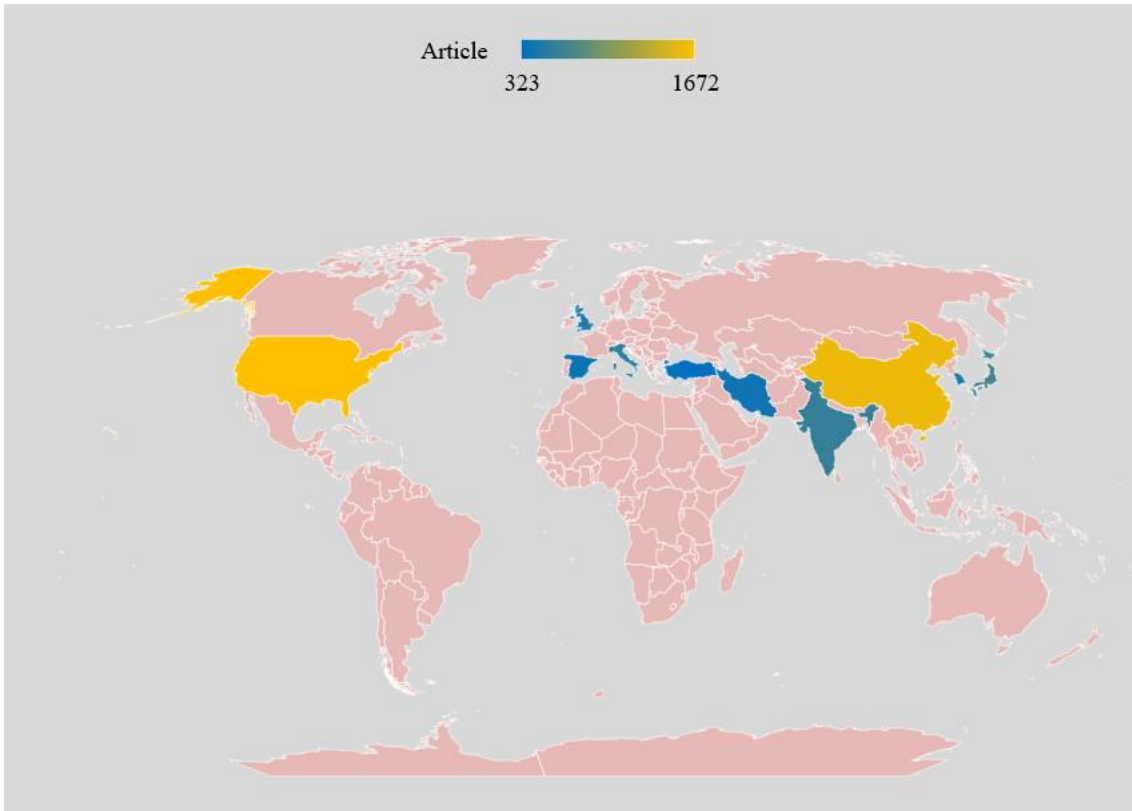


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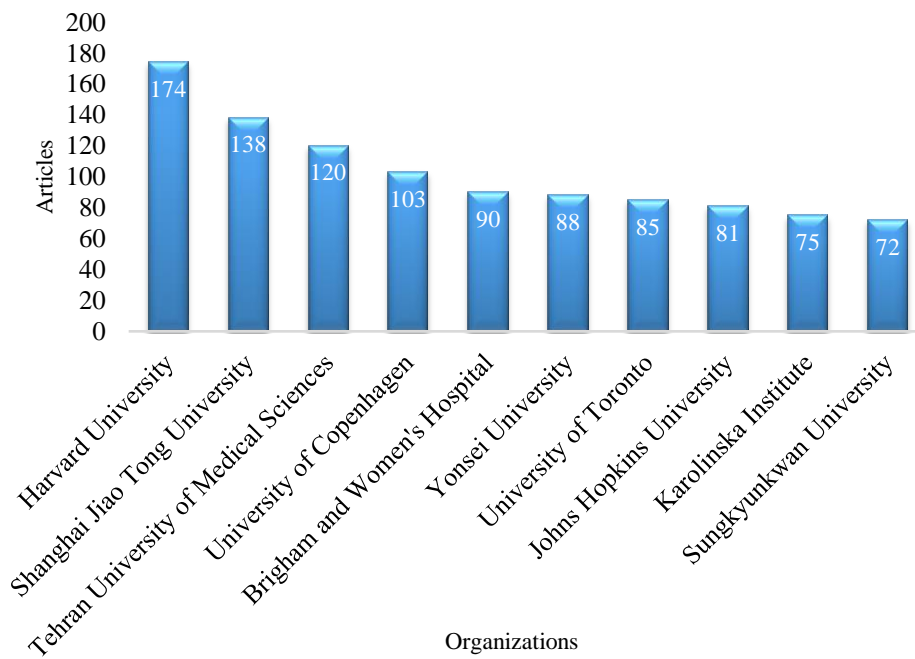


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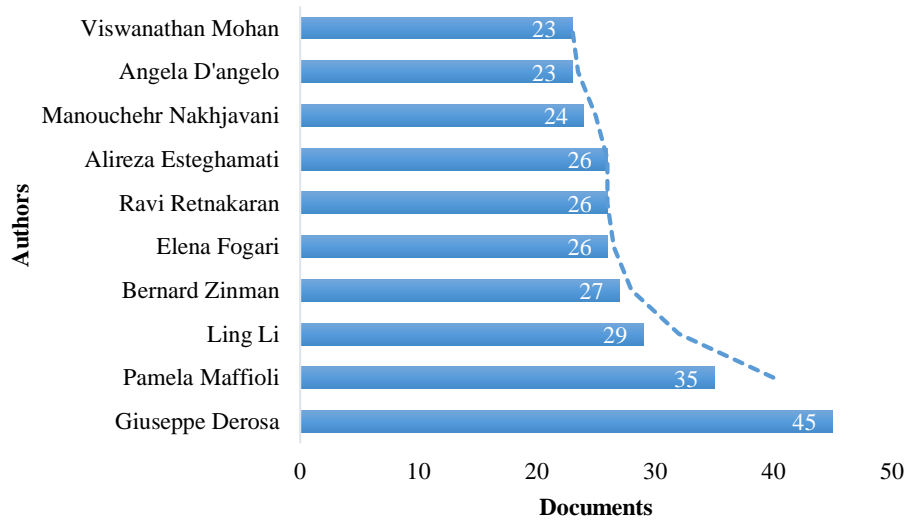


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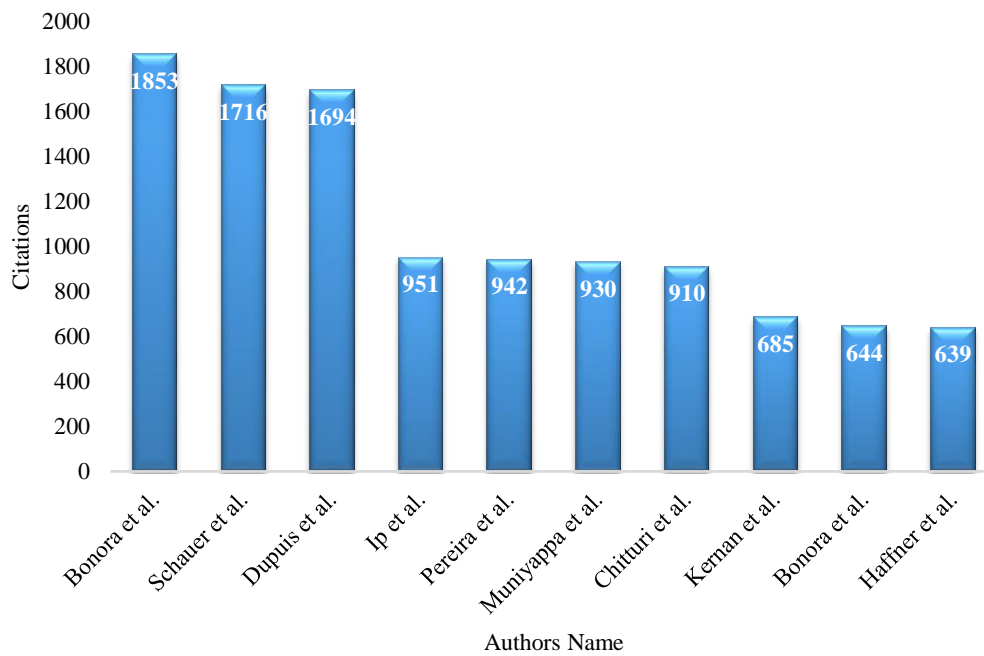


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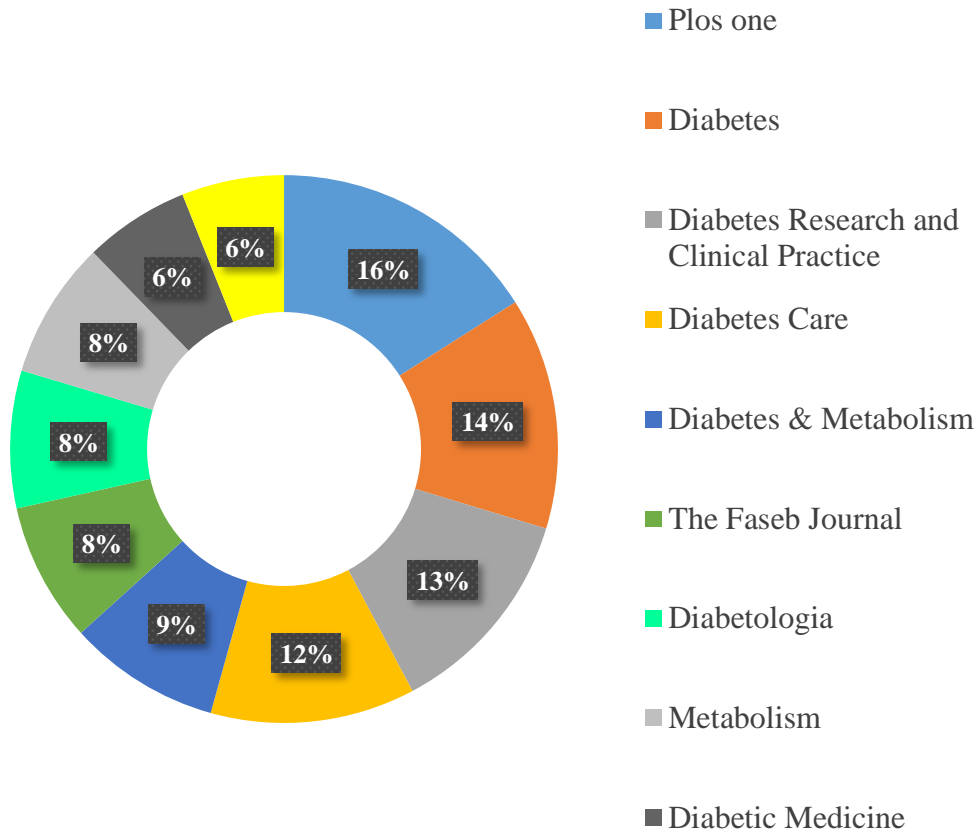


Figure 11. List of top 10 journals (%) contributing to *Yoga-Yagya and Diabetes* research.

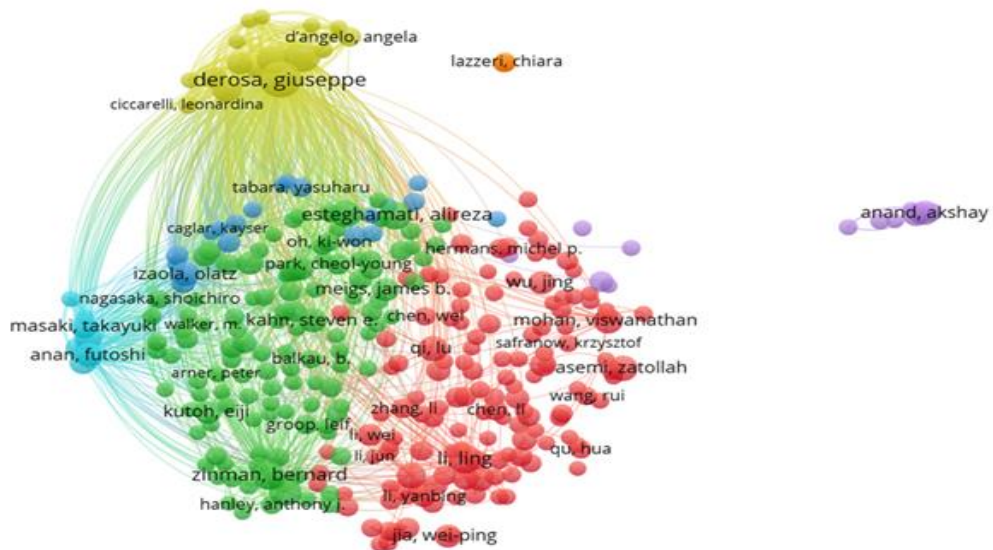


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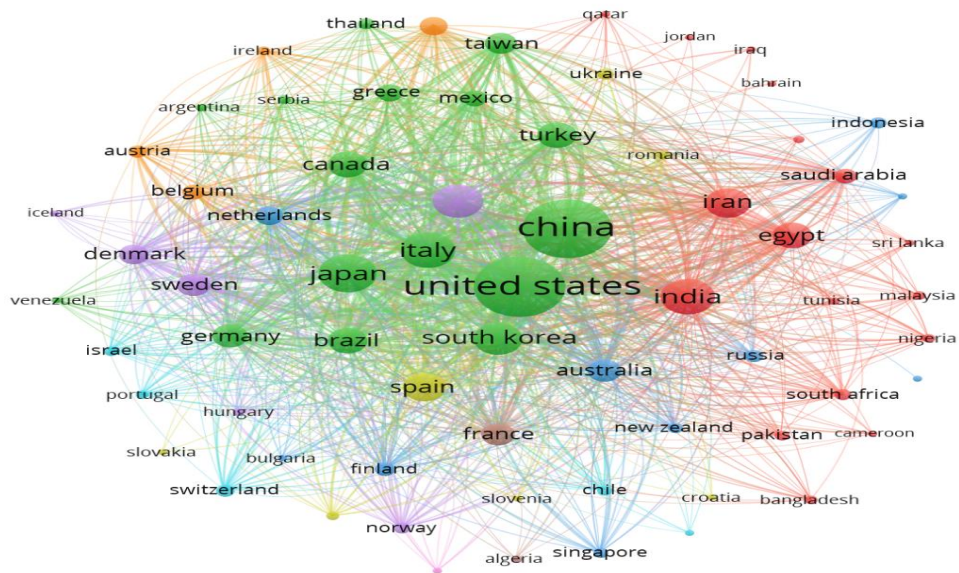


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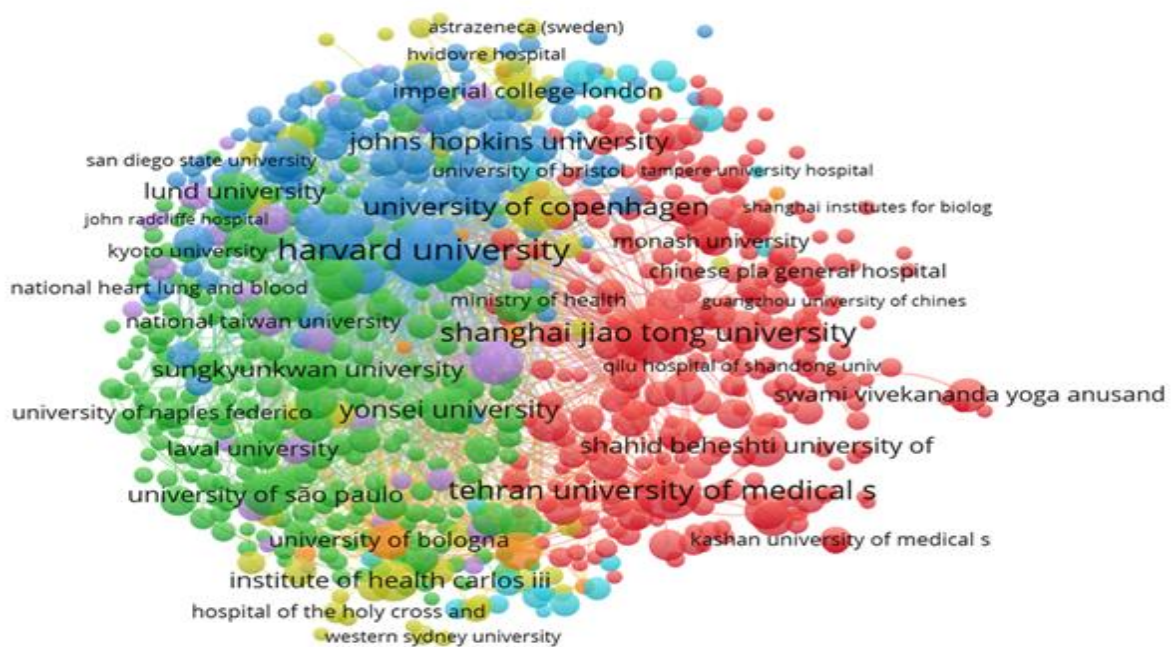


Figure 14. Network visualization collaboration of active organizations in the field of *Yagya-Yoga and Diabetes*.

Table 1. Top 10 Countries and Organizations that published maximum *Yoga-Yagya and Diabetes* research articles during 1992-2021

R	Country	A	C	C/A	R	Organization (Country)	A	C	C/A
1	United States	1672	67339	40.27	1	Harvard University (United States)	174	7013	40.30
2	China	1583	21796	13.77	2	Shanghai Jiao Tong University (China)	138	2080	15.07
3	Japan	677	17016	25.13	3	Tehran University of Medical Sciences (Iran)	120	2547	21.23
4	India	601	10301	17.14	4	University of Copenhagen (Denmark)	103	2595	25.19
5	Italy	577	22628	39.22	5	Brigham and Women's Hospital (United States)	90	3963	44.03
6	United Kingdom	504	22113	43.88	6	Yonsei University (South Korea)	88	1927	21.90
7	South Korea	477	10787	22.61	7	University of Toronto (Canada)	85	3429	40.34
8	Iran	412	7491	18.18	8	Johns Hopkins University (United States)	81	3136	38.72
9	Spain	390	10364	26.57	9	Karolinska Institute (Sweden)	75	2348	31.31
10	Turkey	323	5815	18.00	10	Sungkyunkwan University (South Korea)	72	3963	55.04

R= Rank, A= Number of Articles, C= Citation, C/A= Citation per Article

Table 2. Hierarchy of Authors with their Organizations in terms of publications on *Yoga-Yagya and Diabetes* during 1992-2021.

R	Author	Organization	Country	A	C	C/A
1	Derosa, Giuseppe	University of Pavia	Italy	45	1287	28.60
2	Maffioli, Pamela	University of Pavia	Italy	35	889	25.40
3	Li, Ling	Sheng Jing Hospital	China	29	569	19.62
4	Zinman, Bernard	University of Toronto, Mount Sinai Hospital	Canada	27	1490	55.19
5	Fogari, Elena	University of Pavia	Italy	26	786	30.23
6	Retnakaran, Ravi	Mount Sinai Hospital,	Canada	26	1149	44.19
7	Esteghamati, Alireza	Tehran University of Medical Sciences	Iran	26	601	23.12
8	Nakhjavani, Manouchehr	Tehran University of Medical Sciences	Iran	24	609	25.38
9	D'angelo, Angela	University of Pavia	Italy	23	653	28.39
10	Mohan, Viswanathan	Madras Diabetes Research Foundation	India	23	869	37.78

R= Rank, A= Number of Articles, C= Citation, C/A= Citation per Article

Table 3. Top 10 Cited Articles on *Yoga-Yagya and Diabetes* during 1992-2021.

R	Author	Title	Journals	Year	C
1	Bonora et al.	Homeostasis model assessment closely mirrors the glucose clamp technique in the assessment of insulin sensitivity: studies in subjects with various degrees of glucose tolerance and insulin sensitivity.	Diabetes Care	2000	1853
2	Schauer et al.	Bariatric Surgery versus Intensive Medical Therapy in Obese Patients with Diabetes	New England Journal of Medicine	2012	1716
3	Dupuis et al.	New genetic loci implicated in fasting glucose homeostasis and their impact on type 2 diabetes risk	Nature Genetics	2010	1694
4	Ip et al.	Obstructive Sleep-apnea Is Independently Associated with Insulin Resistance	American Journal of Respiratory and Critical Care Medicine	2002	951
5	Pereira et al.	Fast-food habits, weight gain, and insulin resistance (the CARDIA study): a 15-year prospective analysis	The Lancet	2005	942
6	Muniyappa et al.	Current approaches for assessing insulin sensitivity and resistance in vivo: advantages, limitations, and appropriate usage	AJP Endocrinology and Metabolism	2007	930
7	Chitturi et al.	NASH and insulin resistance: Insulin hypersecretion and specific association with the insulin resistance syndrome	Hepatology	2002	910
8	Kernan et al.	Pioglitazone after Ischemic Stroke or Transient Ischemic Attack	New England Journal of Medicine	2016	685
9	Bonora et al.	Prevalence of insulin resistance in metabolic disorders: the Bruneck Study.	Diabetes	1998	644
10	Haffner et al.	The Homeostasis Model in the San Antonio Heart Study	Diabetes Care	1997	639

R= Rank, C= Citations.

Table. 4. Top 10 Journals on *Yoga-Yagya and Diabetes* Research Papers during 1992-2021.

R	Journals	Publisher	IF	A	C	C/ A
1	Plos One	Public Library of Science (PLOS)	3.24	27	88	31.
				8	35	78
2	Diabetes	American Diabetes Association	9.46	23	89	37.
			1	8	52	61
3	Diabetes Research and Clinical Practice	Elsevier	5.60	21	57	26.
			2	8	23	25
4	Diabetes Care	American Diabetes Association	19.1	21	24	114
			12	0	05	.54
					3	
5	Diabetes & Metabolism	Elsevier	5.37	15	17	11.
			6	6	75	38
6	The Faseb Journal	Federation of American Societies for Experimental Biology	5.19	14	50	0.3
			1	3		5
7	Diabetologia	Springer Science + Business Media	10.1	14	93	66.
			22	1	77	50
8	Metabolism	Elsevier	8.69	14	54	38.
			4	1	10	37
9	Diabetic MEDICINE	Wiley-Blackwell Publishing Ltd	4.35	10	48	45.
			9	8	82	20
1	Diabetes & Metabolic	Elsevier BV	2.46	10	97	9.2
0	Syndrome Clinical Research & Reviews		2	5	3	7

R= Rank, A= Number of Articles, C= Citation, C/A= Citation per Article, IF= Impact Factor.

DISCUSSION

In this study Bibliometric parameters and network visualization analysis were used to highlight numerous characteristics of global scientific research on Yagya, Yoga, and diabetes, as well as the ongoing proliferation of publications in this domain, from 1992 to 2021. According to this analysis global study data on Yagya, Yoga, and diabetes has continuously increased in recent years, however, more research is needed.

After decades of development, a large number of studies have shown that Yagya, Yoga, intervention is a feasible and successful complementary potential approach to the management of diabetes mellitus after decades of development. Furthermore, Specialists agree that Yagya and Yoga intervention is beneficial in the treatment of diabetes mellitus. [21-23] Promising therapeutic or adjunct implications of Yagya, as well as Yoga interventions, are often studied as an alternative to Diabetic drug treatment in people with diabetes who are clinically able to receive non-drug treatment. [24-26] The global growth in this research field has blossomed because of an increase in global Yagya and Yogic affiliation. The number of yoga practitioners and schools in Western

countries has surged. According to the latest IDF Diabetes Atlas statistical report, China and India have the most adults with diabetes aged 20–79 years in 2021. India now has the highest estimated number of prevalent type 1 diabetes cases in people under 20 years of age (229,400), followed by the USA (157,900). However, the current study's findings revealed that India is ranked fourth (Table 1), which is somewhat disheartening. As India is considered the sugar capital of the world, more work in this field is warranted. On a country level, the highest diabetes-related health expenditure is observed in the United States of America (USD 379.5 billion), followed by China which could be easily seen in this current study as the United States and China are on rank one and two (Table 1.), respectively in terms of the publications.^[7] As shown in Figure 2, the publication number arises from 1% (165) in the first decade (1992-2001) to 71% (8193) during the latest decade (2012-2021). According to this study, in the top 10 country distribution analysis (Figure 2), developed countries account for seven in terms of publishing volume, while developing countries account for three.

Previous bibliometric publications on Yoga, investigating the therapeutic value of yoga interventions were dedicated to the

bibliometric analysis of the totality of available randomized yoga trials(RCTs) from 1975 to 2014, which aimed to provide a comprehensive review of the characteristics of these RCTs.^[3] Furthermore, systematic reviews of yoga for health outcomes were subjected to bibliometric analysis, which described publication characteristics and topic coverage.^[27] No previous bibliometric publications on Yagya were done. Thus, our present work proves novelty in that context. There are various interventions for Diabetes have been previously reported ^{[28], [15], [29]} as bibliometric publications on Diabetes. Moreover, it is under the realization that studies continuously search for a cure for diabetes. Here we are reporting a bibliometric study where the intervention of sustainable and traditional ancient knowledge is on focus. Therefore, with this view, we are sure that the present study will

enrich the knowledge base in the treatment of diabetes.

CONCLUSION:

This paper used quantitative data to strengthen and call on additional scholars to pay attention to the intervention of diabetes in form of Yagya and Yoga interventions. From the bibliometric analysis, the following points could be inferred. First, ancient practices like Yagya and Yoga have gained popularity in terms of their scientific merits among researchers around the world. Second, India is the origin of the said practices, still trailing such research. Third, the acceptance of Yagya and Yoga for combating diabetes has been a well-accepted fact. Thus, by the present study, it is our utmost effort to elucidate the growing knowledge of Yagya and Yoga to the public platform for the intervention of diabetes as well as holistic development of life.

FINANCIAL SUPPORT AND SPONSORSHIP

Nil

CONFLICTS OF INTEREST

There is no conflict of interest

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