

A Bibliometric Analysis of Turkish Research Activity in the Rheumatology Category of the Web of Science Database

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ABSTRACT

Objective: The aim of this study was to investigate a bibliometric analysis of publications produced by researchers from Turkey and cataloged in Web of Science's (WoS) Science Citation Index-Expanded (SCI-E) under the rheumatology category.

Methods: The WoS database's 2019 data was scanned for journals in the rheumatology category and indexed in the SCI-E. Articles identified as having been published before January 1, 2020 in the advanced search section of the WoS database were examined using their journal ISSN numbers. Meeting summaries, proceedings, early access studies, book series, and conference titles were excluded. All bibliometric data were evaluated for each publication.

Results: Thirty-one journals scanned in the rheumatology category were investigated. It was determined that a total of 84,761 articles were published over 40 years (1980-2019), and that 3,179 (3.75%) of these articles were written solely by Turkish authors. It was observed that these 3,179 articles were cited 43,494 times, and that the average number of citations was 13.68 ± 23.52 . The total h-index value was 76. The most cited article received 444 citations and the article with the highest annual average number of citations had a value of 20.17 citations/year. It was found that of the top 20 most cited articles, seven articles were about Behçet's disease, and four concerned familial Mediterranean fever.

Conclusion: This study will contribute to the literature by reflecting upon the amount of research that has been carried out and shedding light on future work that could be considered in the field of rheumatology in Turkey.

Keywords: Bibliometric analysis, rheumatology, Turkey

INTRODUCTION

Rheumatology is a branch of medicine that deals with the treatment (preventive, active, and rehabilitation) of musculoskeletal diseases, including autoimmune and autoinflammatory conditions.¹ Rheumatic disorders are some of the most common health problems in the world, and they can lead to disability in both children and adults.² Although a large number of studies have been conducted on common rheumatic diseases, such as rheumatoid arthritis and spondylarthritis, research on the prevalence of all rheumatic diseases in the general population is limited, with figures ranging from 9.8% to 25%.³⁻⁵ Rheumatology as a study dates back to ancient times, while its development as a specialty began in the 20th century. Thanks to the administration of medication such as steroids, methotrexate, and anti-TNF, crucial developments have occurred in the field of rheumatology, particularly over the last five decades.^{6,7}

Rheumatology is an extensive field of research with a long standing in scientific publications. The demand for rheumatol-

ogy has increased due to the widespread presence of these diseases in the community and the recent discovery of new drugs.⁷ The number of publications in the field of rheumatology has therefore been increasing almost every year, on a par with other fields.^{8,9}

A bibliometric study is one method that can be used to numerically analyze the publications produced by people or institutions in a particular area, period, or region, to investigate associations between these publications, and to draw conclusions from these findings.¹⁰ In bibliometric studies, a large number of features, such as publication type, topic, number of citations, number of authors, the affiliations of these authors, and journal index and category, may be examined.¹¹ Moreover, a bibliometric analysis can provide insight into the growing tendencies and characteristics of research output by analyzing keywords and subject categories. Additionally, an investigation into bibliometric properties may reveal differences in research orientation and capacities.¹² Bibliometric analyses are now

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being performed in many scientific fields in order to investigate the impact of research.¹³

Web of Science (WoS) is recognized as the world's most reliable publisher-independent global citation database.¹⁴ WoS features a wide range of indexes, including Science Citation Index Expanded (SCI-E). According to the data for 2019, the SCI-E index includes 178 different scientific disciplines across approximately 9,200 journals.¹⁴ Each journal and book covered by WoS' core collection is assigned to at least one subject category, one of which is rheumatology.¹⁵

The scope of a country's international publications is an essential indicator of its level of scientific advancement.¹⁶ Bibliometric analysis is a popular method that has been used to assess this in recent years.¹⁷ Nonetheless, to the best of our knowledge, no comprehensive bibliometric study on Turkish research in the field of rheumatology has previously been carried out.

The present study aims to conduct a bibliometric analysis of Turkish research in the WoS' SCI-E index, under the rheumatology category, in order to provide a holistic view of these publications and a new perspective for directions in which future research could go.

MATERIALS AND METHODS

In line with Journal Citation Reports' data for 2019, 32 journals were found in the SCI-E index under the rheumatology category. *Rev Bras Reumatol* (ISSN: 0482-5004) was renamed as *Adv Rheumatol* (ISSN: 2523-3106) in 2018. Articles published in both versions of the journal were therefore combined for the purpose of this study. This means that the total number of journals examined was 31 (Table 1). All relevant articles published in these journals were determined by conducting a WoS advanced search with the journals' ISSN numbers. Among these publications, the following were excluded: Articles published after 31 December 2019, meeting abstracts, proceedings papers, early access articles, reprints, book series titles, and conference titles.

This study was conducted in order to investigate articles under the WoS' rheumatology category written by authors with Turkish-based affiliations. Multicenter publications involving the participation of more than one country could have affected the statistical values, thus all countries except Turkey were excluded from the countries/regions search. The names of these articles, the journals to which they belonged, the authors, the year of publication, the authors' affiliations, and the numbers of cita-

tions were recorded in line with the WoS' data. To ascertain the number of citations, data before January 1, 2020 was evaluated in the same way as the publication data. The details for each publication were recorded under the following column headings: Author(s), title, year, journal name, author(s)' affiliations, and document type. For each publication, all information relevant to the analysis was exported to Microsoft Excel, Plain Text, and a reference management tool (EndNote Desktop). The extracted data include author(s), title, source, addresses, times cited, and keywords. VOSviewer software (Version 1.6.15, Center for Science and Technology Studies, Leiden University, Netherlands) was used to create a collaboration and word co-occurrence network and to evaluate citation densities.¹⁸

RESULTS

Over a period of 40 years (1980-2019), 84,761 publications were published in the 31 journals scanned in the rheumatology category. The number of publications with an author with a Turkish-based affiliation was 3,717 (4.39%), while the number of publications written by authors all with a Turkish-based affiliation was 3,179 (3.75%). The articles' distribution by year is illustrated in Figure 1. Of the publications, 3,179 were cited a total of 43,494 times before January 1, 2020. The mean number of citations per publication was 13.68 ± 23.52 . It was observed that 2,692 of the articles had been cited, while 487 articles have never been cited. The *h-index* for all the articles was found to be 76. The most cited article had 444 citations,¹⁹ and the article with the highest annual average number of citations had 20.17 citations.²⁰

The top 20 most cited articles on rheumatology written by authors all with Turkish-based affiliations are presented in Table 2.^{19–38} The top 20 articles with the most citations per year are presented in Table 3.^{19,20,22–24,27,28,31,32,35,38–47} The totals of 11 articles are included in both tables.^{19,20,22–24,27,28,31,32,35,38} Seven of the top 20 most cited articles were on Behçet's disease^{19,23,24,28,30,33,34} and four were on familial Mediterranean fever.^{26,29,35,38}

Turkey is ranked 13 when it comes to the number of articles published in the field of rheumatology (3.23%). As a comparison, the rankings of other countries are ordered as follows: USA (23.22%), UK (11.99%), Germany (8.66%), France (6.77%), Italy (6.58%), Canada (6.39%), Netherlands (6.29%), Japan (5.93%), Spain (3.97%), China (3.71%), Sweden (3.31%), and Australia (3.29%).

It was observed that the three institutions with the highest number of publications were Hacettepe University with 383, Istanbul University with 364, and Ankara University with 180. A collaboration map for the top 25 most productive institutions is shown in Figure 2. It was seen that 4,188 different keywords were used in all the articles. The 50 most frequent keywords are presented in Figure 3.

In terms of number of citations, the most cited institution was Istanbul University, with 5,568 citations, followed by Hacettepe University, with 5,326 citations, and Ankara University, with 2,924 citations. In addition, the cooperation map of the top 25 most cited institutions is shown in Figure 4.

Main Points

- With this study, providing information about the Turkey-based articles in the field of *Rheumatology* and it is aimed at helping researchers in future studies.
- It is thought that this article could help direct future studies.
- In this study, it has been determined that Turkey-based articles in the field of Rheumatology have increased over the years.

Table 1. Journals in the Rheumatology Category in the Web of Science Database in 2019

	Journal Title	Journal Title Abbreviation	ISSN	IF	NP	
					Contributions of All country	Contributions of Turkey
1	Acta Reumatologica Portuguesa	Acta Reumatol Port	0303-464X	1.183	836	80
2	Advances in Rheumatology*	Adv Rheumatol	2523-3106	0.854	106	3
3	Aktuelle Rheumatologie	Aktuel Rheumatol	0341-051X	0.316	2.082	9
4	Annals of The Rheumatic Diseases	Ann Rheum Dis	0003-4967	16.102	12.596	69
5	Archives of Rheumatology	Arch Rheumatol	2148-5046	0.731	421	258
6	Arthritis Care & Research	Arthrit Care Res	2151-464X	4.056	2.759	6
7	Arthritis Research & Therapy	Arthritis Res Ther	1478-6354	4.103	4.560	11
8	Arthritis & Rheumatology	Arthritis Rheumatol	2326-5191	9.586	2.322	9
9	Best Practice & Research in Clinical Rheumatology	Best Pract Res Cl Rh	1521-6942	2.727	1.371	11
10	BMC Musculoskeletal Disorders	BMC Musculoskel Dis	1471-2474	1.879	4.932	15
11	Clinical and Experimental Rheumatology	Clin Exp Rheumatol	0392-856X	3.319	7.940	294
12	Clinical Rheumatology	Clin Rheumatol	0770-3198	2.394	7.136	601
13	Current Opinion in Rheumatology	Curr Opin Rheumatol	1040-8711	4.006	1.930	14
14	Current Rheumatology Reports	Curr Rheumatol Rep	1523-3774	3.873	726	6
15	International Journal of Rheumatic Diseases	Int J Rheum Dis	1756-1841	1.980	2.039	157
16	JCR-Journal of Clinical Rheumatology	JCR-J Clin Rheumatol	1076-1608	2.360	2.567	88
17	Joint Bone Spine	Joint Bone Spine	1297-319X	3.741	3.138	111
18	Journal of Rheumatology	J Rheumatol	0315-162X	3.350	18.599	136
19	Lupus	Lupus	0961-2033	2.251	4.987	58
20	Modern Rheumatology	Mod Rheumatol	1439-7595	2.113	1.886	73
21	Nature Reviews Rheumatology	Nat Rev Rheumatol	1759-4790	16.625	1.371	5
22	Osteoarthritis and Cartilage	Osteoarthr Cartilage	1063-4584	4.793	4.009	1
23	Pediatric Rheumatology	Pediatr Rheumatol	1546-0096	2.595	617	4
24	Revista Brasileira De Reumatologia [†]	Rev Bras Reumatol	0482-5004	1.810		1

Table 1. Journals in the Rheumatology Category in the Web of Science Database in 2019 (Continued)

	Journal Title	Journal Title Abbreviation	ISSN	IF	NP	
					Contributions of All country	Contributions of Turkey
25	Rheumatic Disease Clinics of North America	Rheum Dis Clin N Am	0889-857X	3.244	1.783	-
26	Rheumatology	Rheumatology	1462-0324	5.606	8.261	97
27	Rheumatology and Therapy	Rheumatol Ther	2198-6576	3.615	156	
28	Rheumatology International	Rheumatol Int	0172-8172	1.984	5.756	939
29	Scandinavian Journal of Rheumatology	Scand J Rheumatol	0300-9742	3.025	3.928	68
30	Seminars in Arthritis and Rheumatism	Semin Arthritis Rheu	0049-0172	4.751	2.444	10
31	Therapeutic Advances in Musculoskeletal Disease	Ther Adv Musculoskel	1759-720X	5.043	131	6
32	Zeitschrift Fur Rheumatologie	Z Rheumatol	0340-1855	1.166	3.777	35

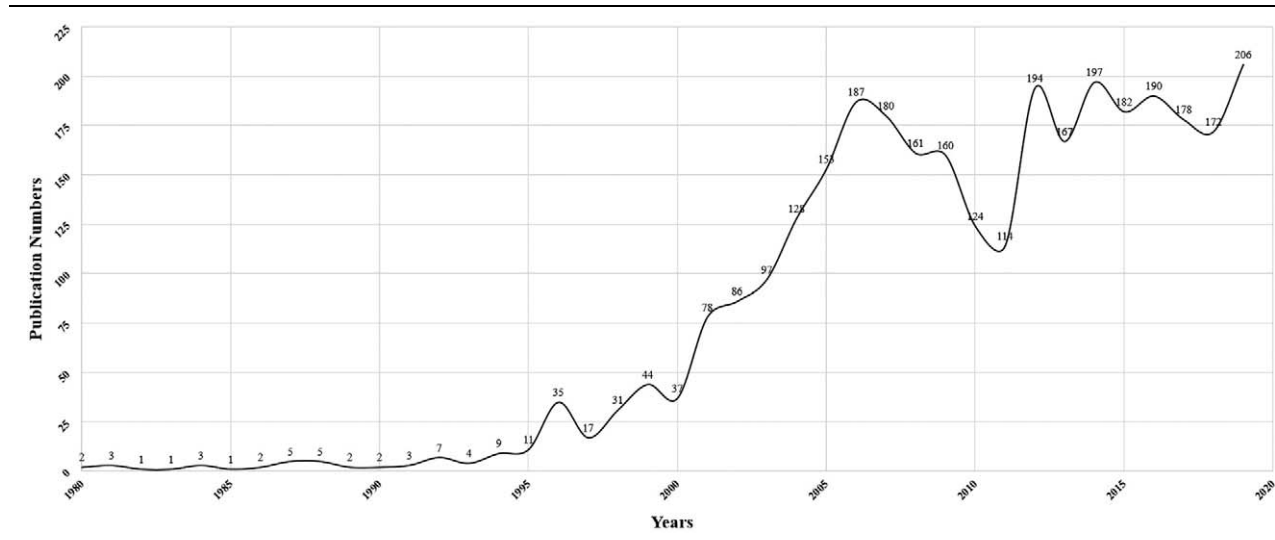
Abbreviations: IF: impact factor; NP: number of publications.

The name of the journal called Rev Bras Reumatol.

*In 2018; in the evaluations, both were combined and analyzed.

†Changed to Adv Rheumatol.

Figure 1. Illustration of the distribution of articles by year.



Twenty-nine of the rheumatology journals included articles with a Turkish affiliation. It was observed that the most articles with a Turkish affiliation were published in *Rheumatol Int* journal (939 articles). *Clin Rheumatol* was second with 601 articles, and *Clin Exp Rheumatol* was third with 294 articles. The number

of Turkish articles published in these journals is shown in [Table 1](#).

It was seen that the top three journals also ranked in the same order when it came to the citation analysis of the articles

Table 2. The 20 Most Cited Articles in Rheumatology from Turkey Between 1980 and 2019

	Title	Journal	Year	TC	PC
1	Vascular Involvement in Behçet's Disease ¹⁹	J Rheumatol	1992	444	15.86
2	Inuence of Age of Onset and Patient's Sex on the Prevalence and Severity of Manifestations of Behçet's Syndrome ³⁰	Ann Rheum Dis	1984	285	7.92
3	Behçet's Disease: Infectious Etiology, New Autoantigens, and HLA-B51 ²³	Ann Rheum Dis	2001	243	12.79
4	Mean platelet volume (MPV) as an inflammatory marker in ankylosing spondylitis and rheumatoid arthritis ²⁰	Joint Bone Spine	2008	242	20.17
5	Behcet's disease: An update on the pathogenesis ²⁴	Clin Exp Rheumatol	2001	236	12.42
6	Familial Mediterranean Fever ³⁵	Rheumatol Int	2006	221	15.79
7	Diagnostic values of clinical diagnostic tests in subacromial impingement syndrome ²²	Ann Rheum Dis	2000	193	9.65
8	The Validity and Reliability of the Turkish Version of the Fibromyalgia Impact Questionnaire ³⁶	Rheumatol Int	2000	192	9.60
9	Short-term trial of etanercept in Behcet's disease: A double-blind, placebo-controlled study ²⁸	J Rheumatol	2005	188	12.53
10	A new set of criteria for the diagnosis of familial Mediterranean fever in childhood ³⁸	Rheumatology	2009	174	15.82
11	Significance of catechol-O-methyltransferase Gene Polymorphism in Fibromyalgia Syndrome ²⁵	Rheumatol Int	2003	164	9.65
12	Lipid peroxidation, some extracellular antioxidants, and antioxidant enzymes in serum of patients with rheumatoid arthritis ³⁷	Rheumatol Int	2002	161	8.94
13	The Prevalence of Behçet's Syndrome in a Rural Area in Northern Turkey ³³	J Rheumatol	1988	157	4.91
14	Vasculitis in Familial Mediterranean Fever ²⁹	J Rheumatol	1997	152	6.61
15	Acceptability, reliability, validity, and responsiveness of the Turkish version of WOMAC osteoarthritis index ³²	Osteoarthritis Cartilage	2005	150	10
16	Comparison of lidocaine injection, botulinum toxin injection, and dry needling to trigger points in myofascial pain syndrome ³¹	Rheumatol Int	2005	149	9.93
17	Kikuchi-Fujimoto Disease: Analysis of 244 cases ²⁷	Clin Rheumatol	2007	148	11.38
18	A Turkish version of the bath ankylosing spondylitis disease activity index: Reliability and validity ²¹	Rheumatol Int	2005	137	9.13
19	Acute phase response in familial Mediterranean fever ²⁶	Ann Rheum Dis	2002	135	7.50
20	The arthritis of Behcet's disease: A prospective study ³⁴	Ann Rheum Dis	1983	134	3.62

Abbreviations: TC: sum of times cited; PY: average citations per year.

Table 3. The 20 Most Average Citations Per Year in Rheumatology from Turkey Between 1980 and 2019

	Title	Journal	Year	TC	PY
1	Mean platelet volume (MPV) as an inflammatory marker in ankylosing spondylitis and rheumatoid arthritis ²⁰	Joint Bone Spine	2008	242	20.17
2	Vascular Involvement in Behçet's Disease ¹⁹	J Rheumatol	1992	444	15.86
3	A clinical guide to autoinflammatory diseases: Familial Mediterranean fever and next-of-kin ⁴³	Nat Rev Rheumatol	2014	104	17.33
4	A new set of criteria for the diagnosis of familial Mediterranean fever in childhood ³⁸	Rheumatology	2009	174	15.82
5	Familial Mediterranean Fever ³⁵	Rheumatol Int	2006	221	15.79
6	Behçet's Disease: Infectious Etiology, New Autoantigens, and HLA-B51 ²³	Ann Rheum Dis	2001	243	12.79
7	Management of Takayasu arteritis: A systematic review ⁴²	Rheumatology	2014	76	12.67
8	Short-term trial of etanercept in Behçet's disease: A double-blind, placebo-controlled study ²⁸	J Rheumatol	2005	188	12.53
9	Behçet's disease: An update on the pathogenesis ²⁴	Clin Exp Rheumatol	2001	236	12.42
10	Two new inflammatory markers associated with Disease Activity Score-28 in patients with rheumatoid arthritis: Neutrophil-lymphocyte ratio and platelet-lymphocyte ratio ⁴⁷	Int J Rheum Dis	2015	62	12.40
11	Kinesio taping compared to physical therapy modalities for the treatment of shoulder impingement syndrome ⁴¹	Clin Rheumatol	2011	111	12.33
12	Behçet's disease: How to diagnose and treat vascular involvement ⁴⁴	Best Pract Res Clin Rheumatol	2016	46	11.50
13	Kikuchi-Fujimoto Disease: Analysis of 244 cases ²⁷	Clin Rheumatol	2007	148	11.38
14	The effect of dry needling in the treatment of myofascial pain syndrome: A randomized double-blinded placebo-controlled trial ⁴⁶	Clin Rheumatol	2013	76	10.86
15	Familial Mediterranean fever in childhood: A single-center experience ³⁹	Rheumatol Int	2018	21	10.50
16	Vascular involvement in Behçet's syndrome: A retrospective analysis of associations and the time course ⁴⁵	Rheumatology	2014	62	10.33
17	Acceptability, reliability, validity, and responsiveness of the Turkish version of WOMAC osteoarthritis index ³²	Osteoarthritis Cartilage	2005	150	10.00
18	Comparison of lidocaine injection, botulinum toxin injection, and dry needling to trigger points in myofascial pain syndrome ³¹	Rheumatol Int	2005	149	9.93
19	Takayasu's arteritis in Turkey—clinical and angiographic features of 248 patients ⁴⁰	Clin Exp Rheumatol	2009	109	9.91
20	Diagnostic values of clinical diagnostic tests in subacromial impingement syndrome ²²	Ann Rheum Dis	2000	193	9.65

Abbreviations: TC: sum of times cited; PY: average citations per year.

Figure 2. Collaboration map of the 25 institutions with the highest number of publications.

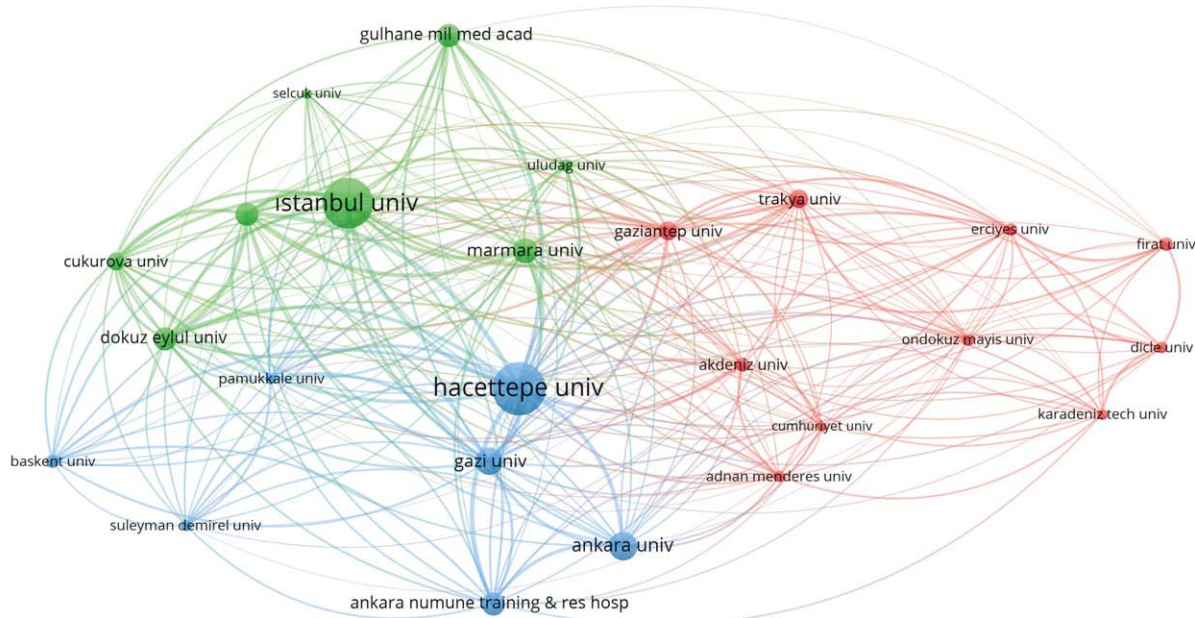


Figure 3. Collaboration map of the 50 most frequently used keywords.

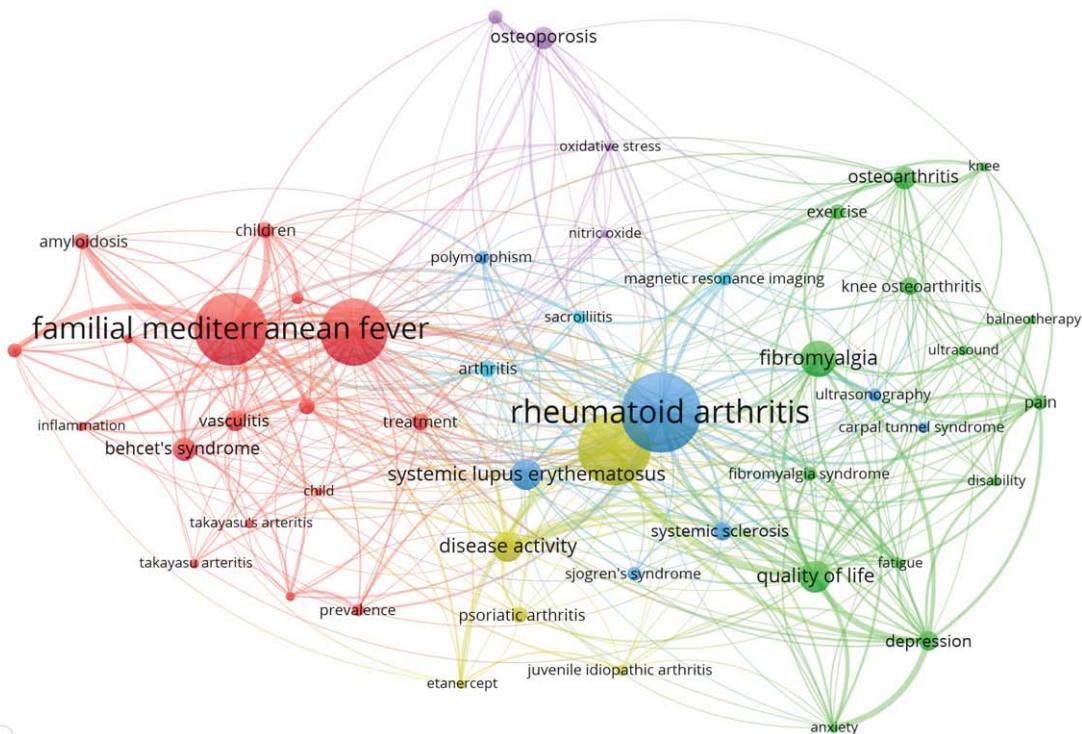


Figure 4. Collaboration map of the top 25 most cited institutions.

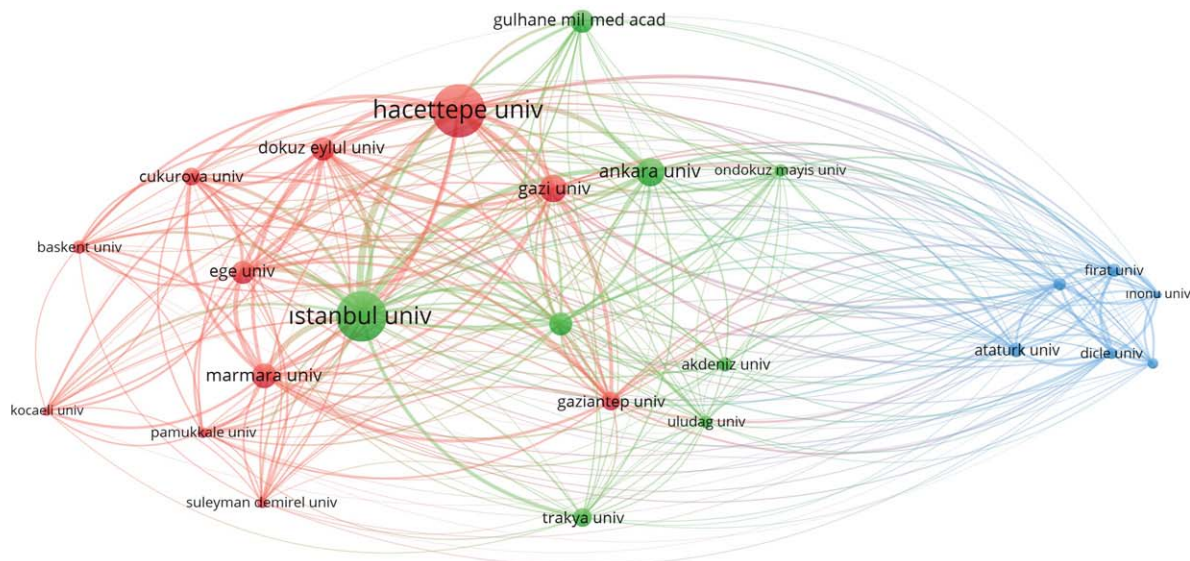


Figure 5. Cooperation map of the top 15 most cited journals.

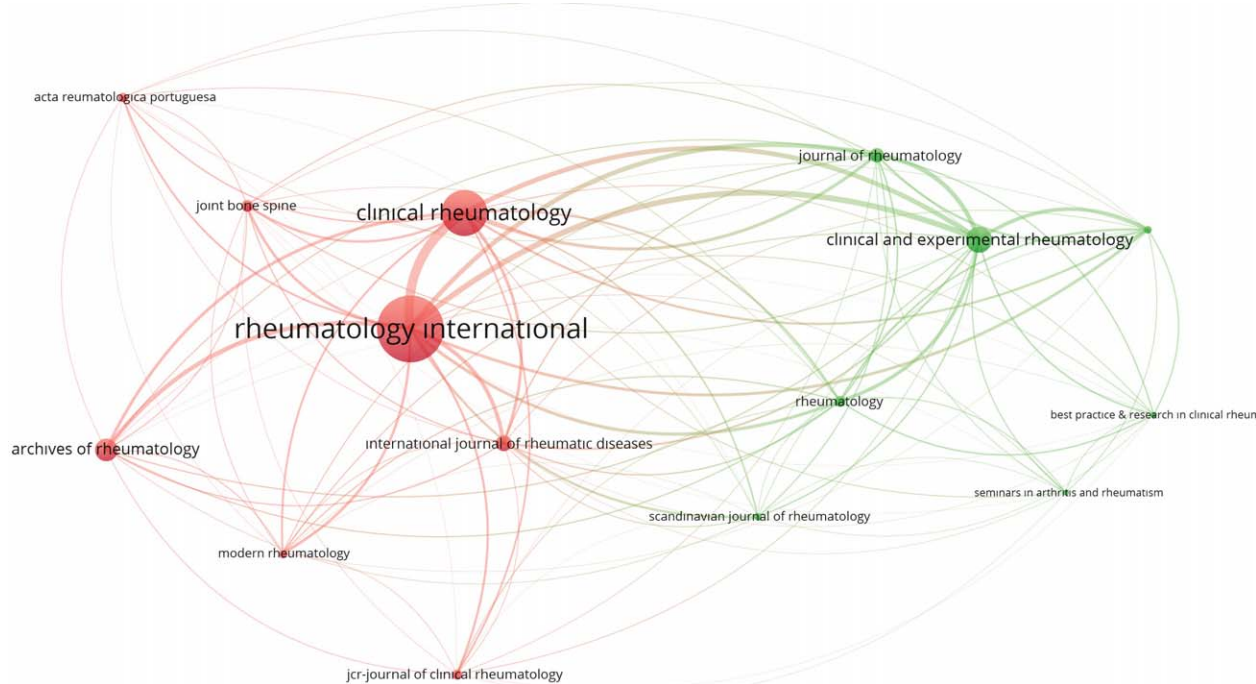
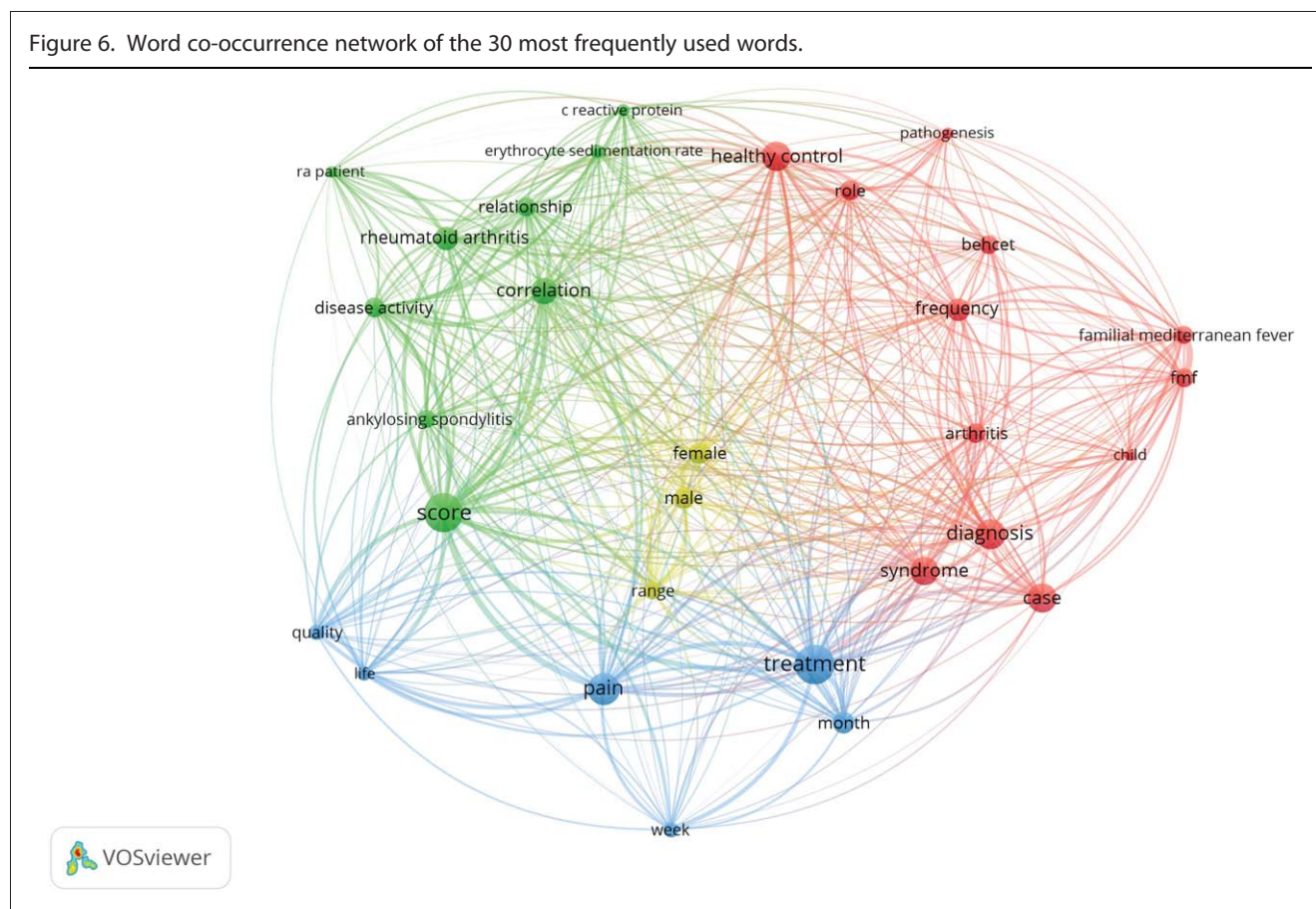


Figure 6. Word co-occurrence network of the 30 most frequently used words.



printed within them. There were 13,819 citations of the articles published in *Rheumatol Int*, 10,263 citations of the articles published in *Clin Rheumatol*, and 4,544 citations of the articles published in *Clin Exp Rheumatol*. The cooperation map of the top 15 most cited journals is given in Figure 5.

Using VOSviewer software, it was possible to see that 33,245 different words are present in the titles and abstracts of these articles. The top three most frequently used words were “treatment” appearing 681 times, “score” appearing 678 times, and “pain” 540 appearing times. The crossover network for the 30 words with the highest usage rate is given in Figure 6. Words shown in the same color in Figure 6 have been analyzed according to their frequency of use together.

DISCUSSION

Science has progressed from ancient times to the present with the contribution of countless scientists.⁴⁸ Especially in the last few centuries, scientific articles play a significant role in introducing new medical knowledge and ensuring it is applied by physicians and researchers.¹⁷ A bibliometric analysis is one of the methods that can be used to determine the number and quality of publications in a particular country.^{10,49} In the literature, it was observed that bibliometric analyses had been conducted for many countries in the field of rheumatology, among

them Malaysia,⁵⁰ Bulgaria,⁵¹ China,^{52–54} and countries in the Arab League.⁵⁵ Bibliometric studies have been carried out for Turkey in a great number of medical fields, such as anesthesia,¹⁶ emergency medicine,⁵⁶ anatomy,⁵⁷ pathology,⁵⁸ endocrine surgery,⁵⁹ dermatology,⁶⁰ orthopedy,⁴⁹ psychiatry⁶¹ and otorhinolaryngology.⁶² However, a detailed review of the literature revealed that no bibliometric studies had been conducted for Turkey in the field of rheumatology. It is therefore thought that the present article is the first comprehensive bibliometric analysis of Turkish articles in the field of rheumatology. Although there are databases other than the WoS database, such as PubMed, Google Scholar, and Scopus, the WoS database is generally known to be the most trusted, especially in bibliometric studies. This is because the WoS database is more objective.^{63,64} For this reason, the WoS database was preferred in this study.

One of the biggest advantages of this study is that it evaluated a long period of 40 years. On the other hand, although this long-term evaluation is an important advantage of this study, the comparison with numerical values such as the number of citations and articles in other studies does not yield meaningful results due to the different time examined. Even so, if a comparison is made, Zhang et al.⁵⁴ reported that there were 2,898 publications from China in the SCI-E between 2007 and 2017. Similarly, Cheng and Zhang⁵² stated that there were 788

publications from China between 2000 and 2009. This situation clearly demonstrates that the number of publications in the field of rheumatology from China is more than the Turkey. Developed countries are more productive in the number of publications to which they contribute and their distribution of these. Many studies have reported that a country's economic wealth is associated with its academic publication productivity.^{63,65} In addition, the western country especially the USA and European countries have dominant influenced on the production of scientific publications in rheumatology as in many branches.⁵¹ On the other hand, Bayoumy et al.⁵⁵ reported the number of rheumatology publications as 944 between 1976-2014 in Arab countries in the Web of Science Core Collection database. This shows that the number of publications originating from Turkey more than Arab countries. Moreover, it has been reported that there has been a continued increase in all publications on rheumatology in many countries.^{54,55} Zhang et al.⁵⁴ are of the opinion that the consistent rise in the number of rheumatologists, improved economic situations, increases in research and development funds, incentive reward schemes, and career requirements are possible causes for this increase. One of the main reasons why the increase has slowed in Turkey may be due to a shortage of rheumatologists similar to in Ukraine.⁵¹

In this study, the number of publications written in the field of rheumatology in Turkey is shown to have increased remarkably up until 2006. However, a standstill is seen after this year. In contrast, Zhao et al.¹⁷ stated that the number of articles published annually on ankylosing spondylarthritis has rapidly grown worldwide over the past 10 years. Georgiev and Stoilov⁵¹ reported that the vast majority of rheumatology publications from Bulgaria are rheumatoid arthritis, systemic lupus erythematosus, osteoporosis, and osteoarthritis. In this study, it is seen that the two most common diseases among the most frequently cited 20 articles and among the most frequently used word groups are Behçet's disease and familial Mediterranean fever. Behçet's disease is more common in countries along the ancient Silk Road is seen all over the world and the highest prevalence was reported in Turkey.⁶⁶ Behçet's disease clinical findings are highly influenced by ethnic origin and environmental factors. Systemic involvement has been reported variable in different countries and regions.⁶⁷ Familial Mediterranean fever is an autoinflammatory and autosomal recessive disease. It affects primarily Jews, Arabs, Turks, and Armenians.^{68,69} In this study, it was seen that many of the reviewed publications focus on Behçet's disease and familial Mediterranean fever. The reason for this may be associated with a more frequent incidence of both diseases in Turkey. It is also observed that those institutions with the highest number of publications are the more established ones. The larger bodies of academic staff at these institutions and the stricter criteria for academic appointment within them may contribute to this.

The fact that the journals with the highest number of articles and citations are ranked similarly suggests that the publications are distributed in a balanced way. The top three journals for both are *Rheumatol Int*, *Clin Rheumatol*, and *Clin Exp Rheumatol*. Authors wishing to publish an article in the field of rheumatology may therefore want to consider these journals first.

Limitations

The authors are aware that articles on rheumatology are not only published in journals classified under the rheumatology category, but also in journals focusing on many different disciplines. The most significant limitation of this study is the fact that only journals in the rheumatology category were assessed, since it would be enormously challenging to examine all journals in the other categories for articles on rheumatology. Another limitation is the fact that the article type could not be evaluated in this study, as the articles scanned in WoS did not have sufficient article type categories.

CONCLUSIONS

This study investigated articles in the field of rheumatology written by authors with a Turkish-based affiliation and identified research trends. For this reason, it is thought that this article could help direct future studies. In the field of rheumatology, to increase in the years the number of publications originating from Turkey hopeful results. Even so, we believe that rheumatology science in Turkey still have a long way to go to take its deserved place. Furthermore, we hope that this article will be a useful guide for academics investigating Turkish publications in the field of rheumatology. We are also of the opinion that scientists should be encouraged to increase the number of publications produced in the field of rheumatology.

Informed Consent: N/A

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Conflict of Interest: The authors have no conflicts of interest to declare.

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