



Authorship Characteristics and Scientometric Indicators of Systematic Reviews and Meta-Analyses of Iran on Psychiatry

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Abstract

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Introduction: Systematic review and meta-analysis articles are some of the most important sources for generating evidence in all medical science fields, including psychiatry. This study investigates the authorship characteristics and scientometric indicators of the sources of publishing systematic review and meta-analysis articles of Iran on psychiatry.

Methods: The present study used qualitative content analysis and scientometric methods. The research community included 206 systematic reviews and meta-analysis articles of Iran on psychiatry published in Scopus in 2021. Authorship characteristics, publication sources, and scientometric indicators of the publication sources of these articles were the things that were investigated. Data analysis was done with the help of Excel software and Scopus analysis facilities.

Results: The study revealed that the subject of 10.6% of the articles was depression and depressive disorder. 25.25% of the articles had between one and three authors, and 74.75% had more than three authors. In most articles, an Iranian was responsible author (85.9%) and first author (90.3%). The authors mainly were affiliated with Iran University of Medical Sciences and Tehran University of Medical Sciences. The first authors of articles were mostly affiliated with Shahid Beheshti University of Medical Sciences. The Switzerland journal *Frontiers in Psychiatry* was ranked first among the most productive publishing sources. United Kingdom had the most publications of articles among the countries. Among the sources of publishing articles, the *Lancet Gastroenterology and Hepatology Journal* of United Kingdom had the highest number of scientific indicators.

Conclusion: Depression and depressive disorders accounted for the most significant percentage of the subjects of the articles. More than half of the articles were favorable regarding the number of authors on the research team. The scientometric indicators of the sources of publishing articles were not favorable, and they need more attention from those in charge.

Introduction

Mental disorder is a syndrome characterized by a significant clinical disorder in a person's cognition, emotion regulation, or behavior, reflecting a disorder in psychological, biological, or developmental processes underlying mental

functioning (1). According to the latest statistics provided by the World Health Organization, in 2019, 970 million people worldwide suffered from at least one mental disorder, the most common of which were anxiety and depression. According to the report of



the World Health Organization, people with severe mental illnesses die ten to twenty years earlier than the general population (2). The significant increase in mental disorders and diseases has also brought attention to psychiatry with increasing growth (3). Psychiatry is a branch of medical science that deals with diagnosing, preventing, and treating mental disorders (4, 5). Since psychiatry is considered one of the branches of medical science, with the movement of medical science towards the evidence-based medical paradigm, this scientific field has also taken a step in this direction and, similarly, emphasizes the conscious, explicit, and wise use of the best available evidence in decision-making in case of individual care of patients (6). Systematic review articles and meta-analyses are among the best pieces of evidence due to their ability to combine the findings of scientific research in answering evidence-based questions in solving clinical problems (7) in such a way that these studies are placed at the top of the pyramid of evidence levels (8, 9). Therefore, this type of study has become necessary (10). Systematic review studies are among the studies that use explicit and regular methods and are based on a series of predetermined criteria to gather and combine the available evidence to answer one or more questions (11, 12). In a kind of systematic review study, which is called meta-analysis, statistical methods are used to combine and summarize the findings (13). In psychiatry, as in other medical sciences, efforts have been made to produce these articles, which can be found by searching the databases.

Considering the importance of systematic review and meta-analysis studies in evidence-based medicine, the scientometric review of these articles can produce valuable information regarding their quantitative and qualitative characteristics. Scientometrics provides quantitative, qualitative, and computational approaches to analyze the growth of a specific scientific subject (14) and has been widely used to calculate the scientific productions of any researchers, journals, universities, or academic institutions and countries (15). Journals are essential for publishing the latest scientific materials in specific fields (16). Evaluating the quality of journals in different fields can help researchers make easier

decisions when choosing the right journal to publish their scientific results (17). Scopus is one of the largest citation databases (18) and includes more than 46,000 (until 2023) journal titles of various subjects (19), which uses CiteScore, SJR, and SNIP indices to evaluate the quality of sources for publishing articles (20). Therefore, examining the citation indices of systematic review and meta-analysis publishing sources can provide helpful information about the quality of these sources.

Notably, CiteScore is a metric used to assess the citation impact and ranking of journals. CiteScore metrics provide more robust, timely, and accurate indicator of a journal's impact. Specifically, this index calculates the four-year average of citations received by a journal's articles over the past four years (21). SCImago Journal Rank (SJR) is an index calculated by SCImago and used by Scopus as a criterion for evaluating journals. A metric assesses the prestige of journals, book series, and conference proceedings by considering the citation's subject field, source quality, and reputation (22). Source-Normalized Impact per Paper (SNIP) is also calculated by Scopus, and the citation impact is measured by considering subject differences. It can be used to compare journals in different fields (23).

Another important element in reviewing articles is the authorship characteristics. By examining the features of systematic review articles and meta-analysis authorship, helpful information can be obtained about the patterns in the article writing teams. Researchers' surveys showed that some researchers have investigated the authorship characteristics or scientometric indicators of systematic review and meta-analysis sources (24-30). In addition, some studies have investigated the scientometrics of articles in different psychiatry fields and reported a growing trend (3, 31-33). However, no research investigated the authorship characteristics and scientometric indicators of the sources of publishing systematic review and meta-analysis articles of Iran on psychiatry. Therefore, this research aims to examine the authorship characteristics and citation metrics of publication sources of systematic review and meta-analysis

articles of Iran, categorized under psychiatry, based on reports from the Scopus citation database.

Methods

The present research was conducted using qualitative content analysis and scientometric methods. To reach the research community on January 25, 2023, the keywords Systematic Review and Meta-analysis were first retrieved using TITLE-ABS, AUTHKEY, and INDEXTERMS tags in the Scopus database based on the following formula.

(TITLE-ABS (“systematic review*”) OR AUTHKEY (“systematic review*”) OR INDEXTERMS (“systematic review*”) OR TITLE-ABS (meta-analys*) OR AUTHKEY (meta-analys*) OR INDEXTERMS (meta-analys*) OR TITLE-ABS (“meta analys*”) OR AUTHKEY (“meta analys*”) OR INDEXTERMS (“meta analys*”))

In the next step, the extracted results for Iran, the publication year of 2021, and the following subject categories:

medicine; Biochemistry, Genetics and Molecular Biology; Nursing; Pharmacology, Toxicology and Pharmaceutics; Immunology and Microbiology; Health Professions; Psychology; Dentistry

which are related to the field of medical sciences was limited. Notably, since psychology has a strong relationship with psychiatry, the researchers decided to put it together with the categories of the field of medical sciences. In the next step, the results obtained were limited to review and article regarding the

document type. In the next step, the remaining 2237 articles were subjected to subject content analysis and classification according to the United States National Library of Medicine classification. 206 articles were placed under the WM category of the NLM classification, which is dedicated to psychiatry, forming the current research community. Then, the necessary data regarding the determination of WM subcategories, authorship characteristics (including the frequency of the number of authors, countries, and corresponding organizations of the responsible and first authors of articles), and the sources of publishing articles (including the sources that have published the most number of articles, the country of journal publishers, Scientometric indices of journals including SJR, Citescore, SNIP) were extracted and transferred to checklists designed in Excel for further analysis.

Results

As seen in Table 1, among the subcategories related to the WM category in the NLM classification, the subcategory of WM 171/5 is depression and depressive disorder, with thirty articles (10.6%), having the largest share of articles. Then, the subcategory of WM172 is the thematic area of anxiety. Anxiety disorders are in second place with twenty-four articles (8.5%), and the subcategory of WM31 of social, economic, and environmental factors in mental diseases are in third place with nineteen articles (6.7%).

Table 1. Frequency distribution of articles based on subcategories of WM category

Rank	WM Schedule	Subject area	Article	
			Number	Percentage (of 206 articles)
1	WM 171.5	Depression. Depressive disorder	30	10.6
2	WM 172	Anxiety. Anxiety disorders	24	8.5
3	WM 31	Socioeconomic and environmental factors in mental illness	19	6.7
4	WM 402	Drug therapy	19	6.7
5	WM 188	Sleep disorders and associated conditions	13	4.6
6	WM 295	Smoking	12	4.2



Table 1. Frequency distribution of articles based on subcategories ...(continued)

Rank	WM Schedule	Subject area	Article	
			Number	Percentage (of 206 articles)
7	WM 172.4	Psychological stres	9	3.2
8	WM 307.M5	Mental disorders	9	3.2
9	WM 167	Psychological aspects of survivors and survivorship	8	2.8
10	WM 282	Narcotic-related disorders	8	2.8
11	WM 101	Mental health. Psychological well-being	7	2.5
12	WM 460.5. S3	Sex	7	2.5
13	WM 145	Psychological tests	6	2.1
14	WM 172.5	Trauma and stressor related disorders	6	2.1
15	WM 200	Psychotic disorders	6	2.1
16	WM 21	Mental health careers and professions. Types of practice. Peer review. Ethics	6	2.1
17	WM 290	Tobacco use. Tobacco use disorder	5	1.8
18	WM 140	Mental disorders. Behavioral symptoms	4	1.4
19	WM 169	Attention deficit and disruptive behavior disorders	4	1.4
20	WM 170	Neurotic disorders	4	1.4
21	WM 171	Affective symptoms. Mood disorders	4	1.4
22	WM 176	Obsessive-compulsive disorder. Compulsive behavior. Obsessive behavior	4	1.4
23	WM 207	Psychotic affective disorders	4	1.4
24	WM 425.5.C6	Cognitive behavioral therapy	4	1.4
25	WM 450.5. A7	Aromatherapy	4	1.4
26	WM 165	Self-injurious behavior Dangerous behavior	3	1.1
27	WM 18.2	Educational materials	3	1.1
28	WM 203	Schizophreni	3	1.1
29	WM 307.S3	Sexual behavior	3	1.1
30	WM 600	Aggression. Violence	3	1.1
31	WM 620	Psychology of sexual behavior. Sexual health	3	1.1
32	Other subclassifications	other subject areas	39	18.93

As seen in Table 2, among the reviewed articles, most of the articles (ninety-one articles equal to 44.17%) have between four and six authors, and

then sixty-three articles (30.58%) have more than six authors. Only three articles (1.46%) have one author.



Table 2. Distribution of the number of articles by authors

Authors	Number	Percentage
Single-author	3	1.46
Two authors	16	7.77
Three authors	33	16.02
Between four and six authors	91	44.17
More than six authors	63	30.58
Total Articles	206	100

The surveys related to the country of origin of the responsible authors and the first authors of the reviewed articles showed that Iran has the highest prevalence in 177 articles (85.9%) among the countries of origin of the responsible authors of the articles and in 186 articles (90.3%) among the countries of the first authors of the articles.

Table 3 shows the organizations that have published more than two articles in the investigated field as the corresponding organization of the responsible authors.

Iran University of Medical Sciences and Tehran University of Medical Sciences, each with 14 articles (79.6%), as the respective organizations of responsible authors, have contributed the most to the production of reviewed articles. After that, Shahid Beheshti University of Medical Sciences, with 12 articles (5.82%), and Baqiyatallah University of Medical Sciences, with 11 articles (5.33%) are ranked second and third respectively. Among these, eight articles have more than one responsible author and affiliated organization.

Table 3. Affiliated organizations of the corresponding authors of the articles

Rank	Organization title	Number	Percentage
1	Iran University of Medical Sciences	14	6.79
2	Tehran University of Medical Sciences	14	6.79
3	Shahid Beheshti University of Medical Sciences	12	5.82
4	Baqiyatallah University of Medical Sciences	11	5.33
5	Shiraz University of Medical Sciences	10	4.85
6	Tabriz University of Medical Sciences	9	4.36
7	Mazandaran University of Medical Sciences	8	3.88
8	Isfahan University of Medical Sciences	7	3.39
9	Kermanshah University of Medical Sciences	7	3.39
10	Mashhad University of Medical Sciences	5	2.42
11	Hamedan University of Medical Sciences	4	1.94
12	Arak University of Medical Sciences	3	1.45
13	Bushehr University of Medical Sciences	3	1.45
14	Islamic Azad University, Tehran	3	1.45
15	Kerman University of Medical Sciences	3	1.45
16	Qazvin University of Medical Sciences	3	1.45
17	Shahrood University of Medical Sciences	3	1.45

Table 4 illustrates the organizations that have contributed the most (more than two articles) to the production of the reviewed articles as the affiliated organizations of the first authors. According to the data in this table, Shahid Beheshti University of Medical Sciences has contributed the most to the

production of reviewed articles, with 19 articles (9.22%) being the affiliated organization of the first authors. After that, Tehran University of Medical Sciences took second place with 18 articles (8.73%), and Iran University of Medical Sciences took the third place with 15 articles (7.28%).

Table 4. Affiliated organizations of the first authors of the articles

Rank	Organization title	Number	Percentage
1	Shahid Beheshti University of Medical Sciences	19	9.22
2	Tehran University of Medical Sciences	18	8.73
3	Iran University of Medical Sciences	15	7.28
4	Baqiyatallah University of Medical Sciences	11	5.33
5	Shiraz University of Medical Sciences	10	4.85
6	Tabriz University of Medical Sciences	9	4.36
7	Isfahan University of Medical Sciences	9	4.36
8	Kermanshah University of Medical Sciences	8	3.88
9	Mashhad University of Medical Sciences	8	3.88
10	Ilam University of Medical Sciences	7	3.39
11	Kerman University of Medical Sciences	5	2.42
12	Mazandaran University of Medical Sciences	5	2.42
13	Zahedan University of Medical Sciences	4	1.94
14	Alborz University of Medical Sciences	3	1.45
15	Islamic Azad University, Tehran	3	1.45
16	Kurdistan University of Medical Sciences	3	1.45
17	Qazvin University of Medical Sciences	3	1.45
18	Shahrood University of Medical Sciences	3	1.45

Table 5 shows that among the 151 journals that published 206 articles, *Frontiers in Psychiatry Journal* from Switzerland published the most with six articles (2.9%). After that, the *Medical Journal of the Islamic Republic of Iran* ranks second with five articles

(2.4%). The third rank of top-producing journals is jointly assigned to the *Iranian Journal of Psychiatry and Behavioral Sciences*, *American Journal of Addictive Diseases*, and *Netherland's Sleep Medicine Journal*, with four (1.9%) articles each.

Table 5. Distribution of sources of publication of articles

Rank	Source	Publisher country	Number	Percentage
1	Frontiers in Psychiatry	Switzerland	6	2.9
2	Medical Journal of the Islamic Republic of Iran	Iran	5	2.4
3	Iranian Journal of Psychiatry and Behavioral Sciences	Iran	4	1.9
4	Journal of Addictive Diseases	United States	4	1.9
5	Sleep Medicine	Netherlands	4	1.9
6	Archives of Iranian Medicine	Iran	3	1.5
7	Complementary Therapies in Medicine	United States	3	1.5
8	International Journal of Preventive Medicine	India	3	1.5
9	Iranian Journal of Psychiatry	Iran	3	1.5
10	Journal of Affective Disorders	Netherlands	3	1.5
11	Journal of Education and Health Promotion	India	3	1.5
12	Obstetrics and Gynecology Science	South Korea	3	1.5
13	Phytotherapy Research	United Kingdom	3	1.5
14	other Sources		159	77.2
15	Total		206	100

As seen in Table 6, among the 151 published sources of the reviewed articles, United Kingdom, with thirty-nine (25.8%) published sources and forty-six (22.3%) published articles, has the highest frequency of the corresponding country. After that, the United States, with thirty-three sources of publication (21.9%) and forty-two (20.4%) articles, is in second place, and Iran is in third place with twenty-six sources of publication (17.2%) and forty-two (20.4%) articles.

In order to check the scientometric indicators (SJR, Citescore, SNIP) of the publication sources of the reviewed articles and specify the top publication

sources based on each of the scientometric indicators, Figures 1 to 3 and Tables 7 to 9 have been drawn and presented. Importantly, for each index, the top five sources of publication of articles are considered.

Figure 1 shows that the distribution of SJR values is skewed to the right. Most journals have low SJR values. According to this diagram, the highest frequency of data is in the range of 0 to 0.4, and then the highest frequency is in the range of 0.4 to 0.8 and 0.8 to 1. Notably, the average SJR index of the published sources of the reviewed articles was calculated as 0.76.

Table 6. Distribution of the countries of the publishers of the sources of publication of articles

Rank	Country	Number of sources	Percentage of 151 sources	Number of articles	Percentage of 206 articles
1	United Kingdom	39	25.8	46	22.3
2	United States	33	21.9	42	20.4
3	Iran	26	17.2	42	20.4
4	Netherlands	10	6.6	15	7.3
5	India	8	5.3	12	5.8
6	Switzerland	7	4.6	14	6.8
7	France	4	2.6	5	2.42
8	Germany	3	2	5	2.42
9	South Korea	3	2	6	3
10	Egypt	2	1.3	2	1
11	Hungary	2	1.3	2	1
12	Ireland	2	1.3	2	1
13	United Arab Emirates	2	1.3	3	1.4
14	Brazil	1	0.7	1	0.5
15	Canada	1	0.7	1	0.5
16	German-British	1	0.7	1	0.5
17	Italy	1	0.7	1	0.5
18	Pakistan	1	0.7	1	0.5
19	Poland	1	0.7	1	0.5
20	Romania	1	0.7	1	0.5
21	Serbia	1	0.7	1	0.5
22	Venezuela	1	0.7	1	0.5
23	Austria	1	0.7	1	0.5
24	Total	151	100	206	100

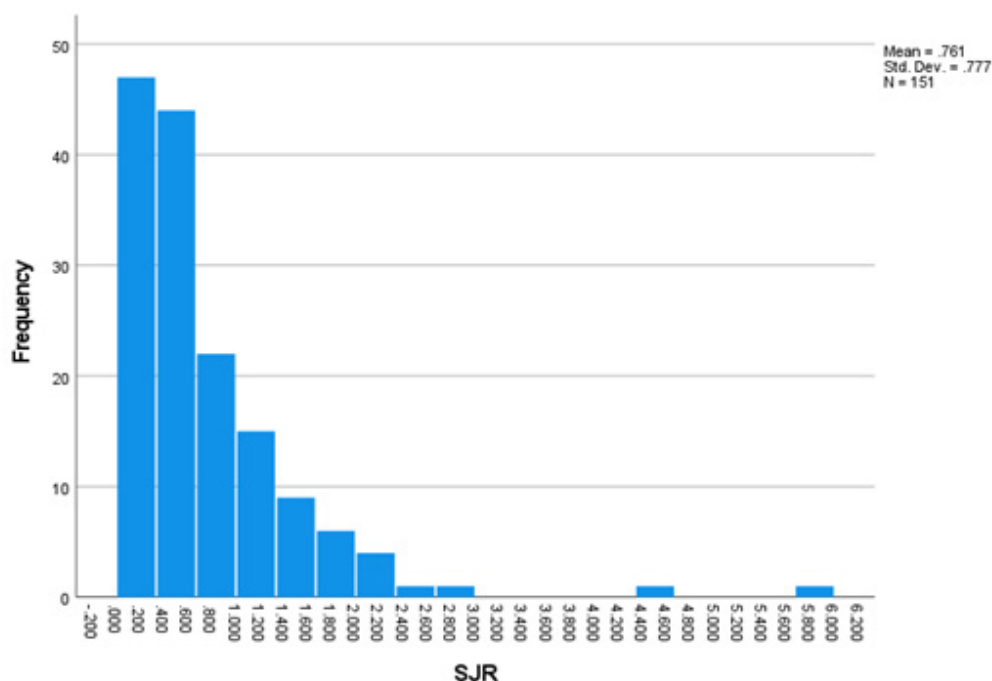


Figure 1. Histogram chart of SJR index of publication sources

As can be seen in Table 7, the Lancet Gastroenterology and Hepatology Journal, belonging to United Kingdom (5.927), has the highest SJR index.

After that, eClinicalMedicine Journal of United Kingdom (4.657) took the second place, and the American Omega Journal (2.741) took the third place.

Table 7. Top five sources of publication of articles based on the SJR index

Rank	Source	Publisher country	SJR
1	The Lancet Gastroenterology and Hepatology	United Kingdom	5.927
2	eClinicalMedicine	United Kingdom	4.657
3	Omega (United States)	United States	2.741
4	Neuroscience and Biobehavioral Reviews	United Kingdom	2.66
5	Journal of Neuroinflammation	United Kingdom	2.286

According to Figure 2, the distribution of Citescore values is skewed to the right, and most journals have low Citescore values. According to this diagram, the highest frequency of data is in the range of 2 to 4,

and then the highest frequency is in the range of 0 to 2 and 4 to 6. Notably, the average Citescore indices of the published sources of the reviewed articles were calculated as 4.05.

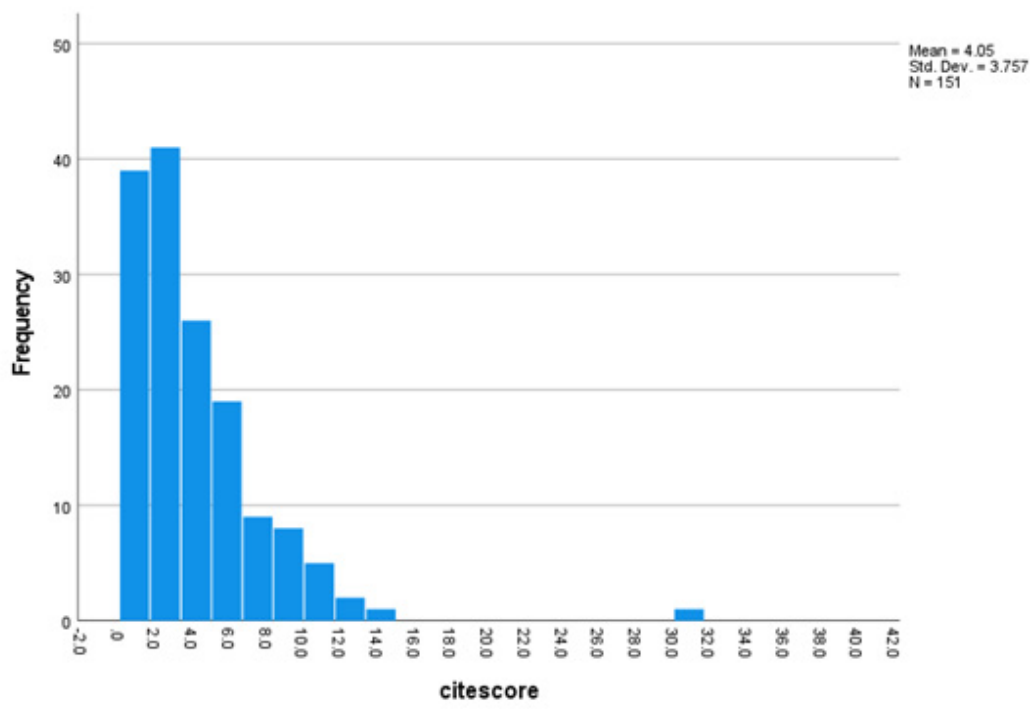


Figure 2. Histogram chart of the Citescore index of sources of publication of articles

As can be seen in Table 8, The Lancet Gastroenterology and Hepatology Journal, which belongs to United Kingdom (31), has the highest Citescore index. After that, the

United Kingdom Journal of Neuroinflammation (4.13) and United Kingdom Neuroscience and Biobehavioral Reviews (12.8) took second and third place.

Table 8. Top five sources of articles published based on the Citescore index

Rank	Source	Publisher country	Citescore
1	The Lancet Gastroenterology and Hepatology	United Kingdom	31
2	Journal of Neuroinflammation	United Kingdom	13.4
3	Neuroscience and Biobehavioral Reviews	United Kingdom	12.8
4	Journal of Telemedicine and Telecare	United Kingdom	12
5	Biomedicine and Pharmacotherapy	France	11.6

Figure 3 shows that the distribution of SNIP values is skewed to the right. Most journals have low SNIP values. According to this diagram, the highest frequency of data is in the range of 0.5 to 1, and

then the highest frequency is in the range of 1 to 1.5 and 0 to 0.5. Notably, the average SNIP index of the published sources of the reviewed articles was calculated as 1.05.

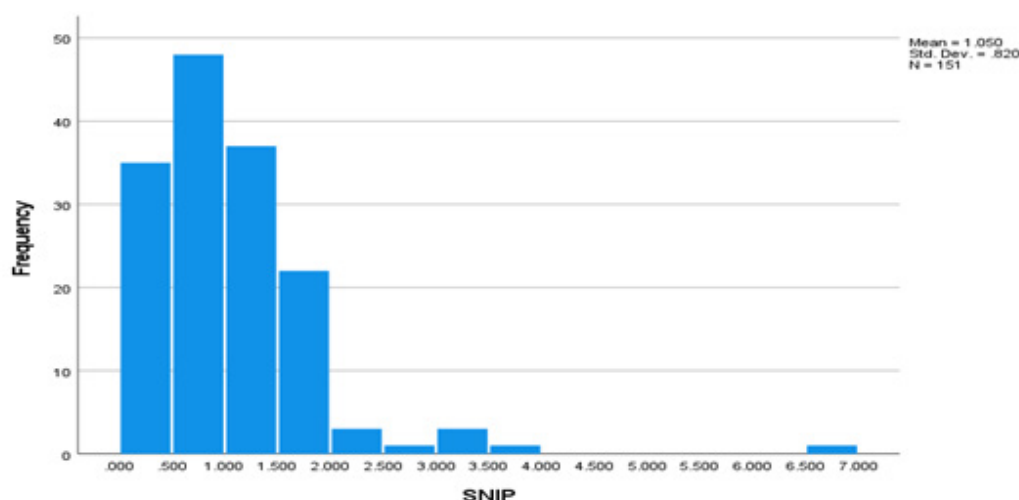


Figure 3. Histogram chart of SNIP index of publication sources

Based on the findings presented in Table 9, The Lancet Gastroenterology and Hepatology Journal (6/804) has the highest SNIP index. After that,

eClinicalMedicine Journal of United Kingdom (3.945) is in second place, and the American Omega Journal (117.3) is in third place.

Table 9. Top five sources of publication of articles based on the SNIP index

Rank	Source	Publisher country	SNIP
1	The Lancet Gastroenterology and Hepatology	United Kingdom	6.804
2	eClinicalMedicine	United Kingdom	3.945
3	Omega	United States	3.117
4	Current Problems in Cardiology	United States	3.091
5	Journal of Telemedicine and Telecare	United Kingdom	3.085

Discussion

The current study examined the subject and authorship characteristics of 206 systematic review and meta-analysis articles in psychiatry in Iran that were published in the Scopus database in 2021, as well as the scientometric indicators of 151 sources of publication of these articles.

Findings regarding the subject areas of the reviewed articles based on the subcategories of the WM category of the NLM classification indicated that depression and depressive disorder accounted for the largest share of articles. According to the latest reports from the World Health Organization, 3.8% of the population, including 5% of adults (4% among men and 6% among women) and 5.7% of

adults over sixty, have experienced depression, and approximately 208 million people worldwide have depression (34). In Iran, depression is considered one of the causes of disability, and one out of every eight adults is struggling with major depressive disorder (35). These statistics may explain why the subject area of depression and depressive disorder, ranks first among the thematic areas of the examined articles.

The findings of the research in terms of the number of authors of the articles showed that despite the emphasis of the Cochrane Manual on the compilation of systematic review articles by a team of authors and the inadmissibility of single-author systematic review articles (36), 1,46% of the reviewed articles

had only one author. In fact, 9,23% of the reviewed articles had one or two authors, which can raise the possibility of bias, at least in the stage of screening the search results, considering that at least three authors are required to screen the search results (37). Further investigations showed that 16.02% of the articles had three authors and 44.17% had between three and six authors, which, according to the recommendation of the Cochrane manuscript (36), indicates a favorable situation in the teamwork of editing these articles. 30.58% of the articles had more than six authors. Commenting on the optimal number of authors for the research team is a difficult task. It is not explicitly emphasized in the sources, but what is certain and emphasized in the Cochrane manuscript is that the team of authors must be able to respond to all the specialized and methodological needs of the research (36). Just as a few authors can indicate the danger of Ghost authorship, many authors can also raise the possibility of Gift or Guest authorship (38). Of course, to comment on whether the reviewed articles, whether they had a few authors or those that had a large number of writing teams, suffer from such Unethical Authorship Practices or not, the findings of the current research are not enough, and further qualitative investigations about the logical origin of each author of these articles is needed, which seems to be a difficult task.

The study of the country of the responsible and first authors of the reviewed articles showed that Iran had taken first place in this regard, and in more than 85% of the articles, an Iranian was the responsible author and the first author. The obtained findings are not far from what was expected considering the society investigated in the current research. However, it seems that Iranian researchers tend to bear the main responsibility in their research. As in Shahbadaghi et al.'s research, the country of origin of the responsible and first author and more than 91% of the systematic review and meta-analysis articles was Iran (27). In Hatami Yadegari's research, Iran and the United States ranked first and second, respectively, with the highest frequency of responsible authors and the first systematic review and meta-analysis articles of Iran in medical sciences. The third place of the country of the responsible authors was assigned to

Canada, and the first authors were assigned to China (25). These findings are somewhat in line with the findings of the present study.

The findings regarding the productive organizations belonging to the corresponding and first authors of the articles indicated that Iran and Tehran Universities of Medical Sciences were in the first rank of the productive organizations belonging to the responsible authors. Additionally, Shahid Beheshti University of Medical Sciences took the first rank as the most productive organization for the first authors of the articles. It may be possible to infer from these findings that the older age, the number of academic staff, the existence of numerous affiliated research centers and hospitals, and more scientific, educational, and research facilities in Iran, Tehran and Shahid Beheshti Universities of Medical Sciences compared to other universities. The universities and organizations under investigation are the reasons why these universities are placed in the mentioned positions. It should be noted that according to the latest report of the Science and Technology System of the Medical Sciences universities of the country, Tehran, Shahid Beheshti, and Iran Medical Sciences universities ranked first to third among the medical sciences universities across the country in terms of publications, citations, and other scientific indicators (18). Based on the findings of Hatami Yadgari's research, Tehran University of Medical Sciences took the first place among the authors' most productive organizations, and Shahid Beheshti and Iran Medical Sciences universities were ranked second and third, which may be said to be in line with the findings of the current research to some extent (25).

The findings regarding the prolific publication sources indicated that the journal *Frontiers in Psychiatry* of Switzerland has taken the first place. After that, the Iranian Journal of Medical Journal of the Islamic Republic of Iran ranked second, and the Iranian Journal of Psychiatry and Behavioral Sciences of Iran, American Journal of Addictive Diseases, and Sleep Medicine of the Netherlands ranked third. Based on the findings, 13 of the investigated publication sources have published three to seven current research articles, of which

four belong to Iran and the rest to other countries. In the 2019 study by Karambakhsh and Salesi, who examined the scientometry of Iran's scientific productions in the field of military psychology and psychiatry based on the Scopus database, the Journal of Military Medicine ranked first with the publication of fifty-six articles, the Archives of Iranian Medicine Journal ranked second with the publication of seven articles, and Iranian Journal of Psychiatry and Behavioral Sciences and Iranian Journal of Psychiatry, each with five articles, took the third place among the most productive publishing sources. The first-ranked journal in the present study was not the source of publication of any article in the mentioned study. However, the second-ranked journal in the present study was in fourth place among the most productive publication sources by publishing three articles, and the two third-ranked research journals, Karambakhsh & Salesi, each by publishing four articles, took third place among the sources of publication in the present study (39). Perhaps the difference in the obtained findings can be considered a result of the difference in the society and the year investigated in the two studies.

According to SCImago reports, in 2021, among the four sources of Iran's emissions, two are in the second quartile range, and two are in the third quartile range. Furthermore, out of the remaining nine emission sources related to other countries, five cases are in the first quartile range, one is in the second quartile range, and three are in the third quartile range. The review of the quality of these journals showed that despite indexing many journals from Iran in the Scopus database, Iranian researchers tend to publish their articles in more reliable journals in this database. These findings highlight the need to formulate programs to improve the quality of Iranian psychiatry journals to be introduced internationally by research policymakers.

The findings regarding the countries of the publishers of the published sources of the reviewed articles indicated that the United Kingdom took the first place, followed by the United States and Iran in the second and third places, respectively. According to the findings, only twenty-six of the 151 publication sources examined in this research belong to Iran.

According to researchers' reviews, journals that have received a scientific research degree from the Medical Publications Commission are considered valid (40). According to the latest report of the Information Bank of the Iranian Medical Sciences Publications Commission, among the 480 scientific research publications in Iran, 13 are active in psychiatry (41). Nevertheless, researchers' studies have shown that the inappropriate interaction of some Persian-language scientific journals in various fields with researchers has made them reluctant to submit articles to these journals. One of the most critical problems in this regard is the long judging process of some Persian journals and the problem of communicating with journals officials, who usually respond late to emails or messages sent through the journals' website, and the difficulty of making phone calls in essential cases, so sometimes it seems that the phone numbers registered on the journals website are only for display. Additionally, non-observance of professional ethics on the part of some officials and editors, which is a problem in various ways, such as not adhering to updating the authors' page after sending articles, correspondence with other authors instead of correspondence with the responsible author; the publication of study being sometimes based on the relationship and without considering the rigid criteria they have set themselves, and receiving the fee for reviewing the article before judging so that some journals have found a commercial approach (42). undoubtedly, the reason why researchers do not select Iranian journals in the field of study needs more investigation.

The findings regarding the status of scientometric indicators of the sources of published articles under review indicated that the average index of SJR, Citescore, and SNIP of the sources of published articles under review were calculated as 0.76, 4.05 and 1.05, respectively, and most journals have low values in the scientific metrics. According to SCImago reports, in 2021, the highest SJR index in the field of psychiatry and mental health is 12.99, which belongs to World Psychiatry SCImago (43). In addition, according to Scopus reports, in 2021, the highest Citescore and SNIP indices in psychiatry and mental health were 53.2 and 10.44, respectively,



belonging to World Psychiatry SCImago (44). Comparison of average scientometric indices (SJR, CiteScore, SNIP) of the sources of publication of the articles examined in the present study is far from the maximum threshold of these indices in SCImago and Scopus, and further interpretation of these findings requires more research.

The findings regarding the top five sources of publication of articles based on SJR, Citescore, and SNIP scientometric indices indicated that The Lancet Gastroenterology and Hepatology journal of United kingdom took the first rank of the examined scientometric indices, which in the present study had only one has published an article. Five authors wrote this article; the responsible author was from United kingdom, and the first author was from Italy. eClinical Medicine Journal of United kingdom took the second rank in SJR and SNIP indexes, and this Journal was the source of publication of only one article in the current research, which was written with the collaboration of more than six authors, the responsible author of which was from Taiwan and the first author of which was from Iran. The third rank of the SJR and SNIP indices belonged to the American Journal of Omega. In this research, this journal has published only one article, which was prepared with the cooperation of more than six authors, and the first and responsible author was from Iran. By examining the findings related to this research question, it was found that among the top five journals of scientometric indicators examined, no journal belongs to Iran, which may require more attention from those in charge.

Conclusion

The thematic analysis of the reviewed articles showed that the central theme of a large part of the reviewed articles was depression and depressive disorders, a problem that is one of the causes of disability in adults in Iran. In addition, the participation of three to six authors for more than half of the articles indicates a favorable state of team collaboration among researchers, consistent with the recommendations of the Cochrane manual. The position of Iran as the country of origin of

the responsible and first authors of these articles, according to the studied society, brought predictable results. On the other hand, Tehran, Shahid Beheshti, and Iran Universities of Medical Sciences were identified as the most productive scientific centers in this field, which can indicate the appropriate research platform and scientific capabilities in these organizations. In general, only four of the 13 sources of high-production publications belonged to Iran, the rest to other countries, and the first place to the journal Frontiers in Psychiatry of Switzerland. The first rank of the countries of the publishers of the sources of publishing articles was also assigned to United kingdom, while Iran was in third place. Finally, the average SJR index, Citescore, and SNIP of the published sources of the reviewed articles, with the highest number of these indicators in Scopus and SCImago in 2021, did not indicate a favorable situation. Furthermore, no journal belonging to Iran was listed among the top five publication sources based on the mentioned scientometric indicators. These findings are points to consider, which require more attention and planning to improve the country's scientific and research level in psychiatry.

Declaration

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Conflicts of Interests

There is no conflict of interest in this study.

Ethical Statement

The current research has been approved by the Ethics Committee of Shahid Beheshti University of Medical Sciences, Tehran, Iran (Ethics Code: IR.SBMU.RETECH.REC.1402.108).

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Authors' contributions

All authors participated in all phases of this study.

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