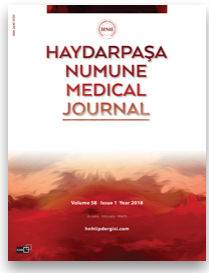
HAYDARPAŞA NUMUNE MEDICAL JOURNAL

DOI: 10.14744/hnhj.2018.47965
Haydarpasa Numune Med J 2019;59(2):142–156



hnhtipdergisi.com

ORIGINAL ARTICLE

Turkish Publications in Science Citation Index and Citation Index Expanded Indexed Journals in the Field of Toxicology: A Bibliographic Analysis

Sibel Büyükçoban[1], Volkan Hancı[2], Leyla İyilikçi[1]

[1]Department of Anaesthesiology and Reanimation, Dokuz Eylul University Faculty of Medicine, Izmir, Turkey
[2]Department of Anaesthesiology and Reanimation, Division of Intensive Care, Dokuz Eylul University Faculty of Medicine, Izmir, Turkey

Abstract

Introduction: Our study aimed to assess Turkish publications in Science Citation Index (SCI) and Science Citation Index Expanded (SCIE) indexed journals in the field of "toxicology".

Methods: We searched the journals related to "toxicology" in the SCIE database of "Thomson Reuter Web of Science". The search engine of Institute for Scientific Information (ISI) Web of Science (WoS) was used in the advanced mode by typing "IS=ISSN number" to identify publications in the journal. We found Turkish papers on toxicology by typing "IS=ISSN number AND CU=Turkey". If Turkish and non-Turkish authors had collaborated, the article was included in the search when the corresponding author had provided a Turkey-based address. The catalogue information and statistics were used to determine Turkish publications as the percentage of total publications and the annual mean number of Turkish publications. In WoS, "SU=toxicology" was used to determine the number, country, year, and topic distributions of publications from 1975 to date and within the last 10 years. The citation numbers and h-indices were determined based on the country for publications within the last 10 years.

Results: In the area of toxicology, there were 92 journals in the SCI/SCIE index. From 1975 to the early 2000s, Turkey was 19th in the list of countries with highest number of publications on toxicology; however, in the last 10 years, Turkey moved up to 14th place. Its mean citation number has been 7.17, and it remains the lowest country pertaining to citations among the 24 countries with the most number of publications.

Discussion and Conclusion: Our work will also shed light on scientists who are constantly working in the field of toxicology, as well as scientists witnessing unusual toxicological events and wanting to make the academic world knowledgeable.

Keywords: Science citation index; science citation index expanded; Turkey; toxicology.

The number and quality of scientific publications is an important indicator of a country's scientific activity [1]. Information must be overlapped for the rapid advancement of science; and when this synergistic effect is achieved. the desire for scientific research and development will increase. Three criteria that highlight international broadcasting activities are generally accepted in the evaluation of academic performance: the number of publications in international scientific journals. the publications in scientific journals scanned by science indices, and the number

Correspondence (İletişim): Volkan Hancı, M.D. Dokuz Eylul Universitesi Anesteziyoloji ve Reanimasyon Anabilim Dali, Yogun Bakim Bilim Dali, Izmir, Turkey
Phone (Telefon): +90 530 643 32 40 **E-mail (E-posta):** volkan.hanci@deu.edu.tr

Submitted Date (Başvuru Tarihi): 21.02.2018 **Accepted Date (Kabul Tarihi):** 02.04.2018

of references to publications [1]. In recent years, there has been an increase in bibliographic publications in the literature [3]. In the light of these bibliographic studies, the number of articles sent from clinics of anesthesia in Turkey and published in valuable high-impact international journals have tended to decrease within the last 10 years. The average number of citations is below the world average [2].

In a report prepared in 2009 by the scientists under the supervision of Higher Education Council (YÖK) where scientific indicators of Turkey were analyzed, the relative citation impact of Turkey is determined to be below the world average in all areas [4]. In our literature review, it has been indicated that bibliographic analyses of publications from our country have been performed in many branches, while studies analyzing publications on one of the most comprehensive disciplines namely toxicology sent from Turkey have not been conducted yet.

This study aimed to quantitatively and qualitatively assess articles coming from Turkey and published in toxicology journals included in the lists of Science Citation Index (SCI) and SCI Expanded (SCIE) and compare the relevant data with the international data.

Materials and Methods

Our study was designed as a retrospective observational study. The study was started after obtaining the approval from Dokuz Eylül University Ethics Committee on Noninvasive Investigations (decision no. 2017/20-05). The term toxicology was selected from the Thomson Reuters Web of Science database and in journals included in SCIE. The list of journals in the SCIE index and their ISSN numbers were obtained. The IS=ISSN number was printed in the advanced mode of the search engine of Web of Science (WoS) of Scientific Information (ISI) all issues of the journal were determined. The "IS=ISSN number of AND CU= Turkey" were recorded, and all articles on toxicology sent from Turkey were determined (on 30.15.2017).

We applied the same procedure in the PubMed database, and performed double check. Articles prepared by Turkish and non-Turkish authors in collaboration were included in the study if the responsible author of the article was residing in Turkey. Catalog information, duration of publication, number of issues, the number of publications from Turkey, proportion (%) of all articles from Turkey in all issues of the relevant journal using impact factors, and average annual rate of Turkey-based publications were determined.

Acceptance Rate (%) of Turkey-based Publications

The number of Turkey-based publications in a journal multiplied by 100 and divided by the total number of publications of the same journal indicates acceptance rate of Turkey-based publications.

Average Rate of Annual Publications from Turkey

The number of Turkey-based publications in a journal divided by the duration of its publication counted from the first year of its release as specified in the catalog information of the journal yields annual mean number of publications. It demonstrates the number of Turkey-based articles published in this journal. It is defined as the annual mean publication rate of Turkey-based articles in this journal.

In the second phase of the study, the word "SU=toxicology" was entered in the advanced mode, in the WoS search engine of ISI, and all publications indexed in the field of toxicology were accessed.

By typing "Analyze Results", the distribution of all publications according to countries, years, fields of publication, and topics was determined and listed. We determined the distribution of topics by taking into account all topics of articles published from 1975 on, and also within the last decade. Then, the words "SU=toxicology AND CU=country name" was entered in the advanced mode of the WoS search engine of ISI, and typing "Citation Report" all h-index values of all countries were determined. In addition, by typing "SU=toxicology AND CU=Turkey" "Analyze Results" only the publications of our country were determined and listed according to years and subjects.

The primary endpoint of this study was to determine acceptance rate of Turkey-based publications by journals in the field of toxicology included in the SCI/SCIE index and the annual mean publication rate, while the secondary endpoint was to compare the number of citations received by Turkey-based publications, and their h-indices with those of the other countries.

Statistical Analysis

The data of the study were analyzed with the Statistical Package for the Social Sciences15.0 (SPSS Inc; Chicago, IL, USA) package program For statistical evaluation of the publication rates [5] of the journals grouped by different criteria and Turkey-based publications and their annual mean publication rates, the Mann–Whitney U test was used. The correlations between impact factors of the journals, publication rates of Turkey-based journals, and their average annual publication rates were analyzed by Pearson correlation test. p value less than 0.05 was considered statistically significant.

Results

A total of 92 journals in the field of toxicology were included in the SCI/SCIE index (Appendix 1). The journals with the highest publication rate from our country were determined as Cutaneous and Ocular Toxicology, Toxicology and Industrial Health, Human & Experimental Toxicology, Food Additives & Contaminants: Part B-Surveillance, and Journal of Food Safety and Food Quality-Archiv für Lebensmittelhygiene (Appendix 2).

We did not encounter any Turkey-based publication in 10 journals listed in the SCI/SCIE index (Annals of Occupational Hygiene; BMC Pharmacology and Toxicology; Critical Reviews in Toxicology; Integrated Environmental Assessment and Management; Journal of Environmental Science and Health, Part C: Environmental Carcinogenesis and Ecotoxicology Reviews; Journal of Exposure Science and Environmental Epidemiology; Journal of Toxicologic Pathology; Journal of Toxicology and Environmental Health, Part B: Critical Reviews; Molecular & Cellular Toxicology; Particle and Fibre Toxicology).

In 23 journals (25%), the number of publications from our country was determined as five and less than five. Evaluation of journals of toxicology indexed in SCI/SCIE according to their catogeries, number of publication fields of toxicology in Turkey and world between 1975-2016 and 2007-2016 were shown in Table 1, 2, 3, respectively.

Annual distrubition of publications in the field of toxicology within the last 10 years both in Turkey and in the World are shown in table 4. Distrubition of types of publications in the years between 1975-2016 and 2007-2016 both in Turkey and in the World are shown in table 5.

In our study, any significant correlation could not be determined between inclusion of the journals in SCI or SCIE index, and publication rates of Turkey-based publications, and their average number of annual publications ($p>0.05$). In addition, a significant correlation did not exist between the geographic location (continent) of the place of publication of the journal, and publication rates, and annual mean number of publications coming from Turkey ($p>0.05$).

In our study, a negative correlation was determined between the increase of impact factors of the journals and the percentage of publications accepted from our country ($p=0.038$; $r=-0.217$). The increase in the impact factor of the journals resulted in a significant decrease in the number of publications from our country. Although there was a negative correlation between the impact factor of the journals and the number of annual publications pertaining to our country, no significant correlation could be determined ($p=0.107$; $r=-0.167$). In our study, both worldwide and in the last decade, the first three subareas in the field of toxicology have been identified as environmental sciences, ecology, and pharmacology and public health occupational diseases. In our country, these fields have been listed as pharmacology, environmental sciences, ecology, and public health occupational diseases since 1975 and within the last decade (Table 2).

The number of publications in the field of toxicology in our country has increased within the next 10 years, remarkably in 2015 and 2016. In addition, the average number of citations of the publications in our country in the field of toxicology and the h-index of our country were found to be lower compared to the countries with the same publication rates.

Discussion

In our study, we determined that the papers from our country in the field of toxicology were published in the following journals entitled Cutaneous and Ocular Toxicology, Toxicology and Industrial Health, Human & Experimental Toxicology, Food Additives & Contaminants, Part B-Surveillance, and Journal of Food Safety and Food Quality-Archiv für Lebensmittelhygiene.

It has been indicated that only five or less than five papers were published in 23 (25%) different journals released in the field of toxicology, and a negative correlation was found between increase in the impact factors of the journals and the percentage of publications accepted from Turkey. Among the countries with the highest number of publications in the field of toxicology, Turkey ranked 19th in 1975, and moved up to 14th place within the last 10 years. With its average number of citations [7,17], it has the lowest number of citations among 24 countries with the greatest number of publications.

The studies that evaluate the scientific productivity of individuals, institutions, and countries in various fields are gradually increasing in the literature of our country and worldwide. The evaluation of scientific productivity of individuals, institutions, and countries can be measured using various objective parameters. The use of measurements such as number of publications, number of citations, and h-index in monitoring the performance of scientists contributes to the advancement of science as well as comparing the researchers to each other. Impact factor is an important criterion to demonstrate the effectiveness of the studies. Scientific studies that analyze such parameters are classi-

fied as bibliometric studies [5].

Bibliometric studies have been carried out in various scientific fields worlwide and in our country. For example, a bibliometric study was conducted in the international literature in the field of anesthesiology. Boldt et al. [6] examined the articles related to anesthesia, intensive care, and pain published in the SCI journals between 1997 and 1998. They stated that America has the highest number of publications. Bould et al. analyzed the studies in the field of anesthesia and indicated that the articles from high-income countries were more frequently published, while only scarce number of articles from low-income countries such as Turkey, China, and India found the possibility of publication [7].

In a bibliometric study, Yilmaz et al. [8] evaluated scientific performance of the publications in the field of anesthesiology both worldwide and in Turkey. According to the results of the study from 2004 to 2009, a serious decline in the number of total Turkey-based publications in anesthesiology journals was determined. However, publication rate increased again after 2009. They reported that Turkish authors more frequently preferred the journal of Pediatric Anesthesia relative to other journals. In this study, the top five countries with the highest number of publications in the field of anesthesiology were developed countries as United States, England, Germany, France, and Canada. In this study, Turkey ranked 14th among them. In the light of all the findings they obtained, the authors concluded that continuous and consistent scientific publication policies supported by the state should be established to place Turkey in a certain scientific position worldwide [8].

Among the bibliographic studies published in the field of toxicology, the studies of Zyoud et al. [9] are remarkable. Zyoud et al. [9] examined publications on cocaine performed between 1975 and 2015. They emphasized that the studies in this area have increased after 1990 and that the United States and Spain had conducted the highest number of studies on the subject.

Zyoud also bibliometrically investigated the place of studies in the literature regarding methanol intoxications [10], calcium channel blocker intoxications [11], use of intravenous lipid emulsions [12] , and treatment schemes as N-acetyl cysteine use in paracetamol intoxications [13] in the field of toxicology.

In our literature review, no bibliographic study was found in the field of toxicology performed in Turkey. The fact that toxicology is a multidisciplinary field is forcing the scientists who are performing toxicology studies with the intention to prepare and publish their works. In spite of its increasing importance in our country and worldwide, toxicology is not taking its expected place in the medical literature.

In our review we conducted in the field of toxicology, the relationship between the various features of the journals and the rates of Turkey-based publications was examined in addition to the journals with the highest rates of publications from our country.

Significant correlations could not be found between the language of the journal, the continent of the country where the article was published, the inclusion of the journal in the SCI, SCIE index, the publication rate of Turkey-based publications, and the annual mean number of publications from our country.

In our study, the countries with the highest number of publications in the field of toxicology have been examined from the year 1975 up to now; and within the last 10 years, while and among the top five countries, the United States, Japan, United Kingdom, Germany, and China have been observed. Turkey ranks 19th in the period from 1975 up to now.

Australia, Denmark, Scotland, Norway, and Spain (between 19.26 and 14.31) were among the top five countries with the highest average citation rate. The countries with the highest number of publications are not the same with the most citations. The same is true for the citation rates of the countries with the highest number of publications. The average citation rate of Turkey was 7.17.

The proportion of publications in the field of toxicology originating from our country to toxicology publications worldwide increased from 0.55% between the years 1975 and 2006 up to 2.14% in the last 10 years. Considering the distribution of Turkey-based publications within the last 10 years, the lowest publication rate was 5.06% in the year 2009, and publication rates fluctuated until 2014. However, an increasing trend was observed from the year 2014 on, and the highest publication rate within the last 10 years was reached with 12.86% in 2016.

In our analysis, especially in recent years, the increase in the number of publications in our country in the field of toxicology among total number of relevant publications worldwide is remarkable. However, Turkey is the country with the lowest citation average within the last 10 years, which indicates that the publications do not reach sufficient quality. The results of our study support the work of Onat [14] and Özbilgin [15] in this respect, and a deep and multifaceted effort is needed to shape an environment that focuses on research that can contribute to medicine in the field of toxicology. In the last 10 years, the growth rates of

China, Spain, South Korea, and Brazil have increased, and consequently a striking increase in the number of publications is observed. This result was similar to that of Yilmaz et al. [8] and Özbilgin et al. [14].

When the publications in the field of toxicology were analyzed from 1975 up to now, publications on pharmacology, environmental science and ecology, public health, occupational diseases, genetics, and hereditary diseases are more numerous all over the world, while in Turkey most frequently publications were made in the fields of environmental science and ecology, pharmacology, public health, occupational diseases, food science and technology, chemistry, ophthalmology, and genetics. Number of publications on genetics rank fourth worldwide, while it falls to seventh place in our country. This finding may be attributed to the higher costs of investment in genetic studies.

Although ophthalmology studies worldwide are not widely published in toxicology journals, ophthalmology occupies an important place in toxicological studies in our country. This situation can be attributed to the lack of protection of the eye from toxic substances in our country.

In our study, both Thomson Reuters Web of Science and PubMed-databases were included in the data analysis. Besides Turkey-based publication rates in the SCI/SCIE indexed journals, the factors affecting them were also investigated. Some scientific journals also publish poster presentations of the congresses they are associated with in the Thomson Reuters Web of Science database.

The data obtained in this case may be scientifically controversial as they will include poster presentations. In this study, we evaluated both databases and we did not include poster presentations in statistical analysis, and only used data from PubMed database to make more accurate data analysis. In our study, instead of these data, we scanned SCI/SCIE indexed journals in the field of toxicology that would provide us more objective data about publication rates and average annual publication rates of Turkey-based publications.

In our study, we determined that the following journals accepted the highest number of manuscripts from our country for publication:

Cutaneous and Ocular Toxicology, Toxicology and Industrial Health, Human & Experimental Toxicology, Food Additives & Contaminants: Part B-Surveillance, Journal of Food Safety and Food Quality-Archiv für Lebensmittelhygiene. We did not encounter any Turkey-based publication in 10 journals listed in the SCI/SCIE index (Annals of Occupational Hygiene, BMC Pharmacology and Toxicology, Critical Reviews in Toxicology, Integrated Environmental Assessment and Management, Journal of Environmental Science and Health: Part C-Environmental Carcinogenesis and Ecotoxicology Reviews, Journal of Exposure Science and Environmental Epidemiology, Journal of Toxicologic Pathology, Journal of Toxicology and Environmental Health: Part B-Critical Reviews, Molecular & Cellular Toxicology, Particle and Fibre Toxicology).

In 23 of the journals (25%), the number of publications from our country was determined as five and less than five.

In our study, no significant relationship could be determined between inclusion of journals in the SCI or SCIE indices, publication rates (%) and mean number of annual publications in Turkey ($p>0.05$). In addition, a significant relationship did not exist between the geographic location of the publication place (continent) of the journal and both publication rates (%), and mean number of annual publications in Turkey ($p>0.05$).

In our study, we determined the presence of a negative correlation between the increase in impact factors of the journals and the acceptance rate of Turkey-based publications ($p=0.038$; $r=-0.217$). The increase in the impact factor of the journals resulted in a significant decrease in the number of publications from our country. A negative but nonsignifi-

Table 1. Evaluation of the journals of toxicology indexed in SCI/SCI-E according to their categories

	Category	Annual number of publications (mean±SD)	Annual number of publications in Turkey (mean±SD)	Publication rate (%) of Turkey-based publications (mean±SD)	Turkey-based publication rate (mean±SD)
SCI/SCIE	SCI (n=65)	3374.50±3042.01	33.75±55.64	1.38±2.00	1.21±1.86
	SCIE (n=27)	1096.25±775.84	32.03±73.25	2.87±6.86	1.58±4.02
p		<0.001	0.111	0.843	0.205
Geographic region	Europe (n=40)	2848.40±3374.13	25.42±54.27	1.82±5.34	1.19±3.11
	Other (52)	2596.26±2264.24	39.26±65.46	1.82±2.84	1.41±2.29
p		0.670	0.282	0.992	0.687

cant correlation existed between the impact factor of the journals and the number of annual publications from our country, (p=0.107; r=-0.167).

Although publication rate and average annual publication rates of Turkey-based publications in European journals were lower when compared with non-European journals, the difference was not statistically significant (Table 1).

As a widely accepted opinion among authors, as the "impact factor" of the journals increase the likelihood of acceptance or publication of the manuscript decreases. Our study supports this view. A negative correlation was determined between the increase in the impact factors of toxicology journals and the percentage of publications accepted from our country (p=0.038, r=-0.217). The publication fields in toxicology of Turkey and the world between 1975 and 2017 are shown in Table 2.

As a limitation of our study, in articles written by Turkish and non-Turkish authors in collaboration, the articles were taken into consideration if the responsible author is living in Turkey.

The first condition of taking place among the developed countries in terms of scientific publications is to conduct numerous and high-quality researches. In the last decade, there has been an increase in the number and publication of articles published in the field of toxicology and publication rates in the indexed journals thanks to the scientific contribution of the countries that appreciated the importance of this issue both in the world and in our country (Tables 3, 4).

Bibliographic surveys not only are a good indicator of publication performance of our scientists but also help those with the idea of making publications in the field

Table 2. Number (%) of publication fields of journals of toxicology between the years 1975 and 2016 both in Turkey and in the World

	In Turkey				In the World			
	1975-2016		2007-2016		1975-2016		2007-2016	
	Total number	%	Total number	%	Total number	%	Total number	%
Pharmacology	633	14.91	421	13.38	101788	28.87	41630	28.99
Environmental sciences, ecology	797	18.77	519	16.81	78800	22.35	30122	20.97
Public health, occupational diseases	508	11.97	413	13.38	36873	10.45	13918	9.69
Genetics, hereditary diseases	181	4.26	76	2.46	33335	9.45	9471	6.59
Chemistry	320	7.54	227	7.35	21195	6.01	7943	5.53
Biochemistry, and molecular biology	132	3.13	75	2.43	18284	5.186	6695	4.66
Food technology	419	9.87	340	11.01	17021	4.82	8561	5.96
Biotechnology, and applied microbiology	133	3.13	60	1.94	10715	3.03	4033	2.80
Developmental biology	17	0.40	12	0.38	9853	2.79	2891	2.01
Freshwater biology	31	0.73	17	0.55	8749	2.48	3797	2.64
Neurologic sciences	27	0.63	16	0.51	7616	2.16	2723	1.89
Zoology	57	1.34	28	0.90	6996	1.98	1696	1.18
Endocrinology, and diseases of metabolism	40	0.94	10	0.32	6121	1.73	1107	0.77
Pathology	83	1.95	60	1.94	6037	1.71	2558	1.78
Medical laboratory technology	16	0.37	12	0.38	5532	1.56	2273	1.58
Veterinary sciences	52	1.22	–	–	4632	1.31	–	–
Substance dependence	7	0.16	6	0.19	3467	0.98	1260	0.87
Forensic medicine	10	0.23	7	0.22	3322	0.94	1783	1.24
Reproductive biology	22	0.51	9	0.29	2847	0.80	1394	0.97
İmmunology	35	0.82	24	0.77	2704	0.76	1412	0.98
Water sources	64	1.50	59	1.91	2386	0.67	1053	0.73
Oncology	21	0.49	2	0.06	2193	0.62	557	0.38
Ophthalmology	224	5.27	218	7.06	1274	0.36	571	0.39
Toxicology	4244	100	3086	100	352552	100	143590	100

Table 3. Number of publications in Turkey and in the World between the years 1975–2016 and 2007–2016

Country	1975-2016		1975-2006		2007-2016			
	Total number of publications	Publication rates (%)	Total number of publications	Publication rates (%)	Total number of publications	Publication rates (%)	Average number of citations	h- indices
USA	126325	35.83	83528	39.97	42797	29.98		
Japan	23080	6.54	15444	7.39	7637	5.31	9.41	75
UK	22458	6.37	14459	6.91	7999	5.57	13.04	111
Germany	17038	4.83	8790	4.20	8248	5.74	12.4	101
China	16333	4.63	2653	1.27	13680	9.67		
Canada	15871	4.50	9659	4.62	6211	4.32	13.39	97
French	13800	3.91	7576	3.62	6224	4.33	12.00	87
Italy	13059	3.70	6820	3.26	6239	4.34	12.71	91
India	10754	3.05	5071	2.42	5683	3.95	11.05	70
Holland	10060	2.85	5950	2.84	4110	2.86	10.30	79
Spain	9019	2.55	3598	1.72	5421	3.77	14.31	77
Sweden	8713	2.47	5763	2.75	2694	1.87	9.04	59
Brazil	7362	2.08	2450	1.17	4912	3.42	13.70	75
South Korea	6610	1.87	1697	0.81	4913	3.42	13.01	90
Australia	5882	1.66	3311	1.58	2571	1.79	19.26	117
Switzerland	5401	1.53	2707	1.29	2694	1.87	13.70	75
Belgium	4965	1.40	2553	1.22	2412	1.68	13.08	70
Denmark	4478	1.27	2521	1.20	1957	1.36	17.32	75
Turkey	4244	1.20	1158	0.55	3086	2.14	7.17	52
Taiwan	4056	1.15	1775	0.84	2281	1.58	12.03	55
Poland	3897	1.10	1920	0.91	1977	1.37	9.45	50
Finland	3882	1.10	2695	1.29	1187	0.82	12.47	53
Norway	3578	1.01	2013	0.96	1565	1.09	15.00	61
Scotland	3181	0.90	1872	0.89	1309	0.91	15.13	62
Total	352552	100	208962	100	143590	100	–	–

Table 4. Annual distribution of publications in the field of toxicology within the last 10 years both in Turkey and in the World

	In Turkey		In the World	
	Total number	%	Total number	%
2007	227	5.34	11736	3.32
2008	239	5.63	13355	3.78
2009	215	5.06	14029	3.97
2010	240	5.65	13671	3.87
2011	323	7.61	14656	4.15
2012	298	7.02	14500	4.13
2013	361	8.50	14633	4.15
2014	300	7.06	15414	4.37
2015	337	8.50	14952	4.24
2016	546	12.86	16644	4.72
	4244	100	352552	100

of toxicology. Toxicology continues to be a common area of many disciplines both worldwide and in our country. It is also very difficult to make publications in this multidisciplinary field. Toxicology is a branch of science that attracts interests of experts in many different fields such as forensic experts, pharmacists, anesthetists, chemists, and others. Specialists working in fields of forensic toxicology, emergency toxicology, and analytical toxicology are not aware of each other. In this context, the selection of a journal for submission of manuscripts that are likely to be published in journals of many disciplines has a great importance.

As a result, our study will shed light on the scientists who are constantly working in the field of toxicology and witness the extraordinary toxicological events as well as the scientists in the academic world who want to make sci-

Table 5. Distribution of types of publications in the years between 1975–2016 and 2007–2016 both in Turkey and in the World

	In Turkey				In the World			
	1975-2016		2007-2016		1975-2016		2007-2016	
	Total number	%	Total number	%	Total number	%	Total number	%
Articles	3266	76.95	2268	73.49	243286	69.0	92812	64.6
Case presentations	817	19.25	709	22.97	56843	16.1	33755	23.5
Ahead of publication	100	2.35	35	1.13	26742	7.5	3474	2.41
Review articles	50	1.17	44	1.42	18829	5.3	9218	6.42
Letter to the editor	12	0.28	11	0.35	9283	2.6	3189	2.22
Letters	55	1.29	39	1.26	5265	1.4	2097	1.46
Notes	8	0.18	-	-	2872	0.8	-	-
Total	4244	100	3086	100	352552	100	143590	100

entific contributions to the field of toxicology. From time to time, such publications should be reevaluated and updated to maintain their current status and should be revised based on literature reviews.

Ethics Committee Approval: The study was started after obtaining the approval from Dokuz Eylül University Ethics Committee on Noninvasive Investigations (Decision no. 2017/20-05).

Peer-review: Externally peer-reviewed.

Authorship Contributions: Concept: V.H.; Design: S.B., L.İ.; Data Collection or Processing: S.B., L.İ.; Analysis or Interpretation: V.H.; Literature Search: S.B., V.H.; Writing: S.B.

Conflict of Interest: None declared.

Financial Disclosure: The authors declared that this study received no financial support.

References

1. Ak MZ, Gülmez A. Türkiye'nin uluslararası yayın performansının analizi. Akademik İncelemeler Dergisi 2006;1:22–49.
2. Yılmaz HO, Babazade R, Turan OA, Babazade B, Koyuncu O, Turan A. Scientific Publication Performance of Turkish Anaesthesia Clinics in High Impact Factor International Journals Between 2005 and 2014: A Bibliometric Analysis. Turk J Anaesthesiol Reanim 2017;45:16–25. [CrossRef]
3. Glanville J, Kendrick T, McNally R, Campbell J, Hobbs FD. Research output on primary care in Australia, Canada, Germany, the Netherlands, the United Kingdom, and the United States: bibliometric analysis. BMJ 2011;342:d1028. [CrossRef]
4. Karasozen B, Bayram G, Zan BU. 1997-2006 Türkiye Bilim Göstergeleri Analizi. Türk Kütüphaneciliği 2009;23:4–21.
5. Hirsch JE. An index to quantify an individual's scientific research output. Proc Natl Acad Sci U S A 2005;102:16569–72.
6. Boldt J, Maleck W, Koetter KP. Which countries publish in important anesthesia and critical care journals? Anesth Analg 1999;88:1175–80. [CrossRef]
7. Bould MD, Boet S, Riem N, Kasanda C, Sossou A, Bruppacher HR. National representation in the anaesthesia literature: a bibliometric analysisof highly cited anaesthesia journals. Anaesthesia 2010;65:799–804. [CrossRef]
8. Yılmaz S, Bakış M. A Bibliometric Analysis of Scientific Publications from Turkey and the World in the Field of Anesthesiology. Türkiye Klinikleri J Anesth Reanim 2014;12:143–7.
9. Zyoud SH, Waring WS, Al-Jabi SW, Sweileh WM. Global cocaine intoxication research trends during 1975–2015: a bibliometric analysis of Web of Science publications. Substance Abuse Treatment, Prevention, and Policy 2017;12:6. [CrossRef]
10. Zyoud SH, Al-Jabi SW, Sweileh WM, Awang R, Waring WS. Bibliometric profile of the global scientific research on methanol poisoning (1902-2012). J Occup Med Toxicol 2015;10:17. [CrossRef]
11. Zyoud SH, Al-Jabi SW, Sweileh WM, Waring WS. Scientific research related to calcium channel blockers poisoning: Bibliometric analysis in Scopus, 1968-2012. Hum Exp Toxicol 2015;34:1162–70. [CrossRef]
12. Zyoud SH, Waring WS, Al-Jabi SW, Sweileh WM, Rahhal B, Awang R. Intravenous Lipid Emulsion as an Antidote for the Treatment of Acute Poisoning: A Bibliometric Analysis of Human and Animal Studies. Basic Clin Pharmacol Toxicol 2016;119:512–9. [CrossRef]
13. Zyoud SH, Al-Jabi SW, Sweileh WM, Awang R, Waring WS. Global research productivity of N-acetylcysteine use in paracetamol overdose: A bibliometric analysis (1976-2012). Hum Exp Toxicol 2015;34:1006–16. [CrossRef]
14. Onat A. Status of Turkey's top publications in cardiovascular medicine, revisited after 4 years. Turk Kardiyol Dern Ars 2016;44:320–8. [CrossRef]
15. Özbilgin Ş, Hancı V. Turkish Publications in Science Citation Index and Citation Index-Expanded Indexed Journals in the Field of Anaesthesiology: A Bibliographic Analysis. Turk J Anaesthesiol Reanim 2017;45:26–35. [CrossRef]

Appendix 1. Catalogue information of the journals included in the SCI/SCIE index

Name of the journal	ISSN	Country	SCI/SCIE	First publication (year)	Annual publication rate	Language	IF 2015
1. Alcohol	0741-8329	USA	SCI	1984	6	English	2.440
2. Annals of Occupatıonal Hygiene	0003-4878	England	SCI	1958	9	Eng/Fra	1.743
3. Annual Revıew of Pharmacology and Toxicology	0362-1642	USA	SCI	1989	8	English	14.769
4. Aquatic Toxicology	0166-445x	Netherland	SCI	1981	20	English	3.557
5. Archives of Environmental Contamination and Toxicology	0090-4341	USA	SCI	1973	8	English	2.039
6. Archives of Toxicology	0340-5761	Germany	SCI	1974	12	English	6.637
7. Arhiv Za Hıgıjenu Rada I Toksikologiju-Archives of Industrial Hygiene and Toxicology	0004-1254	Croatia	SCIE	1956	4	English	0.971
8. Basic & Clinical Pharmacology & Toxicology	1742-7835	England	SCI	2004	12	English	3.097
9. Biomarkers	1354-750x	England	SCI	1996	6	English	2.016
10. Birth Defects Research Part A-Clinical and Molecular Teratology	1542-0752	USA	SCI	2003	12	English	1.954
11. Birth Defects Research Part B-Developmental and Reproductıve Toxicology	1542-9733	USA	SCI	2003	6	English	0.965
12. BMC Pharmacology & Toxicology	2050-6511	England	SCIE	2012	0 /op ac	English	2.030
13. Bulletin of Envıronmental Contamination and Toxicology	0007-4861	USA	SCI	1966	12	English	1.191
14.Cardiovascular Toxicology	1530-7905	USA	SCIE	2001	4	English	2.063
15. Cell Biology and Toxicology	0742-2091	Netherland	SCI	1984	6	English	2.842
16. Chemical Research in Toxicology	0893-228x	USA	SCI	1988	12	English	3.025
17.Chemical Speciation and Bioavailabilty	0954-2299	England	SCIE	1981	4	English	0.457
18. Chemico-Biological Interactions	0009-2797	Netherland	SCI	1969	18	English	2.618
19. Clinical Toxicology	1556-3650	USA	SCI	2005	10	English	2.886
20. Comparative Biochemistry and Physiology C-Toxicology & Pharmacology	1532-0456	USA	SCI	2000	12	English	2.546
21. Critcal Revıews In Toxıcology	1040-8444	USA	SCI	1980	10	English	5.422
22. Cutaneois qnd Ocular toxıcology	1556-9527	USA	SCIE	2005	4	English	1.119
23. DNA Repair	1568-7864	Netherland	SCI	2002	12	English	3.929
24.Drug and Chemıcal Toxicology	0148-0545	England	SCI	1977	4	English	1.653
25.Drug Safety	0114-5916	New Zeland	SCI	1990	15	English	3.206
26. Drugs	0012-6667	New Zeland	SCI	1988	24	English	4.883
27. Ecotoxicology	0963-9292	Netherland	SCI	1996	6	English	2.329
28. Ecotoxicology and Environmental Safety	0147-6513	Netherland	SCI	1977	8	English	3.130
29. Environmental and Molecular Mutagenesis	0893-6692	USA	SCI	1987	8	English	3.326
30. Environmental Health Perspectives	0091-6765	USA	SCI	1972	17	English	8.443
31. Environmental Toxicology	1520-4081	USA	SCI	1999	6	English	2.668
32. Environmental Toxicology and Chemistry	0730-7268	USA	SCI	1982	12	English	2.763
33. Environmental Toxicology and Pharmacology	1382-6689	Netherland	SCI	1996	6	English	2.187
34. Experimental and Toxicologic Pathology	0940-2993	Germany	SCI	1992	6	Eng/Fra	1.716
35. Fluoride	0015-4725	New Zeland	SCI	1968	4	English	0.797
36. Food Additives & Contaminants Part B-Surveillance	1939-3210	England	SCI	2008	12	English	1.467

Appendix 1. Cont.

Name of the journal	ISSN	Country	SCI/SCIE	First publication (year)	Annual publication rate	Language	IF 2015
37. Food Additives and Contaminants Part A-Chemistry Analysis Control Exposure & Risk Assessment	1944-0049	England	SCI	2008	12	English	1.878
38. Food and Agricultural Immunology	0954-0105	Germany	SCIE	1992	6	English	1.548
39. Food and Chemical Toxicology	0278-6915	England	SCI	1982	12	English	3.584
40. Forensic Toxicology	1860-8965	Japan	SCIE	2006	2	English	5.756
41. Human & Experimental Toxicology	0960-3271	England	SCI	1990	12	English	1.604
42. Immunopharmacology and Immunotoxicology	0892-3973	USA	SCI	1987	4	English	1.617
43. Industrial Health	0019-8366	Japan	SCIE	1963	4	English	1.057
44. Inflammopharmacology	0925-4692	Switzerland	SCIE	1991	6	English	2.304
45. Inhalation Toxicology	0895-8378	England	SCI	1989	4	English	2.012
46. Integrated Environmental Assessment and Management	1551-3777	USA	SCIE	2005	4	English	1.530
47. International Journal of Toxicology	1091-5818	USA	SCIE	1997	6	English	1.077
48. Journal of Analytical Toxicology	0146-4760	England	SCI	1977	12	English	2.322
49. Journal of Applied Toxicology	0260-437X	England	SCI	1981	6	English	2.727
50. Journal of Biochemical and Molecular Toxicology	1095-6670	USA	SCIE	1998	6	English	2.303
51. Journal of Environmental Pathology Toxicology and Oncology	0731-8898	USA	SCIE	1985	4	English	1.246
52. Journal of Environmental Science and Health Part C-Environmental Carcinogenesis & Ecotoxicology Reviews	1059-0501	USA	SCI	1991	4	English	3.667
53. Journal of Exposure Science and Environmental Epidemiology	1559-0631	USA	SCI	2006	6	English	3.141
54. Journal of Food Safety and Food Quality-Archiv Fur Lebensmittelhygiene	0003-925X	Germany	SCI	1955*	6	English	0.083
55. Journal of Immunotoxicology	1547-691X	England	SCIE	2004	4	English	2.02
56. Journal of Pharmacological and Toxicological Methods	1056-8719	USA	SCIE	1992	6	English	2.147
57. Journal of Toxicologic Pathology	0914-9198	Japan	SCI	1988	4	English	0.848
58. Journal of Toxicological Sciences	0388-1350	Japan	SCIE	1976	4	English	1.224
59. Journal of Toxicology and Environmental Health-Part A-Current Issues	1528-7394	England	SCI	1998	12	English	2.243
60. Journal of Toxicology and Environmental Health-Part B-Critical Reviews	1093-7404	England	SCI	1998	6	English	5.553
61. Journal of Venomous Animals and Toxins Including Tropical Diseases	1678-9199	England	SCIE	2003	4	English	1.488
62. Marıne Envıronmental Research	0141-1136	England	SCI	1978	12	English	2.769
63. Molecular & Cellular Toxicology	1738-642X	South Korea	SCIE	2010	4	English	1.24
64. Mutagenesis	0267-8357	USA	SCI	2005	4	English	1.53
65. Mutation Research-Fundamental and Molecular Mechanisms of Mutagenesıs	0027-5107	Netherland	SCI	1964	12	English	2.581
66. Mutation Research-Genetic Toxicology and Envıronmental Mutagenesis	1383-5718	Netherland	SCI	1997	24	English	2.254
67. Mutation Research-Revıews In Mutatıon Research	1383-5742	Netherland	SCI	1964	12	English	5.261

Appendix 1. Cont.

Name of the journal	ISSN	Country	SCI/SCIE	First publication (year)	Annual publication rate	Language	IF 2015
68. Mycotoxin Research	0178-7888	Germany	SC IE	1985	4	English	2.0
69. Nanotoxicology	1743-5390	England	SCIE	2007	6	English	7.913
70. Neurotoxicology	0161-813X	Netherland	SCI	1979	6	English	2.738
71. Neurotoxicology and Teratology	0892-0362	USA	SCI	1987	6	English	2.488
72. Particle and Fibre Toxicology	1743-8977	England	SCI	2004	Irregular	English	8.649
73. Regulatory Toxicology and Pharmacology	0273-2300	Netherland	SCI	1981	12	English	2.227
74. Reproductive Toxicology	0890-6238	England	SCI	1987	6	English	2.85
75. Reviews of Environmental Contamination and Toxicology	0179-5953	USA	SCI	1987	4	English	2.446
76. Sar and Qsar In Environmental Research	1062-936X	England	SCI	1993	12	English	1.897
77. Therapeutic Drug Monitoring	0163-4356	USA	SCI	1979	6	English	2.099
78. Toxicologic Pathology	0192-6233	USA	SCIE	1978	6	English	2.197
79. Toxicological and Environmental Chemistry	0277-2248	England	SCIE	1981	12	English	0.634
80. Toxicological Sciences	1096-6080	USA	SCI	1998	12	English	3.88
81. Toxicology	0300-483X	Ireland	SCI	1973	24	English	3.817
82. Toxicology and Applied Pharmacology	0041-008X	USA	SCI	1959	24	English	3.847
83. Toxicology and Industrial Health	0748-2337	England	SCIE	1985	12	English	1.688
84. Toxicology In Vıtro	0887-2333	England	SCI	1987	6	English	3.338
85.Toxicology Letters	0378-4274	Netherland	SCI	1977	24	English	3.522
86. Toxicology Mechanisms and Methods	1537-6516	England	SCIE	2002	12	English	1.476
87. Toxicology Research	2045-452X	England	SCIE	2012	6	English	2.161
88. Toxicon	0041-0101	England	SCI	1962	24	English	2.309
89. Toxin Reviews	1556-9543	USA	SCI	2005	4	English	0.857
90. Toxins	2072-6651	Switzerland	SCIE	2009	12	English	3.571
91. World Mycotoxin Journal	1875-0710	Netherland	SCIE	2008	4	English	1.397
92. Xenobiotic	0049-8254	England	SCI	1971	12	English	1.723

IF: Impact Factor.

Appendix 2. Publications from Turkey in journals indexed in toxicology SCI /SCI-E

Name of the Journal	Total number of publications indexed in Web of Science (WoS)/ Pubmed (PM)	Number of Turkey-based publications indexed in Web of Science (WoS)/ Pubmed (PM)	Acceptance rate of Turkey-based publications in Web of Science (WoS)/Pubmed (PM)	Average annual publication rate of Turkey-based articles
1. Alcohol	3250 (WoS)	7	0.00006	0.212
	2713 (PM)	7	0.258	0.212
2. Annals of Occupational Hygiene	2837(WoS)	0	0	0
	3088 (PM)	0	0	0
3. Annual Review of Pharmacology and Toxicology	918 (WoS)	1	0.108	0.035
	1044 (PM)	0	0	0
4. Aquatic Toxicology	4581 (WoS)	11	0.240	0.305
	3504 (PM)	11	0.313	0.305
5. Archives of Environmental Contamination and Toxicology	4805 (WoS)	33	0.686	0.750
	4487 (PM)	33	0.735	0.750
6. Archives of Toxicology	4869 (WoS)	45	0.924	1.046
	4967 (PM)	45	0.905	1.046
7. Arhiv Za Higijenu Rada I Toksikologiju-Archives of Industrial Hygiene and Toxicology	489 (WoS)	30	6.134	0.491
	2010 (PM)	14	0.696	0.229
8. Basic & Clinical Pharmacology & Toxicology	7034 (WoS)	86	1.222	6.61
	1970 (PM)	65	3.299	5
9. Biomarkers	1324 (WoS)	21	1.586	1.000
	1405 (PM)	17	1.209	0.809
10. Birth Defects Research Part A-Clinical and Molecular Teratology	3622 (WoS)	10	0.276	0.714
	1433 (PM)	2	0.139	0.142
11. Birth Defects Research Part B-Developmental and Reproductive Toxicology	561 (WoS)	1	0.178	0.071
	548 (PM)	1	0.182	0.071
12. BMC Pharmacology & Toxicology	119 (WoS)	0	0	0
	285 (PM)	0	0	0
13. Bulletin of Environmental Contamination and Toxicology	10327 (WoS)	269	2.604	5.274
	12595 (PM)	269	2.135	5.274
14. Cardiovascular Toxicology	439 (WoS)	17	3.872	1.06
	602 (PM)	19	3.156	1.18
15. Cell Biology and Toxicology	1282 (WoS)	23	1.794	0.696
	1189 (PM)	23	1.934	0.696
16. Chemical Research In Toxicology	6386 (WoS)	2	0.031	0.689
	5304 (PM)	2	0.377	0.689
17. Chemical Speciation and Bioavailability	493 (WoS)	11	2.231	0.305
18. Chemico-Biological Interactions	5984 (WoS)	31	0.518	0.645
	6830 (PM)	27	0.395	0.562
19. Clinical Toxicology	7190 (WoS)	49	0.681	4.08
	1776 (PM)	44	2.477	3.66
20. Comparative Biochemistry and Physiology C-Toxicology & Pharmacology	2182 (WoS)	19	0.870	1.117
	2053 (PM)	16	0.779	0.941
21. Critical Reviews In Toxicology	752 (WoS)	0	0	0
	853 (PM)	0	0	0
22. Cutaneous and Ocular Toxicology	615 (WoS)	230	37.398	19.16
	680 (PM)	230	33.823	19.16
23. DNA Repair	2258 (WoS)	4	2.170	0.266
	2216	4	2.211	0.266
24. Drug and Chemical Toxicology	1404 (WoS)	100	7.122	2.500
	1499 (PM)	100	6.671	2.500
25. Drug Safety	4946 (WoS)	42	0.848	1.55
	2387 (PM)	2	0.083	0.074

Appendix 2. Cont.

Name of the Journal	Total number of publications indexed in Web of Science (WoS)/ Pubmed (PM)	Number of Turkey-based publications indexed in Web of Science (WoS)/ Pubmed (PM)	Acceptance rate of Turkey-based publications in Web of Science (WoS)/Pubmed (PM)	Average annual publication rate of Turkey-based articles
26. Drugs	6937 (WoS)	6	0.086	0.206
	6780 (PM)	6	0.088	0.206
27. Ecotoxicology	2185 (WoS)	15	0.686	0.714
	2099 (PM)	17	0.809	0.809
28. Ecotoxicology and Environmental Safety	5915 (WoS)	70	1.183	1.75
	6180 (PM)	70	1.132	1.75
29. Environmental and Molecular Mutagenesis	5140 (WoS)	18	0.350	0.600
	2443 (PM)	18	0.736	0.600
30. Environmental Health Perspectives	14008 (WoS)	12	0.856	0.266
	13439 (PM)	12	0.089	0.266
31. Environmental Toxicology	1632 (WoS)	60	3.676	3.333
	1608 (PM)	60	3.731	3.333
32. Environmental Toxicology and Chemistry	9478 (WoS)	10	0.105	0.28
	5970 (PM)	12	0.201	0.342
33. Environmental Toxicology and Pharmacology	2601 (WoS)	105	4.03	5
	2683 (PM)	101	3.76	4.80
34. Experimental and Toxicologic Pathology	1905 (WoS)	70	0.367	2.8
	1910 (PM)	65	3.403	2.6
35. Fluoride	1409 (WoS)	38	2.69	0.775
	Not scanned (PM)			
36. Food Additives & Contaminants Part B-Surveillance	377 (WoS)	35	9.28	3.88
	403 (PM)	35	8.68	3.88
37. Food Additives and Contaminants	1653 (WoS)	34	2.08	3.77
Part A-Chemistry Analysis Control Exposure & Risk Assessment	1835 (PM)	32	1.743	3.555
38. Food and Agricultural Immunology	746 (WoS)	6	0.804	0.24
	Not scanned (PM)			
39. Food and Chemical Toxicology	9046 (WoS)	198	2.18	5.65
	8879 (PM)	193	2.17	5.51
40. Forensic Toxicology	310 (WoS)	1	0.322	0.09
	24 (PM)	0	0	0
41. Human & Experimental Toxicology	2007 (WoS)	272	13.55	10.07
	3227 (PM)	297	9.20	11
42. Immunopharmacology and Immunotoxicology	1753 (WoS)	24	1.36	0.8
	1770 (PM)	24	1.35	0.8
43. Industrial Health	1758 (WoS)	18	1.023	0.333
	1980 (PM)	17	0.858	0.31
44. Inflammopharmacology	169 (WoS)	3	1.77	0.11
	677 (PM)	5	0.73	0.19
45. Inhalation Toxicology	2201 (WoS)	29	1.317	1.03
	1799 (PM)	28	1.55	1
46. Integrated Environmental Assessment and Management	681 (WoS)	0	0	0
	1026 (PM)	0	0	0
47. International Journal of Toxicology	2142 (WoS)	18	0.840	0.9
	1031 (PM)	18	1.74	0.9
48. Journal of Analytical Toxicology	3756 (WoS)	2	0.053	0.05
	3690 (PM)	1	0.027	0.025
49. Journal of Applied Toxicology	2900 (WoS)	38	1.31	1.15
	3085 (PM)	36	1.16	1

Appendix 2. Cont.

Name of the Journal	Total number of publications indexed in Web of Science (WoS)/ Pubmed (PM)	Number of Turkey-based publications indexed in Web of Science (WoS)/ Pubmed (PM)	Acceptance rate of Turkey-based publications in Web of Science (WoS)/Pubmed (PM)	Average annual publication rate of Turkey-based articles
50. Journal of Biochemical and Molecular Toxicology	1002 (WoS)	42	4.19	2.210
	1037 (PM)	46	4.435	2.421
51. Journal of Environmental Pathology Toxicology	602 (WoS)	15	2.49	0.46
and Oncology	1180 (PM)	39	3.305	1.21
52. Journal of Environmental Science and Health	277 (WoS)	0	0	0
Part C-Environmental Carcinogenesis & Ecotoxicology	164 (PM)	0		
Reviews				
53. Journal of Exposure Science and Environmental	886 (WoS)	1	0.112	0.090
Epidemiology	925 (PM)	2	0.216	0.18
54. Journal of Food Safety and Food Quality-Archiv	1328 (WoS)	94	7.07	1.51
Fur Lebensmittelhygıene	Not scanned (PM)	0	0	0
55. Journal of Immunotoxicology	500 (WoS)	5	1	0.38
	575 (PM)	5	0.86	0.38
56. Journal of Pharmacological and Toxicological	2026 (WoS)	5	0.246	0.2
Methods	1585 (PM)	4	0.252	0.16
57. Journal of Toxicologic Pathology	357 (WoS)	0	0	0
	348 (PM)	0		
58. Journal of Toxicological Sciences	932 (WoS)	5	0.536	0.12
	2432 (PM)	7	0.287	0.17
59. Journal of Toxicology and Environmental	2431 (WoS)	25	1.028	1.31
Health-Part A-Current Issues	2663 (PM)	34	1.27	1.78
60. Journal of Toxicology and Environmental	334 (WoS)	0	0	0
Health-Part B-Critical Reviews	325 (PM)	0		
61. Journal of Venomous Animals and Toxins	656 (WoS)	21	3.20	1.5
Including Tropical Diseases	198 (PM)	0	0	0
62. Marine Environmental Research	3764 (WoS)	16	0.425	0.410
	1858 (PM)	9	0.484	0.230
63. Molecular & Cellular Toxicology	1043 (WoS)	0	0	0
	Not scanned (PM)	0		
64. Mutagenesis	3718 (WoS)	15	0.403	1.25
	2449 (PM)	13	0.53	1.08
65. Mutation Research-Fundamental and Molecular	4071 (WoS)	19	0.466	0.354
Mechanisms of Mutagenesis		112	0.564	2.24
66. Mutation Research-Genetic Toxicology and	3445 (WoS)	83	2.409	1.56
Environmental Mutagenesis		112	0.564	2.24
67. Mutation Research-Reviews In Mutation Research	677 (WoS)	0	0	0
		112	0.564	2.24
68. Mycotoxin Research	120 (WoS)	1	0.833	0.03
	1008 (PM)	6	0.595	0.18
69. Nanotoxicology	730 (WoS)	1	0.136	0.10
	662 (PM)	1	0.151	0.10
70. Neurotoxicology	4380 (WoS)	14	0.319	0.36
	3538 (PM)	12	0.339	0.31
71. Neurotoxicology and Teratology	2982 (WoS)	12	0.402	0.40
	2177 (PM)	12	0.597	0.43
72. Particle and Fibre Toxicology	433 (WoS)	0	0	0
	473 (PM)	0		
73. Regulatory Toxicology and Pharmacology	3326 (WoS)	10	0.300	0.27
	3419 (PM)	12	0.350	0.33

Appendix 2. Cont.

Name of the Journal	Total number of publications indexed in Web of Science (WoS)/ Pubmed (PM)	Number of Turkey-based publications indexed in Web of Science (WoS)/ Pubmed (PM)	Acceptance rate of Turkey-based publications in Web of Science (WoS)/Pubmed (PM)	Average annual publication rate of Turkey-based articles
74. Reproductive Toxicology	2797 (WoS)	18	0.659	0.60
	2829 (PM)	17	0.636	0.56
75. Reviews of Environmental Contamination and Toxicology	556 (WoS)	3	0.539	0.10
	510 (PM)	5	0.980	0.166
76. Sar and Qsar In Environmental Research	823 (WoS)	17	2.06	0.70
	877 (PM)	18	2.052	0.75
77. Therapeutic Drug Monitoring	5499 (WoS)	15	0.272	0.39
	3995 (PM)	6	0.150	0.157
78. Toxicologic Pathology	3380 (WoS)	12	0.355	0.307
	3188 (PM)	8	0.250	0.205
79. Toxicological and Environmental Chemistry	1876 (WoS)	55	2.931	1.52
	Taranmıyor	–	0	0
80. Toxicological Sciences	7319 (WoS)	2	0.027	0.10
	5312 (PM)	2	0.037	0.10
81. Toxicology	9172 (WoS)	68	0.741	1.54
	7677 (PM)	50	0.651	1.13
82. Toxicology and Applied Pharmacology	10.831 (WoS)	38	0.350	0.65
	13251 (PM)	10	0.075	0.172
83. Toxicology and Industrial Health	2062 (WoS)	360	17.45	11.25
	2141 (PM)	323	15.08	10.09
84. Toxicology In Vitro	4420 (WoS)	20	0.452	0.66
	4467 (PM)	17	0.380	0.566
85. Toxicology Letters	17.847 (WoS)	450	0.252	15
	8590 (PM)	30	0.349	0.75
86. Toxicology Mechanisms and Methods	631 (WoS)	19	3.011	1.26
	1087 (PM)	42	3.863	2.8
87. Toxicology Research	453 (WoS)	8	0.370	1.60
	24 (PM)	0		
88. Toxicon	8332 (WoS)	18	0.216	0.327
	8015 (PM)	19	0.237	0.345
89. Toxin Reviews	240 (WoS)	10	4.166	0.8330
	Not scanned	0	0	0
90. Toxins	1493 (WoS)	4	0.267	0.50
	1545 (PM)	2	0.129	0.25
91. World Mycotoxin Journal	464 (WoS)	7	1.508	0.777
	Not scanned	0	0	0
92. Xenobiotic	3961 (WoS)	7	0.176	0.152
	4650 (PM)	6	0.129	0.130