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# Iranian medical English journals: reference analysis based on journal selection criteria in WOS, PubMed and Scopus

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# Iranian medical English journals: reference analysis based on journal selection criteria in WOS, PubMed, and Scopus

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## Abstract

**Objective:** The references are an important component of citation analysis. In this study, it is aimed to determine the reference analysis of Iranian Medical English Journals (IMEJ) based on WOS, Scopus and PubMed journal selection criteria.

**Methods:** This study is a descriptive quantitative analysis which deals with the last issues of 52 numbers of IMEJ which haven't been indexed in WOS, Scopus, and PubMed. The data were collected observing the journals data provider websites and then entered into a checklist tool. MS Excel software was used for data analysis.

**Results:** About 88.5% of journals had their own reference style. In 60.9% of journals, the amount of failure in the reference style was less than 10%. The average of self-citations to authors and journal articles, were 3.6% and 1.2%, respectively. The average percentage of foreign references was 83.6%. Most of the references were old and only 2.9% of references were done in the study year. Journals with 87.2%, had received most of the references.

**Conclusion:** References old date, imbalance the format of cited resources, and high distances between the rate of Iranian and foreign references, were the shortcomings of cited references in IMEJ.

**Keywords:** references, journals, analysis, WOS, Scopus, PubMed

## Introduction

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Journals are the basic source of current information and their major role as the main formal information channels is to disseminate qualified scientific information and publish scientific articles (Sandesh & Wahrekar, 2017; Shokraneh, Ilghami, Masoomi, & Amanollahi, 2012). These unique information channels intend to further the progress of science by reporting new research. In order to represent journals to the international scientific community, they have to be indexed in citation databases (Jafari & Ostovari, 2009).

Indexing of a journal is a reflection of its quality and indexed journals are considered to be of higher scientific quality as compared to those not indexed. Furthermore, journal indexing in citation databases can be utilized for evaluation of journals and increasing participation in producing science in the world (Cronin & Meho, 2008).

Thomson Reuter's Web Of Science was the first citation database and Elsevier's Scopus is more recently international citation index database (Choi, Kim, Jung, & Choi, 2013). PubMed comprised 27 million citations for Biomedical literature at the United States National Library of Medicine up to present ("PubMed Help," Updated 2017 May 25). WOS, Scopus, and PubMed are considered as the most reputable international citation indexes in science and also in medical sciences (Abdekhoda, 2010; Huh, 2016). To be included in these databases explains the significance of journals. Each of these databases has criteria to accept journals to be indexed in them. Usually, the most common criteria are the observance of standards of the database by journals on publishing time, continuity and compliance with international language in the title, abstract and keywords (Khanchamani, 2005).

Every citation index database uses different factors to evaluate journals in order to index them. It should be noted that journal evaluation is an ongoing process which no one factor is considered in isolation in it, but by combination and interrelation of data, database's editors are able to determine the journal's overall strength and weakness (Testa, 2017). These factors are publishing standards (peer review, ethical publishing practice, publishing format, timeliness, international editorial conventions, full-text English), editorial content, international focus and citation analysis. One of the most important criteria that are mentioned in all of these databases is citation analysis (or journal standing in Scopus and PubMed) ("PubMed Help," Updated 2017 May 25; "Scopus content coverage guide," January 2016; Testa, 2017).

Citation analysis is used to determine the importance and influence of a journal in the surrounding literature of its subject. Citation analysis takes place on at least two levels. Total citation counts to determine the integration of the journal into the surrounding literature over its entire publication history and impact factor determines the recent effect of the journal on the literature of its subject (Testa, 2017).

Adriaanse and Rensleigh defined that a citation can be a written reference to a specific work or a part of a document by a particular author that identifies document's location in different works (Adriaanse & Rensleigh, 2013). Indeed, citation analysis as a research method of bibliometrics investigates the relationship between cited and citing documents (Kim, So, & Choi, 2014).

The accuracy of references provides validity to the authors and journals and its major benefit is establishing the relationships between published works and establishing connections within the world's body of research (Mohta & Mohta, 2003; Testa, 2017). On the other hand, incorrect references, particularly in medical publications, continues big problems like decreasing the credibility of the publication and make difficult locating the cited references for further researches (Mohta & Mohta, 2003). Consequently improving the quality of the references in all kind of journals appears to be challenging task but the authors and the editorial board have to try to improve them to obtain international standards.

According to Iranian Ministry of Health in 2013, more than half of Iranian medical journals have been indexed in these citation databases. From 116 Iranian Medical English Journals (IMEJ), only 8 journals have been indexed in all of these databases, 52 journals are not indexed in any of these databases ("Iisna," 2013).

The main aim of this study is to carry out a quantitative assessment of references cited in IMEJ based on WOS, Scopus and PubMed journal selection criteria. We hope our findings will be as a help guide study to improve in quality of the references cited in IMEJ.

### **Literature review**

Surveying scientific publications compliance criteria in order to standardized journals to achieve citation index databases, requirements, is an important case which leads to numerous studies both in Iran and foreign countries.

Mohta and Mohta (2003) checked the accuracy of references in Indian journal of surgery according to 6 items and they concluded this journal need to improve the quality of references(Mohta & Mohta, 2003).

Pierz and his colleagues (2006) examined 24 Spanish ophthalmology journals compliance with Web Of Science's selection criteria and found that reviewed journals met the selection criteria in references(Pierz, Lopez-Cozar, & Contreras, 2006).

Razmgir(2007) indicated that the rate of self- citation in her study's reviewed journals was too low and most of the citations were from foreign researchers(Razmgir, 2007).

Abdekhoda and Noruzi(2011) observed that the number of indexed Iranian journals in Scopus and the number of citations and self-citations to these articles have been grown during 2005- 2009, significantly(Abdekhoda & Noruzi, 2011).

Roales Nieto and O'Neill (2012) based on three selected databases (Web Of Science, Scopus, and Google Scholar) standards, investigated the growth of one Spanish psychiatric journal during one decade and found that this journal had a perfect compliance with selected databases and citation standards(Roales Nieto & O'Neill, 2012).

Choi and his colleagues (2013) reasoned that global citation databases have limitations in coverage and depth of non-English language journals. Thus they investigated the trend of constructing national citation databases, to introduce Korea Science Citation Database (KSCD). They studied citation analysis at the journal, article, reference and researcher affiliation level based on KSCD(Choi et al., 2013).

According to Haughom and his colleagues (2014), their study provided a baseline analysis of the study designs of OITE recommended references. They observed that the majority of the cited journal references in their study were published within 10 years of the test date(Haughom et al., 2014).

In a recent study by Krampen and his colleagues (2015), they conducted a different study to analyze the frequencies of which different publication types and publication genres are cited by psychology publications from German-speaking countries. They concluded that citation analyses, which are limited to journal papers, have neglected very high portions of references that are cited in scientific publications(Krampen, Weiland, & Wiesenhütter, 2015).

Danişman and his colleagues (2016) determined the reference analysis of scientific journal published in educational sciences field in Turkey and their impact factors. In their study the ratio of self-citing was high (Şahin Danişman et al., 2016a).

### Methods

This study is a descriptive quantitative analysis which deals with the last issues of 52 numbers of Iranian Medical English Journals which haven't been indexed in "Web of Science", "Scopus", and "PubMed" to the end of 2014. 465 articles and 11235 references of these issues of journals are surveyed as a population of this study. Data is collected using researcher-developed checklists whose validity were confirmed by faculty members. First checklist, allocated to the publication information, including title, year, volume and issue, publication period, publisher characteristics, web address, email and subject field. The second one allocated to self-citing rate, cited resource format, the year of study in cited resources and identifying if cited resources are Iranian or foreign one. Microsoft Office Excel was used to analyze data.

Since the main population of this research is non-indexed English medical journals in three selected databases, this study checked up the citation analysis compliance of 11235 references cited in 465 articles of these 52 journals. Average calculated for evaluation of related values to articles and references. Then the average percentage was analyzed.

### Findings

In this article, the term Journal Scientific Rank means the total number of citation receives by the journal, self-citation, and citation to journal articles, authors, and editorial boards.

88.4% of reviewed journals were published in 2014, the rest were published in 2013. 78.8% of them have been issued quarterly. 76.9% were academic institutions and 23.1% were dependent to research centers.

The correctness of references and use of valid reference style are essential elements in the journal evaluation. 88.4% of studied journals used Vancouver reference style with a few changes and 11.5% didn't use any style.

Table1. Average number of references in articles and last issue of journals

No. of references	No. of articles	Percentage of articles	The average of references	No. of journals	Percentage of journals
0	6	1.3	10-14.9	2	3.9
2-9	30	6.5	15-19.9	9	17.3
10-19	137	29.5	20-24.9	14	26.9
20-29	166	35.7	25-29.9	17	32.7
30-39	83	17.8	30-34.9	9	17.3

40-49	25	5.4	35-39.9	1	1.9
50-69	15	3.2			
70-114	3	0.6			
Total	465	100	Total	52	100
Minimum	0		Minimum	13	
Maximum	114		Maximum	38.8	
Average	26.6		Average	25.3	
Standard deviation	12.8		Standard deviation	5.3	

Table 1 shows the average number of references in articles and the average number of references in the last issue of journals. Based on provided data, 1.3% of examined journals did not have any references. 65.2% of examined articles had the numerical range between 10 to 29 references. The average number of references in 59.6% of examined journals were among 20 to 30.

Table2. The frequency distribution percentage and average percent of non-conformity with the relevant reference style in examined articles and journals

Percentage of non-conformity in articles	No. of articles	Percentage of articles	Average percent of non-conformity in journals	No. of journals	Percentage of journals
0	166	40.2	0	4	8.7
1-24.9	192	46.5	1-9.9	24	52.2
25-49.9	25	6.1	10-19.9	10	21.7
50-74.9	13	3.1	20-29.9	4	8.7
75-99.9	8	1.9	30-39.9	1	2.2
100	9	2.2	40-49.9	1	2.2
			50-59.9	2	4.3
Total	413	100	Total	46	100
Average	12.4		Minimum	0	
Standard deviation	20		Maximum	53.4	
			Average	12	
			Standard deviation	12.7	

As mentioned before, 88.4% out of 52 reviewed journals have used their own reference style. Table 2 shows the compliances of 46 last issues of reviewed journals' articles with the relevant reference style. 40.2% of articles with their own reference style, matched completely with recommended reference style in journals.

In 2.2% of articles, no references followed the recommended reference style. 8.7% of journals, all references completely were appropriate to recommended reference style.

Table3. The frequency distribution percentage and average percent of citations without self-citation on all citations in studied articles and journals

Percentage of citations without self-citation to the whole citations in the articles	No. of articles	Percentage of articles	Percentage of citations without self-citation to the whole citations in the journals	No. of journals	Percentage of journals
0	1	0.2	Less than 90	4	7.7
1-50	3	0.6	90-92.9	5	9.6
50-74.9	14	3.1	93-95.9	20	38.5
75-99.9	169	36.8	96-98.9	13	25
100	272	59.3	99-100	10	19.2
Total	459	100	Sum	52	100
Minimum	25		Minimum	72.4	
Maximum	100		Maximum	100	
Average	95.1		Average	95.1	
standard deviation	12.7		standard deviation	4.5	

According to table 3, there is no self-citation in 59.3% of articles and 5.8% of journals. Low standard deviation indicates little difference between the average percent of citations without self-citation on all citations listed in the journals.

Tables 4 and 5 represent the average of self-citation in reviewed articles and journals, respectively.

Table4. The frequency distribution of percentage of self-citation on the authors and reviewed journal's articles

Self-citation on Percentage of self-citation	Article author		reviewed articles	
	No. of articles	Percentage of articles	No. of articles	Percentage of articles
0	291	63.4	407	88.7
1-9.9	112	24.4	35	7.7
10-19.9	37	8.1	10	2.2
20-29.9	12	2.6	2	0.4
30-39.9	2	0.4	2	0.4
40-49.9	2	0.4	1	0.2
More than 50	3	0.7	2	0.4
Total	459	100	459	100
Minimum	0		0	
Maximum	65		60	
average	3.6		1.2	
standard deviation	5.4		2.9	

As mentioned in table 4, self-citations were so low in reviewed articles.

Table5. The frequency distribution of average percent of self-citation on authors and reviewed journals

Self-citation on	Article author		Studied journal's articles	
	No. of	Percentage	No. of	Percentage



Self-citation average percent	journals	of journals	journals	of journals
0	3	5.8	27	51.9
0.1-1.9	15	28.8	18	34.6
2-3.9	12	23.1	2	3.9
4-5.9	13	25	1	1.9
6-7.9	5	9.6	2	3.9
8-9.9	1	1.9	1	1.9
10-11.9	3	5.8	0	0
More than 12	0	0	1	1.9
Total	52	100	52	100
Minimum	0		0	
Maximum	11.5		17	
average	3.6		1.2	
standard deviation	2.8		2.9	

More than half of reviewed journals have no citation to journals' articles. In 34.6% of journals, the average of citations to reviewed journal articles was between 0.1 to 1.9%.

Table 6. the frequency distribution of percentage of Iranian and foreign references in the last issue of journals' article

Percentage of .....references on total articles references	Iranian references		Foreign references	
	No. of articles	Percentage of articles	No. of articles	Percentage of articles
0	125	27.2	1	0.2

1-24.9	224	48.8	8	1.7
25-49.9	70	15.3	31	6.8
50-74.9	31	6.8	70	15.3
75-99.9	8	1.7	224	48.8
100	1	0.2	125	27.2
Total	459	100	459	100
Average	16.4		83.6	
standard deviation	19.2		19.2	

In citation examination, the rate and percentage of Iranian and foreign references have been studied. Statistical analysis revealed a significant difference in this case so the rate of using foreign resources was significantly more than Iranian resources. Only in one article from Journal of Health Scope, the percentage of foreign reference on total references was zero and in 8.7% of articles, the percentage of foreign reference on total references were under 50%. According to Table 6, in 76% of the articles, the percentage of foreign references on total stated references, was more than 75%. Table 7 indicated that the highest percentage of foreign references in 71.1% of reviewed journals was among 80 to 99%.

Table7. The frequency distribution of the average percent of foreign references on total references in the last issue of journals

Average percent of articles' foreign references	No. of journals	Percentage of journals
Less than 60	1	1.9
60-69.9	6	11.6
70-79.9	8	15.4
80-89.9	19	36.5
90-99.9	18	34.6
	52	100
Minimum	49.4	

Maximum	99
Average	84.1
standard deviation	10.5

Table8. The frequency distribution of articles in and before the year of study reviewed articles

reference date reference percent	The year of study		2 years before study		More than 2 years before study	
	No. of articles	Percentage of articles	No. of articles	Percentage of articles	No. of articles	Percentage of articles
0	346	75.4	98	21.4	2	0.4
1-24.9	103	22.5	288	62.8	4	0.9
25-49.9	7	1.5	64	13.9	10	2.2
50-74.9	1	0.2	7	1.5	67	14.6
75-99.9	1	0.2	2	0.4	285	62.1
100	1	0.2	0	0	91	19.8
Total	459	100	459	100	459	100
Minimum	0		0		0	
Maximum	100		93.3		100	
average	2.7		12.7		84.6	
standard deviation	5.5		10.7		15.9	

As table 8 shows, about 50 to 100% of references in 96.5% of reviewed journals' articles were related to more than two years before the study. In an article from Journal of "Biomedical physics & Engineering", all of the references related to the year of study. In an article from "International Journal of Pediatrics", 3.3% of references related to two years before the year of study and only 6.7% of references related to the year of study.

Table9. The frequency distribution and the average percent of stated references in journals based on study year and before the study year in journals

references date  reference average percent	Year of study		2years before study		More than 2years before study	
	No. of journals	Percentage of journals	No. of journals	Percentage of journals	No. of journals	Percentage of journals
0	12	23.1	0	0	0	0
0.1-9.9	38	73.1	13	25	0	0
10-24.9	2	3.8	37	71.2	0	0
25-49.9	0	0	2	3.8	0	0
50-74.9	0	0	0	0	4	7.7
75-89.9	0	0	0	0	39	75
90-99.9	0	0	0	0	9	17.3
Total	52	100	52	100	52	100
Minimum	0		2.5		66.2	
Maximum	23.8		27.7		97.5	
Average	2.9		12.7		84.6	
standard deviation	3.9		5		6.6	

Table 9 states that in all of the reviewed journals, 50% of references related to more than two years before the study. Also in all reviewed journals, the average percent of references related to the year of study was less than 25%. In this table, the lowest standard deviation belongs to the average percent of references related to the year of the study in reviewed journals and represents a small difference in journals in the mentioned area.

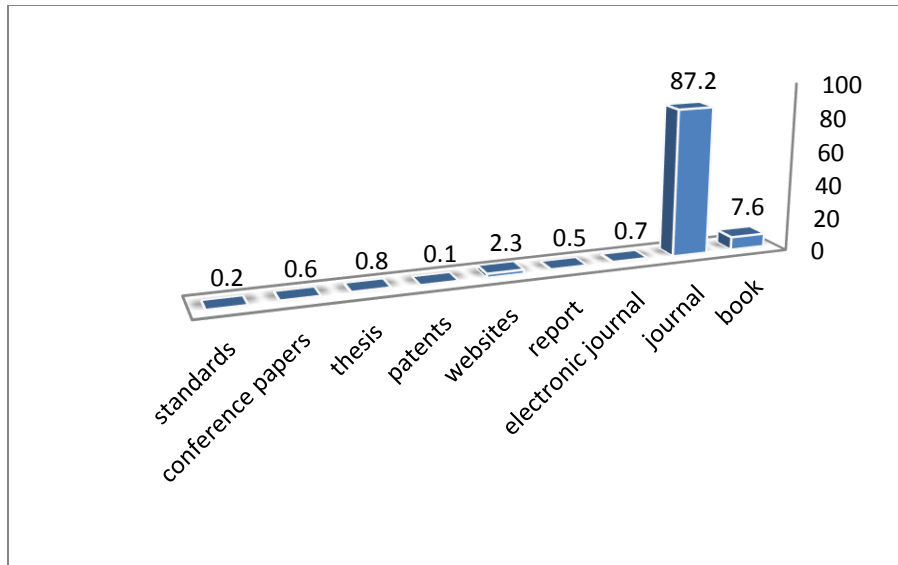


Figure1. The frequency distribution of the type of resources in the last issue of studied journals

Types of cited resources are as guides for the important parts of research and in addition, refer the readers to similar and related works. Figure 1 and Tables 10 & 11, investigated the rate of citations to different types of resources in examined articles and journals. Figure 1 shows that most of the references in the reviewed articles are journals. According to the results obtained from reviewing references of articles in the last issue of reviewed journals, among 11235 references; the different format of references were 87.2% journals, 7.6% books, 2.3% websites, 0.8% thesis, 0.7% electronic journals, 0.6% conference papers, 0.5% reports, 0.2% standards and 0.1% patents.

Table10. The frequency distribution of the different formats of references cited in the reviewed articles on total references cited in reviewed articles

Format of cited references reference% on all of the articles' references	Book		Journal		Electronic journal		Reports		Websites		Patents		Thesis		Conference paper		Standards	
	No. of article	Percent age of articles	No. of article	Percent age of articles	No. of articles	Percent age of articles	No. of articles	Percent age of articles	No. of articles	Percent age of articles	No. of article	Percent age of articles	No. of article	Percent age of articles	No. of articles	Percent age of articles	No. of articles	Percent age of articles
0	195	42.5	3	0.7	399	86.9	423	92.2	362	78.9	455	99.1	406	88.4	426	92.8	443	96.5
1-24.9	233	50.8	8	1.7	58	12.7	36	7.8	88	19.2	4	0.9	53	11.6	33	7.2	16	3.5
25-49.9	18	3.9	7	1.5	2	0.4	0	0	8	1.7	0	0	0	0	0	0	0	0
50-74.9	6	1.3	51	11.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
75-99.9	7	1.5	261	56.9	0	0	0	0	1	0.2	0	0	0	0	0	0	0	0
100	0	0	129	28.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	459	100	459	100	459	100	459	100	459	100	459	100	459	100	459	100	459	100
Minimum	0		0		0		0		0		0		0		0		0	
Maximum	92.8		100		25		13.3		81.2		23.1		17.4		33.3		23.1	
average	8		86.8		0.9		0.4		2.1		0.1		0.7		0.6		0.2	
standard deviation	12.7		17.1		1.9		1.3		6.4		1.2		2.5		2.6		1.5	

Based on data from table 10, 28.1% of reviewed articles, the format of all references were journals. In more than 75% of reviewed articles, there were no citations to reports, patents, thesis, standards and conference papers.

Table 11. The frequency distribution of the different formats of references in the reviewed journals on total cited references

Format of references Average percent of reference on all of the references	Book		Journal		Electronic journal		Reports		Websites		Patents		Thesis		Conference paper		Standards	
	No. of journals	Percent age of journal	No. of journals	Percent age of journal	No. of journals	Percent age of journals	No. of journals	Percent age of journals	No. of journals	Percent age of journals	No. of journals	Percent age of journal	No. of journals	Percent age of journal	No. of journals	Percent age of journals	No. of journals	Percent age of journals
0	0	0	0	0	16	30.8	28	53.8	15	28.8	48	92.3	24	46.2	32	61.5	40	76.9
0.1-24.9	50	96.2	0	0	36	69.2	24	46.2	37	71.2	4	7.7	28	53.8	20	38.5	12	23.1
25-49.9	1	1.9	2	3.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0
50-74.9	1	1.9	2	3.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0
75-100	0	0	48	92.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	52	100	52	100	52	100	52	100	52	100	52	100	52	100	52	100	52	100
Minimum	0.7		26.9		0		0		0		0		0		0		0	
Maximum	50.1		98.7		4.9		3.7		21.2		2.3		5		8.3		4.2	
average	8.1		86.8		0.9		0.4		2		0.1		0.7		0.7		0.2	
standard deviation	9.2		12.8		1.2		0.7		3.4		0.3		1.1		1.5		0.6	

In 92.4% of reviewed journals, citation to journals was among 75% to 100%. 7.7% of reviewed journals, the average citation to patents were among 0.1% to 2.3%.

## Discussion

One of the most important parts of the research papers is citations. Citation expresses research process and also researchers' information seeking behavior (Testa, 2017). Citation analysis is an instrument in the evaluation process for selecting journals by citation databases (Gómez-Núñez, Vargas-Quesada, de Moya-Anegón, & Glänzel, 2011). In this article, we carried out a quantitative assessment of references cited in 52 number of IMEJ which haven't been indexed in WOS, Scopus, and PubMed.

Razmgir's study showed, more than 80% of reviewed journals haven't been followed the recommended reference style (Razmgir, 2007). In Pierz and his colleagues' study, more than 80% of studied journals, corresponds with the presented reference style (Pierz et al., 2006). In our study, the number of journals which recommended a reference style and the number of articles which followed the reference style were significantly high. About 90% of studied journals have been used a reference style and the rate of observation of style was in a desirable compliance. This indicated that if the reference styles represented in journals have been provided accordance to international valid standards, authors will observe it properly. Regarding the compliance of articles, can be a major step to improve and standardize the journal citations.

"Self-citations, defined as citations from publications authored or co-authored by the author in question" (Chirici, 2012). In this study, self-citation or particularly self-reference rate was very low and self-citations to journals articles were lower than self-citations to authors themselves. In Razmgir's study too, the rate of self-citations to articles was very low and the rate of self-citations to the articles was lower than self-citations to the author. Razmgir has stated that the low rate of self-citations in Iranian journals returns to lack of specialization activity of researchers and journals (Razmgir, 2007). Şahin Danişman and his colleagues showed the number of self-citations for each studied journal separately and in total, they resulted that the number of self-citations were high and was more than 25%. They think the authors and the journals chose this way to get high impact factor in some impact factor evaluations where self-citing is also acceptable (Şahin Danişman et al., 2016b). In our study, the average rate of self-citations in studied journals was low, so doesn't conflict with selection criteria in mentioned databases.

Although prior studies state the average rate of references to foreign papers has been decreased (Razmgir, 2007), results showed most of the given references were to foreign papers and Iranian papers owned a very small percentage. Overall, the average percent of foreign references in this study to previous studies, dropped somewhat close to balance, but there is still a big difference between the percentage of foreign and Iranian references.

About the date of references, findings showed that an average of 90% of the references, were old and related to more than two years before the study and as in previous studies, continued their upward trend to old years (Razmgir, 2007). In Haughom and his colleagues study 7.8% of



references were published in the year or the year before the study, while the rest of the references were published more than 2 years before the year of study (Haughom et al., 2014). Lack of timeliness articles can be one of the reasons of increasing references to the old years because the time between receiving and accepting articles in investigated journals in this study showed that the average time between receiving and publishing were over than 6.5 months and this long period can cause studies and citations to become old.

Findings related to the formats of cited references in studied journal articles showed that about 90% of the cited references were journals. In comparison with previous studies, indicates that journals have always accounted for the largest number of citations. Journal articles comprised 70% of the entire references, and books, conference proceedings, reports, and theses followed in order among the formats of references in Choi and his colleagues' study (Choi et al., 2013). Journal article references comprise 75% of the entire references in Haughom and others (Haughom et al., 2014). Since different formats of resources in studied articles have been considered low, need to create a relative balance in the use of resources through policies and rules of the journals, to be felt.

## **Conclusion**

In this study, reviewed journals have been in compliance with the databases' criteria in citation analysis standards. It can be said that compared with similar studies in previous years, progress has been shown. The most important weakness in IMEJ was the imbalance between the number of Iranian and foreign references, the time of cited references, the imbalance between the formats of cited references. Citing to various resources should be relatively balanced, and in order to improve the standards of studied journals reliable reference styles must be provided and these rules must be fully respected and applied by the authors, as well as references used by authors must be in the study year or close to study year. In this regard, the official boards and referees must be on early detection and shorten the time between receiving date and Publishing an article.

Vancouver reference style that is partially provided in most examined journals, is one of the most prestigious reference styles used worldwide. Providing clear explanations and detailed guidelines on this style for writers as well as a full review of recorded references, by the referees can lead to better conformity and more accurate reference style and therefore a positive rating to examined journals, to be followed. Management, editorial board and executive committee of journals can be more clearly formulate their rules in order to comply. Also, allocation of appropriate funds, create the necessary facilities and training by the authorities, providing by Ministry of Health and Medical Education are one of the proposed solutions in order of promotion and improvement in studied journals, with the aim of indexing in the world's reliable databases.

Finally, it should be noted that despite the importance of references, one should not forget that the standardization of references, is only a small step toward the aim of indexing journals in citation databases. Overall, the results obtained from this study can help to studied journals to

understand their shortcomings in the field of references and try to overcome it. We hope our study will be as a baseline for future studies to evaluate the improvement of the cited references in the journals' articles and this forgotten item can attract more attention to improve and be more efficient.

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