

## **The Usage of Social Media Platforms by Iranian Medical Journals**

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### **Abstract**

Currently, medical journals are utilizing social media to attract an audience and publish their articles in various ways, which has been significantly enhanced. The present study aimed to investigate the status of Iranian medical journals in social networks. This research is a cross-sectional study. The statistical population included all Iranian medical journals indexed in the Web of Science (WoS) or Scopus databases (182 titles). The website of scientific journals was checked regarding the possibility of sharing articles. LinkedIn, Academia, Facebook, Twitter, and Instagram were investigated concerning the journals' profiles and their features. Data analysis was conducted using descriptive statistics in Excel software. On the websites of medical journals, the most likely platforms to share articles are provided for Twitter and Facebook social media in 144 journals (79.12%) and LinkedIn in 142 journals (78.02%). Among the 182 medical journals, 38 journals have an active account on LinkedIn (20.78%), 31 journals are on Academia (17.03%), 19 are on Twitter (10.43%), 15 are on Facebook (8.24%), and only five are on Instagram (2.74%). No journal had an active account on all the mentioned social networks, and only two journals had an active account on four of the social networks. Iranian medical journals do not have significant activity in social networks. Therefore, medical journals should pay more attention to using, creating accounts, sharing, posting, and attracting followers in these networks. The removal of filtering on some social networks by the Iranian government can lead to increased use of these networks in scientific environments, such as the offices of journals and universities.

**Keywords:** Social Media Platforms, Medical journals, Social Networks, Twitter, Facebook, Instagram, Academia, LinkedIn, Iran.

### **Introduction**

Using social networks to communicate with others daily has become commonplace among people in society (Zheng, Aung, Erdt, Peng, Sesagiri Raamkumar, & Theng, 2018). Social networks are also popular among professionals, health organizations, hospitals, and physicians as supportive communication tools (Kamel Boulos & Anderson, 2014). Preferably, integrating social media into the daily lives of physicians, researchers, medical educators, journal publishers, and patients facilitates better communication between healthcare providers and patients (Fox, Barry, & Colbert, 2016). Social networks can expand scientific communication by shortening communication paths and removing the physical world's limitations. In this regard, researchers can utilize a variety of public (such as Facebook, Twitter, and Instagram) and scientific or academic (such as LinkedIn, ResearchGate, and Academia) social media platforms to stay informed about the latest research. Other benefits of social media include increased visibility, downloads, and citations of the articles, the ability to create an online resume, introduce researchers' activities, connect with other people and researchers, the ability to create and participate in online discussions, publish research faster than traditional processes, and collaborative scientific productions (Khalili, 2016; Nikkar, Alijani & Ghazizadeh Khalifeh Mahaleh, 2017; Trueger, 2018). Simultaneously with the increase in using social networks among the scientific community and professionals, medical journals can also use these social networks to attract and expand the audience, disseminate articles and discuss them, share medical findings with a wide range of people in addition to traditional readers, and publish the research results in non-academic environments (Breeze, Page, Smith & Langford, 2018; Fox et al., 2016; Khalili, 2016; Nikkar et al., 2017; Trueger, 2018). The active presence of journals in social networks has several advantages, including increased visibility, citation rates, impact factors, and altmetrics (Rahimi, Danesh, & Latifi, 2024; Fox et al., 2016). However, despite journals' interest in attracting audiences through social networks and the benefits of their presence in these networks, there are still many challenges in this context (Amaral & Santos, 2020; Trueger, 2018). Possibly, these journals are aware of the importance of social media; however, the gap between this awareness and the actual use of these networks needs to be addressed (Thelwall & Kousha, 2013). Therefore, information about the extent of journals' use of social networks is required to plan and develop policies related to addressing this gap, leveraging opportunities, and overcoming challenges and obstacles in this area. In this regard, Fox et al. stated that Twitter and Facebook were used in most medical journals, but over time, other platforms will likely gain popularity for these journals (Fox et al., 2016).

Investigations reveal that studies have been conducted in this regard in journals of various areas (Alotaibi et al., 2016; Breeze et al., 2018; Kamel Boulos & Anderson, 2014; Nason et al., 2015; Raamkumar, Erdt, Vijayakumar, Rasmussen & Theng, 2018; Valerio-Ureña, Herrera-Murillo & Madero-Gómez, 2020; Zheng et al., 2018). A study (Vara, 2021) also determined that out of 1,060 journals published by the Ministry of Science, Research and Technology, only 18% of the journals' websites had links to share articles on three scientific social networks (ResearchGate, LinkedIn, and Academia). However, no research has been found on the use of social media in Iranian medical journals. Accordingly, the present study aims to investigate the presence of Iranian medical journals in selected social networks. The research findings can provide the necessary data for informed decision-making and policy-making, leading to a more effective presence of journals in social networks.

### **Objectives**

The primary purpose of the current study is to determine the status of Iranian medical

journals indexed in Web of Science (WoS) or Scopus on selected social networks, including LinkedIn, Facebook, Twitter, Academia, and Instagram. The objectives include:

- Determining the number of websites of Iranian medical journals with shared articles in various social networks
- Determining the number of journals' user accounts on social networks
- Determining the features of journals' user accounts in social networks.

### Literature Review

In recent years, studies have been conducted regarding the presence of journals in social networks. Cerón-Perdomo, Mancipe-García, Fernández-Ávila, Muñoz-Velandia, and García (2020) conducted a study investigating the relationship between the presence of physical medicine and rehabilitation journals in social networks and the scientific journal ranking (SJR). The results demonstrated that scientific journals of physical medicine and rehabilitation presented in social networks have superior quality criteria (Valerio-Ureña et al., 2020). Zheng et al. (2018) investigated the use of social media in scientific journals. The results indicated that metrics, such as the number of Facebook posts and tweets related to scientific journals on Twitter, had increased significantly over the last decade. Alotaibi et al. (2016) conducted a study investigating the relationship between social media criteria and scientific indicators of neurosurgery journals. The results indicated that the values of SJR and H-index were significantly higher in journals with social media accounts.

Furthermore, a significant correlation was found between the number of tweets and SJR. Nason et al. (2015) studied the use of Twitter in urology journals. The results showed that many leading urology journals had used Twitter to highlight significant articles of interest to readers. Raamkumar et al. (2018) investigated the presence of humanities and social science journals on Twitter by analyzing interaction and communication patterns. The results showed that the presence of social science and humanities journals on Twitter among these disciplines still needs to be considered. Besides, sharing research articles and retweeting were predominantly unobserved. Kamel Boulos and Anderson (2014) investigate the use of Facebook and Twitter by medical journals. The research results revealed that the number of Twitter followers was less than that of Facebook during the research period in all the reviewed journals. They concluded that, due to the increasing influence of Facebook and other social media platforms among Internet users, this potential should be investigated and utilized by editors-in-chief and publishers. Golchin, Isfandyari-Moghaddam, Mirhosseini, Famil Rohani, and Zarei (2022) investigated the presence of Iranian journal articles indexed in Scopus in social media from 2010 to 2018. The results of their study showed that articles published in Iranian journals indexed in Scopus in the medical sciences area had relatively suitable altmetric coverage and were shared more widely on social media than in other fields. As a result, they receive more attention from the users of these media. Shenavar and Doulani (2020) investigated the impact of social media on Iranian English articles indexed in the WoS using the Altmetric bookmarklet. They showed that only 417 (9%) of articles have been posted on social media at least once in 2018. Mendeley and Twitter were the most essential social media regarding altmetric.com.

The literature review reveals that research into the presence and use of journals in social networks began in 2015, with most studies focusing on the presence of journals in two primary

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social networks: Twitter and Facebook. The literature shows that a relatively small percentage of journals have accounts in social networks, and this value is below 30% for journals in various areas (Alotaibi et al., 2016; Cerón-Perdomo et al., 2020; Kamel Boulos & Anderson, 2014; Quinlan, Collins, Nason & Dempsey, 2016; Raamkumar et al., 2018; Zheng et al., 2018).

#### Materials and Methods

**Research Method:** The present study employed a cross-sectional design, with data collection conducted in July 2022.

**Research population:** The statistical population consisted of all Iranian journals approved by the Ministry of Health, which were indexed in the WoS or Scopus databases. At the time of data collection, there were 168 titles in Scopus and 90 titles in WoS. A total of 182 journal titles were investigated in this study.

**Data collection:** The list of all Iranian medical journals indexed in the WoS, along with their indexing history, was extracted using the JCR and Master Journal List (<https://mjl.clarivate.com/home>) and the Iranian Research Information System (<https://irisweb.ir/index.php?gsmp=2-en>). The list of all Iranian journals in the field of medicine indexed in Scopus was also extracted using the Iranian Research Information System in the source section of the Scopus database. LinkedIn and Academia are scientific social networks, and Facebook, Twitter, and Instagram are public networks that were checked for the profiles of the mentioned journals. The reason for choosing these social networks is that it is possible to create profiles for journals on them. The titles of the journals were searched in all the mentioned networks, and the member journals of each network were separately registered. The features of journals' accounts in the investigated networks, such as the number of Followers, Posts, and Likes, were extracted and transferred to the relevant checklists.

Notably, these features can be dissimilar due to the structure of different social networks. The data were analyzed using Excel and descriptive statistics, including the mean.

#### Results

The findings revealed that among 182 Iranian medical journals, 168 are indexed in Scopus, and 90 are indexed in WoS. Of these, 75 journals are jointly indexed in both WoS and Scopus. Among the 90 journals indexed in the WoS, 24 are on the Science Citation Index (SCI), and 66 are on the Emerging Sources Citation Index (ESCI).

The Academia, Facebook, Twitter, LinkedIn, and Instagram) Share options on the journal's website allow for sharing the article on social networks. On the websites of 144 titles (79.12%) of Iranian journals, it is possible to share articles on Facebook and Twitter. LinkedIn ranks second with 142 (78.02%) titles. The last rank regarding the possibility of sharing articles was given to Instagram, with 38 journal titles (20.78%). (Table 1)

*Table 1*

*Social networks with the possibility of sharing on the websites of Iranian medical journals*

| Rank  | Social Network | The Number of Journals | Percent |
|-------|----------------|------------------------|---------|
| 1     | Facebook       | 144                    | 79.12   |
| 2     | Tweeter        | 144                    | 79.12   |
| 3     | LinkedIn       | 142                    | 78.02   |
| 4     | Telegram       | 73                     | 40.01   |
| 5     | Google+        | 56                     | 30.76   |
| 6     | Academia       | 41                     | 22.52   |
| 7     | ResearchGate   | 41                     | 22.52   |
| 8     | Instagram      | 38                     | 20.78   |
| Total |                | 182                    | 100     |

Table 2 shows the frequency of Iranian journal accounts in the surveyed social networks. The most significant number of Iranian journal accounts on social networks belong to LinkedIn, with 38 titles (20.78 %), followed by Academia, with 31 titles (17.03 %), and Twitter, with 19 titles (10 %). The lowest number of accounts is related to Instagram, with five titles (2 %).

Table 2

*The number of accounts of Iranian medical journals on social networks*

| Social Network | Account numbers | % of all journals |
|----------------|-----------------|-------------------|
| Facebook       | 38              | 20.78             |
| Tweeter        | 31              | 17.03             |
| LinkedIn       | 19              | 10.43             |
| Telegram       | 15              | 8.24              |
| Google+        | 5               | 2.74              |

Table 3 shows that only two journals, Advanced Biomedical Research and Galen Medical Journal, have accounts in four of the five social networks surveyed. A total of 21 journals has accounts in at least two social networks, and no journal was found to have accounts in all five social networks.

Table 3

*Iranian medical journals with at least two user accounts on social networks*

| Row | Journal title                                    | LinkedIn | Academia | Facebook | Twitter | Instagram | Total |
|-----|--|----------|----------|----------|---------|-----------|-------|
| 1   | Advanced Biomedical Research                     | □        |          | □        | □       | □         | 4     |
| 2   | Galen Medical Journal                            | □        | □        |          | □       | □         | 4     |
| 3   | Asian Journal of Sports Medicine                 | □        |          | □        | □       |           | 3     |
| 4   | Caspian Journal of Neurological Sciences         | □        | □        |          | □       |           | 3     |
| 5   | International Journal of Fertility and Sterility | □        | □        | □        |         |           | 3     |
| 6   | Journal of Holistic Nursing and Midwifery        | □        | □        |          | □       |           | 3     |

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| Row | Journal title  | LinkedIn | Academia | Facebook | Twitter | Instagram | Total |
|-----|--|----------|----------|----------|---------|-----------|-------|
| 7   | Urology Journal  |          | ☐        | ☐        |         | ☐         | 3     |
| 8   | Annals of Applied Sport Science                          | ☐        |          |          |         | ☐         | 2     |
| 9   | Archives of Clinical Infectious Diseases                 | ☐        |          | ☐        |         |           | 2     |
| 10  | Basic and Clinical Neuroscience                          |          | ☐        |          | ☐       |           | 2     |
| 11  | International Journal of Health Policy and Management    |          | ☐        | ☐        |         |           | 2     |
| 12  | International Journal of Molecular and Cellular Medicine | ☐        | ☐        |          |         |           | 2     |
| 13  | Iranian Journal of Immunology                            | ☐        |          | ☐        |         |           | 2     |
| 14  | Iranian Journal of Medical Physics                       | ☐        |          | ☐        |         |           | 2     |
| 15  | Iranian Journal of Microbiology                          | ☐        | ☐        |          |         |           | 2     |
| 16  | Iranian Journal of Pediatrics                            |          |          | ☐        | ☐       |           | 2     |
| 17  | Iranian Journal of Psychiatry                            | ☐        |          |          | ☐       |           | 2     |
| 18  | Iranian Journal of Toxicology                            | ☐        | ☐        |          |         |           | 2     |
| 19  | Iranian Rehabilitation Journal                           |          | ☐        |          | ☐       |           | 2     |
| 20  | Salmand: Iranian Journal of Ageing                       |          | ☐        |          | ☐       |           | 2     |
| 21  | Journal of Modern Rehabilitation                         | ☐        |          |          | ☐       |           | 2     |

Table 4 indicates the features of the reviewed journals in the investigated social networks. The activity history of journals is presented based on the date of profile creation (on Twitter and Instagram) or the first post/article published on social networks (on LinkedIn, Academia, and Facebook). Most journals with accounts on Academia (19 titles) and Facebook (11 titles) have at least five years of experience in the above networks. Most journals on Twitter (16 titles) and LinkedIn (14 titles) have a history of activity between one and five years. Only five journals are active on Instagram, of which three titles have been active for less than a year.

*Table 4*

*Features of Iranian medical journals in selected social networks*

| Account Features |           | LinkedIn | Instagram | Tweeter | Facebook | Academia | Total |
|------------------|-----------|----------|-----------|---------|----------|----------|-------|
| Activity history | ≥ 5 years | 3        | 1         | 1       | 11       | 19       | 35    |
|                  | 1-5 years | 14       | 1         | 16      | 2        | 6        | 39    |
|                  | < 1 year  | 10       | 3         | 2       | 0        | 1        | 16    |

|                  |            |    |   |    |    |    |    |
|------------------|------------|----|---|----|----|----|----|
|                  | No posts   | 11 | . | 0  | 2  | 5  | 22 |
| Like numbers     | ≥500       | 2  | 2 | 0  | 0  | 2  | 25 |
|                  | 100-500    | 4  | 0 | 2  | 4  | 4  | 14 |
|                  | 1-100      | 19 | 3 | 6  | 9  | 1  | 38 |
|                  | No like    | 13 | 0 | 11 | 2  | 5  | 31 |
| Post numbers     | ≥100       | 3  | 2 | 4  | 3  | 14 | 26 |
|                  | 50-100     | 5  | 0 | 2  | 3  | 5  | 15 |
|                  | 1-50       | 19 | 3 | 10 | 8  | 7  | 47 |
|                  | No post    | 11 | 0 | 3  | 1  | 5  | 20 |
| Comment numbers  | ≥100       | 0  | 0 | 0  | 0  | -  | 0  |
|                  | 50-100     | 0  | 1 | 0  | 0  | -  | 1  |
|                  | 1-50       | 15 | 1 | 3  | 10 | -  | 29 |
|                  | No comment | 23 | 3 | 16 | 5  | -  | 47 |
| Share numbers    | ≥100       | 0  | - | 0  | 0  | -  | 0  |
|                  | 50-100     | 0  | - | 1  | 2  | -  | 3  |
|                  | 1-50       | 16 | - | 6  | 6  | -  | 28 |
|                  | No sharing | 22 | - | 12 | 7  | -  | 41 |
| Follower numbers | ≥2000      | 5  | 2 | 0  | 2  | 1  | 10 |
|                  | 500-2000   | 6  | 0 | 3  | 3  | 1  | 13 |
|                  | 100-500    | 12 | 1 | 15 | 3  | 9  | 40 |
|                  | <100       | 15 | 2 | 1  | 5  | 24 | 47 |

The findings showed that most Academia journals (21 titles) received more than 500 Likes. Most LinkedIn journals (19 titles) have received between one and 100 Likes. Most posts posted on social networks by journals have received fewer than 100 Likes (Table 4). Examining the number of journals' posts demonstrated that most journals with accounts on the Academia social network (14 journals) have uploaded more than 100 posts. At the same time, most journals have posted the lowest number of posts (ranging from 1 to 50) on LinkedIn, Facebook, Twitter, and Instagram. In total, most accounts on social networks (47 accounts) have shared between one and 50 posts (Table 4).

The findings revealed that none of the journals received more than 100 comments on any of the reviewed social networks. Only one journal received between 50 and 100 comments on Instagram. LinkedIn received the highest number of comments (between 1 and 50) for 15 journals (Table 4). Notably, it is impossible to post comments on articles in Academia. The findings indicated that none of the journals had been shared more than 100 times in any of the investigated social networks. The highest sharing rate on LinkedIn, Facebook, and Twitter networks was between one and 50 times. Other users have never shared the posts of most journals on social networks (Table 4). Notably, viewing the number of shares for posts on Instagram and Academia is impossible. The number of journal followers' accounts on social networks showed that most accounts (47 accounts) have less than 100 followers, while only ten accounts have more than 2000 followers.

### Discussion

The current study examines the status of Iranian medical journals indexed in Scopus and

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WoS in social networks. Of 427 Iranian health journals, 182 are indexed in at least one of the two mentioned databases. Among these, 144 journals (79.12%) offer the possibility of sharing articles on Twitter and Facebook, while only 38 journals (20.87%) offer the possibility of sharing articles on Instagram. Among previous studies, this study can refer to Quinlan et al. (2016), which showed that in 17 of 24 websites (70.83%) related to plastic surgery journals, links were available for readers to share articles on social networks. In this regard, although the reviewed journals have yet to provide the possibility of sharing articles on all social networks, Twitter and Facebook have provided the most possibility of sharing articles, with 79.12%. Unquestionably, creating the desired link can encourage authors and researchers to share articles on social networks, increase the visibility of articles, and enhance the journals' altmetric indices (Fox et al., 2016). These findings are somewhat consistent with previous studies. An altmetric study by Rahimi et al. (2024) of Iranian journals showed that Twitter is the most widely used social media platform among Iranian medical journals. Bashiri, Erfanmanesh, and Asnafi (2018) also showed that Mendeley and Twitter are the most altmetrics sources for Iranian highly cited articles in the field of medical sciences.

The findings revealed that among the reviewed journals, only 38 were on LinkedIn (roughly 20.78%), 31 were on Academia (17.03%), and a smaller number were on Facebook, Twitter, and Instagram accounts. No journal had an account on all social networks; only 21 had accounts in at least two. Since LinkedIn is a professional social network, its membership facilitates connections among various professions and fields. Therefore, the membership of only 38 Iranian medical journals in this social network is not convincing. Quinlan et al. (2016) found that the use of Facebook, YouTube, LinkedIn, and Google+ among plastic surgery journals was inconsistent and low. Among 24 journals, ten had at least one social media account.

The results showed that five journals have accounts on Instagram, indicating that journals pay little attention to this social network. These findings align with those of Cerón-Perdomo et al. (2020), which show that using Instagram was not well received by physical medicine and rehabilitation journals. Since Instagram is not a scientific social network, primarily used for sharing photos and text, it is not the first choice for creating accounts for scientific journals. However, due to the network's popularity in Iran, journals can plan to be more present and attract their audience. Indicatively, checking the number of comments in the journal accounts also revealed that no single journal across any social media platform has received a minimum of 100 comments. Only one journal has received between 50 and 100 comments on Instagram (the highest number). This issue demonstrates the ability to attract an audience on Instagram, which journals can also take note of. In this regard, the study by Amaral and Santos (2020), which examines the activities of Portuguese universities on social media, indicates that universities on Instagram have a large number of followers. Therefore, the significant potential of Instagram in attracting an audience can be used in scientific journals.

In Academia with a history of about 14 years since its establishment, out of a total of 31 journals that have a profile in this social network, 20 journals (more than 62%) have been active for five years or more, indicating a relatively respectable record of membership of journals in this social network. However, paying more attention to scientific social networks should be on the agenda of Iranian journals. Introducing and teaching the use of this network, as well as other social networks, can be a step toward identifying and utilizing these networks more effectively.

Among the studies investigating Facebook, this research can refer to Golchin et al. (2022),

which shows that Facebook is one of the essential social media platforms for reflecting articles' activity, with 13.9% of journals. In the present study, only 15 out of 182 journals (nearly 8.24%) have accounts on Facebook, which aligns with the mentioned research. Facebook is less used than LinkedIn, Academia, and Twitter. Nevertheless, the percentage of journals with a profile on Facebook is in line with the research of Cerón-Perdomo et al. (2020), who found that in physical medicine and rehabilitation journals, Facebook is the most widely used platform, with 16.4% of journals. Furthermore, Alotaibi et al. (2016) indicated that 28.9% of the neurosurgical journals had Facebook and Twitter accounts. Zheng et al. (2018) also showed that 9% of the reviewed journals have Facebook accounts. The research by Kamel Boulos and Anderson (2014) revealed that a significant number of medical journals actively use Facebook. Specifically, 80% of the 25 journals they identified had Facebook accounts, which is considerably higher than the statistics found in the current study. Nineteen Iranian medical journals (10.43%) are active on Twitter. Twitter has been operating for nearly 16 years, since its launch in 2006. However, only BioImpacts Journal has been a member of this network since 2013, i.e., for more than eight years. Instead, 16 of 19 journals have a history between one and five years. Interestingly, ten journals have started using Twitter since 2018. It is the most famous micro-blogging platform and effective in scholarly communication (Ebner & Reinhardt, 2009; Mahrt, Weller & Peters, 2014). Twitter is a powerful platform for entertainment, sharing diverse thoughts and opinions, connecting with friends, staying informed about current events, following famous individuals, and being updated on their activities (Bruns & Burgess, 2012). It is used in academia to establish connections between individuals and share information (Mohammadi, Thelwall, Kwasny, & Holmes, 2018; Thöring, 2011). In many studies, it has been considered a network used by journals, articles, and even universities and scientific societies. For example, Cardona-Grau, Sorokin, Leinwand, and Wellive (2016) indicated that the number of urology journals with a Twitter account is increasing. According to the research conducted by Golchin et al. (2022), Twitter and Facebook are the leading social media platforms for sharing articles from Iranian medical journals, with Twitter accounting for 80.1% and Facebook for 13.9% of the dissemination. The current study found that only 19 out of 182 Iranian medical journals (roughly 10.43%) had a Twitter account, indicating that Twitter needs to pay more attention. Undoubtedly, the filtering of specific social networks, such as Facebook and Twitter, can be considered a reason for the low usage of these networks by ordinary people and the scientific community in Iran. Although Golchin et al.'s research (2022) has a different methodology than the current research, and altmetric indicators were used to evaluate the articles, we can conclude that journals should give Twitter more attention.

Some activities, such as likes, shares, and comments on social media, can represent the influence patterns of accounts or users (Cha, Haddadi, Benevenuto, & Gummadi, 2010). The results showed that most Academia journals have received more than 500 Likes. Conversely, most LinkedIn journals have received the lowest rate of Likes (between 1 and 100). In total, most accounts on social networks (47 accounts) have shared between one and 50 posts. None of the journals has been shared more than 100 times in the investigated social networks. The current study can conclude that the low number of posts, comments, likes, and shares indicates that the journals should pay more attention to these social networks. Journals that accept expert members can garner more views and feedback. In this regard, Raamkumar et al. (2018) introduced URLs as a significant activity by academic journals in the humanities and social

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sciences, sharing them on Twitter. However, it was observed that the proportion of tweets, including hyperlinks to scholarly articles, was relatively small—4.98% of the overall tweets.

Overall, the number of scientific social network accounts (LinkedIn and Academia) is 69 journals, and on public social networks (Facebook, Twitter, and Instagram) is 39. Thus, regarding their presence in scientific social networks, the reviewed journals have a better status than public social networks. This does not diminish the importance of general social networks. Because the two social networks, Twitter and Facebook, are among the crucial social networks for sharing articles, and this issue has been clarified in altmetrics studies conducted on articles in various fields (Bashiri et al., 2018; Golchin et al., 2022; Nason et al., 2015; Quinlan et al., 2016; Rahimi et al., 2024; Shenavar & Doulani, 2020).

### Conclusion

Although 182 Iranian journals in the medical area have been included in the most prestigious international indexes. 79.12% of these journals offer the possibility of sharing articles on Twitter and Facebook, while only 20.87% provide the option to share articles on Instagram. Therefore, the journals need to pay more attention to providing the possibility of sharing on all scientific and public social networks. The possibility of sharing may increase the visibility of journals through the sharing of information by researchers and professionals. The number of journal accounts on social networks was meager, with the most significant number of accounts on LinkedIn being 38 journals (about 20%). No journal had an active account on any of the mentioned social networks. Despite having accounts and several years of experience on some social networks, the mentioned journals had little activity. Notably, if proper posts and content are not produced, the number of followers will be limited, and the account will be considered inactive. Moreover, with few followers, the possibility of sharing decreases, and visibility diminishes. Accordingly, it is necessary for Iranian medical journals to pay more attention to social networks to enhance their prosperity and visibility in the virtual space. This can increase the altmetrics score and citations.

Iranian Medical Journals should be aware of the social media potential as a tool to connect with and engage their audience. Considering the increasing influence of social media among Internet users, this potential should be explored and used by editors-in-chief and publishers. Likewise, removing the filtering of some social networks, such as Instagram and Twitter, by Iran's government can lead to more use of these networks in scientific environments. Proposedly, scientific journals should identify the most used social networks and use them to increase their journals' visibility. In addition to sharing articles, links to the journals' social network accounts should also be mentioned on the journals' websites.

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### Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest concerning the research, authorship, and/or publication of this article.

### References

- Alotaibi, N. M., Guha, D., Fallah, A., Aldakkan, A., Nassiri, F., Badhiwala, J. H., Ibrahim, G. M., Shamji, M. F., Macdonald, R. L. & Lozano, A. M. (2016). Social Media Metrics and Bibliometric Profiles of Neurosurgical Departments and Journals: Is There a Relationship? *World Neurosurgery*, 90, 574-579.E7. <https://doi.org/10.1016/j.wneu.2016.01.087>
- Amaral, I. & Santos, S. (2020). Social Networks and institutional communication: The case of Portuguese universities. *Prisma Social*, 28, 20-43. Retrieved from <https://revistaprismasocial.es/article/view/3371/4079>
- Bashiri, T., Erfanmanesh, M. & Asnafi, A. (2018). Do highly-cited articles from Iran in the field of medical sciences attract high attention in social media? *Health Information Management*, 15(2), 90-96. <https://doi.org/10.22122/him.v15i2.3445> [In Persian]
- Breeze, J., Page, P., Smith, G. D. & Langford, C. E. J. (2018). Dispatches from the editor: How can we responsibly harness social media to improve our military health journal? *BMJ Military Health*, 164(6), 393–396. <https://doi.org/10.1136/JRAMC-2018-001080>
- Bruns, A. & Burgess, J. (2012). Notes towards the scientific study of public communication on Twitter. In *Science and the Internet* (pp. 159–169). Duesseldorf University Press. <https://eprints.qut.edu.au/55916/>
- Cardona-Grau, D., Sorokin, I., Leinwand, G. & Welliver, C. (2016). Introducing the Twitter impact factor: An objective measure of Urology’s academic impact on Twitter. *European Urology Focus*, 2(4), 412–417. <https://doi.org/10.1016/J.EUF.2016.03.006>
- Cerón-Perdomo, D., Mancipe-García, C., Fernández-Ávila, D. G., Muñoz-Velandia, Ó. & García, Á. (2020). Research paper: Use and impact of social networks on physical medicine and rehabilitation scientific journals. *Iranian Rehabilitation Journal*, 18(2), 223–230. <https://doi.org/10.32598/irj.18.2.988.1>
- Cha, M., Haddadi, H., Benevenuto, F., & Gummadi, K. (2010, May). Measuring user influence in Twitter: The million follower fallacy. In *Proceedings of the International AAAI Conference on Web and Social Media*, 4(1), 10-17. <https://doi.org/10.1609/icwsm.v4i1.14033>
- Ebner, M. & Reinhardt, W. (2009, October). Social Networking in Scientific Conferences—Twitter as a Tool for Strengthening a Scientific Community. In *Proceedings of the 1st International Workshop on Science* (Vol. 2, pp. 1-8).
- Fox, C. S., Barry, K. & Colbert, J. (2016). Importance of social media alongside traditional medical publications. *Circulation*, 133(20), 1978–1983. <https://doi.org/10.1161/CIRCULATIONAHA.115.020303>
- Golchin, M., Isfandyari-Moghaddam, A., Mirhosseini, Z., Famil Rohani, A. A. & Zarei, A. (2022). Investigating the presence of Iranian journals’ articles indexed by Scopus via social media during 2010-2018. *Scientometrics Research Journal*, 8(1), 35–48. <https://doi.org/10.22070/rsci.2020.5716.1418> [In Persian]

- Kamel Boulos, M. N. & Anderson, P. F. (2014). Preliminary survey of leading general medicine journals' use of Facebook and Twitter. *Journal of the Canadian Health Libraries Association Journal De l'Association Des bibliothèques De La Santé Du Canada*, 33(2), 38–47. <https://doi.org/10.5596/c2012-010>
- Khalili, L. (2016). Participation of Iranian medical universities in ResearchGate. *Health Information Management*, 13(4), 273-279 [In Persian]. Retrieved from [https://him.mui.ac.ir/article\\_11520\\_833d6c4195eac12c02efeed75487e6e9.pdf?lang=en](https://him.mui.ac.ir/article_11520_833d6c4195eac12c02efeed75487e6e9.pdf?lang=en)
- Mahrt, M., Weller, K. & Peters, I. (2014). Twitter in the ecology of scholarly communication. In K. Weller, A. Bruns, J. Burgess, M. Mahrt and C. Puschmann (eds.) *Twitter and society* (pp. 399–410). Retrieved from <https://katrinweller.net/wp-content/uploads/2012/08/twitter-and-society-scholarly-communication-2014.pdf>
- Mohammadi, E., Thelwall, M., Kwasny, M. & Holmes, K. L. (2018). Academic information on Twitter: A user survey. *PLoS ONE*, 13(5), e0197265. <https://doi.org/10.1371/journal.pone.0197265>
- Nason, G. J., O'Kelly, F., Kelly, M. E., Phelan, N., Manecksha, R. P., Lawrentschuk, N. & Murphy, D. G. (2015). The Emerging Use of Twitter by Urological Journals. *BJU International*, 115(3), 486–490. <https://doi.org/10.1111/bju.12840>
- Nikkar, M., Alijani, R. & Ghazizadeh Khalifeh Mahaleh, H. (2017). Investigation of the presence of surgical researchers in the ResearchGate scientific network: An altmetrics study. *Iranian Journal of Surgery*, 25(2), 76-82 [In Persian]. Retrieved from [http://www.ijs.ir/library/upload/article/af\\_53833548\\_Research\\_Gate-Dr.\\_Alijani\\_1981.pdf](http://www.ijs.ir/library/upload/article/af_53833548_Research_Gate-Dr._Alijani_1981.pdf)
- Quinlan, C. S., Collins, A. M., Nason, G. J. & Dempsey, M. (2016). The Use of Social Media by Plastic Surgery Journals. *Journal of Plastic, Reconstructive and Aesthetic Surgery*, 69(7), 1009–1011. <https://doi.org/10.1016/j.bjps.2016.04.004>
- Raamkumar, A. S., Erdt, M., Vijayakumar, H., Rasmussen, E. & Theng, Y. L. (2018). Understanding the Twitter usage of humanities and social sciences academic journals. *Proceedings of the Association for Information Science and Technology*, 55(1), 430–439. <https://doi.org/10.1002/pra2.2018.14505501047>
- Rahimi, F., Danesh, F. & Latifi, M. (2024). The role of social media in the journals and the effectiveness of journals on social media: A comparative study of reputable journals based on OECD classification. *Library and Information Sciences*, 27(3), 193-223. <https://doi.org/10.30481/lis.2024.464215.2173>
- Shenavar, A. & Doulani, A. (2020). Review of Iranian journal articles indexed in Web of Science based on altmetric indicators in scientific social media. *Webology*, 17(1), 158–170. <https://doi.org/10.14704/WEB/V17I1/A214>
- Thelwall, M. & Kousha, K. (2013). Academia.edu: Social network or Academic Network? *Journal of the Association for Information Science and Technology*, 65(4), 721–731. <https://doi.org/10.1002/asi.23038>
- Thöring, A. (2011). Corporate tweeting: Analysing the use of Twitter as a marketing tool by UK trade publishers. *Publishing Research Quarterly*, 27(2), 141–158. <https://doi.org/10.1007/S12109-011-9214-7>
- Trueger, N. S. (2018). Medical Journals in the Age of Ubiquitous Social Media *Journal of the American College of Radiology*, 15(1), 173–176. <https://doi.org/10.1016/j.jacr.2017.09.036>

- Valerio-Ureña, G., Herrera-Murillo, D. & Madero-Gómez, S. (2020). Analysis of the presence of the best-ranked universities on social networking sites. *Informatics*, 7(1), 9. <https://doi.org/10.3390/informatics7010009>
- Vara, N. (2021). Examining the status and qualitative evaluation of MSRT journals based on regulations for determining credibility. *Rahyافت*, 30(4), 115-129. <https://doi.org/10.22034/rahyaft.2020.10455.1151> [in Persian].
- Zheng, H., Aung, H. H., Erdt, M., Peng, T. Q., Sesagiri Raamkumar, A., & Theng, Y. L. (2018). Social media presence of scholarly journals. *Journal of the Association for Information Science and Technology*, 70(3), 256–270. <https://doi.org/10.1002/asi.24124>