



# Challenges for social media editors in rheumatology journals: an outlook

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## Abstract

Social media has become a key component of contemporary medicine, and the rheumatology subspecialty is not an exemption. We found that just six of the 40 key peer-reviewed rheumatology journals have found it sensible to incorporate the new appointment of a Social Media Editor—or a similar designation—into their Editorial Boards. We propose that the role of a social media editor is a trinomial: not only a technological work to promote digital engagement but also an activity of ethical guidance and a cultural challenge dealing with worldwide cultural and mindset diversity.

**Keywords** Publishing · Rheumatology · Social media · Trends

## Introduction

Recent history has undergone a remarkable worldwide expansion of social media (SM), defined as interactive web-based interfaces allowing the production, distribution, and consumption of user-generated digital contents [1]. According to this definition, SM may include social networking platforms (such as Twitter), but also content and multimedia communities, blogs, collaborative projects, and virtual game worlds, *inter alia* [2, 3].

With 3484 million users as of January 2019, SM represented 79% of worldwide netizens and 45% of the planetary population [4, 5]. By region, Table 1 depicts both the SM annual growth rate and its penetration. The time users in each country spend on SM differs widely: from the Philippines, with 4 h

and 12 min daily, to Japan, with 36 min. On average, worldwide users of SM consumed 2.16 h per day [6]; this time amounted to nearly one-third of their total time on the Internet and one-seventh of their waking lives.

The expansion of SM exerted an accelerated impact on the medical field as well. In this context, the adoption of SM among rheumatology fellows is barely beginning to be systematically studied [6]: (1) in the 2014 American College of Rheumatology Annual Meeting, a questionnaire showed that 40.9% of fellows-in-training attendees were using SM for professional reasons [7], and (2) in 2015, an online survey applied to members of the European League Against Rheumatism Network found a major usage of SM (68%) by rheumatology fellows and basic scientists [8].

## New functions, barriers, and designations

Rheumatology journals have good potential for taking advantage the SM boom through a new editorial function: the SM editor, whose main purpose—although by no means the only one, as we shall see—is to deal with the engagement and dissemination of digital content through the following activities [9]:

1. Schedule postings, including text messages and sometimes images and videos, with embedded URL to drive traffic to the institutional journal website.
2. Promote the usage of hashtag campaigns.

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**Table 1** Netizen demographics by region\* (in millions of persons)

	Total population	Social media users	Social media penetration (%)	Social media annual growth (%)
Africa	1304.0	216.0	16.6	13.0
America	1020.0	673.1	66.0	3.8
Asia-Pacific	4250.0	1997.0	47.0	12.0
Europe	846.0	462.5	54.7	3.2
Middle East	256.0	136.1	53.2	4.7

Source: authors' elaboration based on data from references [4, 5]

\*Data to January 2019

3. Produce digital content for the general user, beyond the scholarly or scientific communities.
4. Respond to posts and channel claims or complaints.
5. Safeguard the institutional reputation of the journal.
6. Anticipate conflictive situations.

According to one exploratory survey applied to 24 SM editors of 19 scholarly journals, the development of all of these new functions faces several obstacles, such as lack of best practices, undefined standardized metrics, ambiguous roles, overlapping functions with conventional editors, and insufficient levels of support, academic credit, and monetary resources [10]. Other barriers faced by SM editors relate to the lack of reliability, quality concerns, lack of confidentiality and privacy, and information overload [11].

An additional issue to consider is that, to date, the number of SM editors available in medical journals is not well known. We identified SM editors by researching into the ScienceDirect database of the health and life sciences, including medicine and dentistry, nursing and health professions, pharmacology, toxicology, pharmaceutical science, neuroscience, immunology, and microbiology journals.

In accordance with this research, the number of journals with an SM editor incorporated into their Editorial Boards (EB) yields a total of 177 journals to 2018, as depicted in Fig. 1. A linear regression performed on the data ( $r = 0.97$ ) showed that the year 2019 will conclude with 195 SM editors.

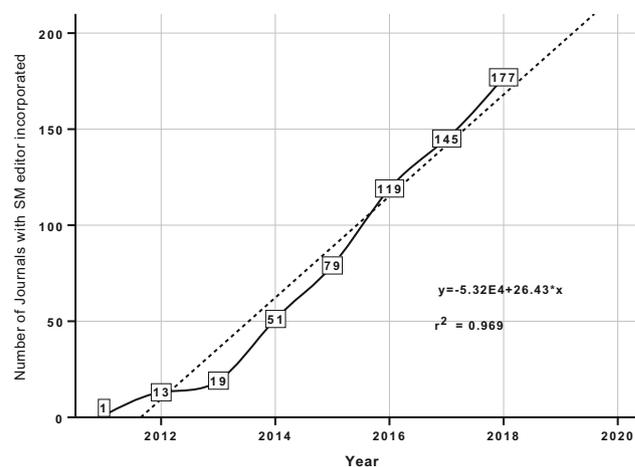
Also, we found that six peer-reviewed rheumatology journals include the position of Social Media Editor—or a similar title—in their EB. The two most recent rheumatology journals, focused on the open access model, already include this function, as depicted in Table 2. In the rheumatology journals analyzed, we found that there is no uniformity in the name or title of the new function: in three cases, the journals refer to the SM editor, while appointments of “Digital Editor,” “Associate Editor of Social Media and Correspondence,” and “Social Media Advisor” comprise other designations utilized in their Editorial Boards.

### The case of Twitter: a necessary condition, but not enough

Although an SM platform such as Twitter could play an increasing role in disseminating rheumatological information in the future, to date, the majority of correlations performed revealed negligible or weak correlations between alternative SM metrics—such as “*altmetrics*”—and citations [12].

For example, a regression analysis performed on 63,801 papers published in scholarly journals showed that tweets exert a significant but low influence ( $\rho = 0.183$ ,  $p < 0.01$ ) on citation impact [15]. In fact, in a sample of 4176 papers from 350 scholarly journals, tweeted papers since 2013 resulted as fairly low (13%) [14]. Other studies reported less than 10% [13]. Thus, the institutional account of a journal on Twitter could be necessary for its propagation and visibility, but this simple institutional presence is not a sufficient condition.

Since papers with the strongest scientific impact are not the most popular papers on Twitter [14], these results suggest that the normal user is not necessarily interested in the same topics as the scholarly users are; however, the former can benefit



Source: Authors' elaboration based on ScienceDirect data 2018.

**Fig. 1** Health and life sciences journals with an SM editor.

**Table 2** Peer-reviewed rheumatology journals with a social media function declared in their Editorial Boards

	Name of the journal	Registered SM function in the Editorial Board?	Appointment or designation
1	<i>Aktuelle Rheumatologie</i>	×	
2	<i>ACR Open Rheumatology</i>	✓	SM editor
3	<i>Acta Reumatológica Portuguesa</i>	×	
4	<i>Advances in Rheumatology</i>	×	
5	<i>Annals of the Rheumatic Diseases</i>	✓	SM editor
6	<i>Archives of Rheumatology</i>	×	
7	<i>Arthritis &amp; Rheumatology</i>	×	
8	<i>Arthritis and Rheumatism</i>	×	
9	<i>Arthritis Care &amp; Research</i>	×	
10	<i>Arthritis Research &amp; Therapy</i>	×	
11	<i>Baillière's Clinical Rheumatology</i>	×	
12	<i>Best Practice &amp; Research in Clinical Rheumatology</i>	×	
13	<i>BMC Musculoskeletal Disorders</i>	×	
14	<i>Clinical and Experimental Rheumatology</i>	×	
15	<i>Clinical Rheumatology</i>	×	
16	<i>Current Opinion in Rheumatology</i>	×	
17	<i>Current Rheumatology Reports</i>	×	
18	<i>Indian Journal of Rheumatology</i>	✓	Digital editor
19	<i>International Journal of Rheumatic Diseases</i>	×	
20	<i>JCR: Journal of Clinical Rheumatology</i>	×	
21	<i>Joint Bone Spine</i>	×	
22	<i>Journal of Orthopedics &amp; Rheumatology</i>	×	
23	<i>Journal of Rheumatology</i>	×	
24	<i>Lupus</i>	×	
25	<i>Lupus Science and Medicine</i>	✓	SM editor
26	<i>Modern Rheumatology</i>	×	
27	<i>Nature Reviews Rheumatology</i>	×	
28	<i>Osteoarthritis and Cartilage</i>	✓	Associate editor, social media, and correspondence
29	<i>Pediatric Rheumatology</i>	×	
30	<i>Reumatología Clínica</i>	×	
31	<i>Rheumatic Disease Clinics of North America</i>	×	
32	<i>Rheumatology</i>	×	
33	<i>Rheumatology International</i>	×	
34	<i>RMD Open</i>	✓	SM advisor
35	<i>Scandinavian Journal of Rheumatology</i>	×	
36	<i>Seminars in Arthritis and Rheumatism</i>	×	
37	<i>British Journal of Rheumatology</i>	×	
38	<i>Journal of Rheumatology</i>	×	
39	<i>Turkish Journal of Rheumatology</i>	×	
40	<i>Zeitschrift für Rheumatologie</i>	×	

Source: authors' elaboration based on ScienceDirect data

from the use of hashtags on specific topics [15]. This means that really very few users—or maybe none—who might have read a scientific article would decide not to do so because it has low popularity on Twitter. However, we think that, in the

future, the results on the latter type of regression analyses will be different if they consider open access models.

It is noteworthy that the life cycle of a post on Twitter live feeds is very short and quickly scrolls past by new content.

Thus, the impact of tweets is ephemeral, with page visits and web-link clicks taking place within the week of the tweet post. For this reason, some authors [16] suggest that scholarly journals should look at the usage of the personal accounts of Editorial Board members to increase the efficiency of social media campaigns.

Finally, we must also highlight the ban of some social networks, such as Facebook and Twitter, in China. Therefore, any global SM engagement strategy should take into account the Chinese social networks such as Wechat (with 1083 million active user accounts), QQ (803 million), Qzone (531 million), Douyin/TikTok (500 million), and Sina Weibo (446 million), any one of these larger than Twitter (326 million) itself [4, 5].

### **Social media management requires ethical guidance, well-defined journal policies, and processes to confront challenges**

SM editors require ethical guidance on the procedures that should guide the behavior of authors and editors in the new SM ecosystem. In the USA, the American Medical Association Code of Medical Ethics recommends “caution” when using SM [10], and suggests ethical advice on (1) respect for dignity and human rights, (2) honesty and encouraging the standards of medical professionalism, and (3) safeguarding confidentiality and the privacy of patients’ information [17].

On the other hand, the Ethics Manual of the American College of Physicians proposes “extreme caution” on reporting scientific research discoveries in SM, since this type of online content may generate misconceptions, non-justified extrapolations, and baseless inferences [18]. It also suggests not merging professional and personal boundaries in SM.

Other institutions—such as the American College of Physicians and the Federation of State Medical Boards—have published a “policy statement,” with five positions for online medical professionalism that SM editor must know [19]. Even the Health Insurance and Probability and Accountability Act (HIPAA) applies to SM to the same degree as it applies to any medical work environment [20].

In other countries such as the 28 member states (including the UK to date) comprising the European Union, SM editors must be cognizant that a peer-reviewed journal’s digital presence is required to comply with the General Data Protection Regulation to avoid fines and penalties [21]. The truth is that, ultimately, there are no consensus guidelines or policy statements developed by the main regional rheumatology leagues that establish a canon of conduct to follow in terms of SM behavior.

Deriving from all of these international US and European recommendations, it is clear that SM editors should be aware that SM usage may have potential risks for their journals’ digital image, such as complaints on reviewer unethical

behavior, plagiarism, institutional influences, data misappropriation, copyright infringement, and authorship topics.

For example, the Committee on Publication Ethics (COPE) drafted guidance to handle complaints directed at an author, an editor, or a journal from anonymous “whistle blowers” [22], with a detailed flowchart to follow, involving well-defined journal policies and processes [23].

Also, the “Recommendations for the Conduct, Reporting, Editing, and Publication of Scholarly work in Medical Journals” determine that editors should review commentaries and SM postings, ensuring that the journal’s personnel comply with best practices in defense of possible accusations of libel [24].

### **SM editorship is, in fact, trinomial: a technical engagement-ethical guidance-cultural challenge**

Social media management is a complex task that reaches beyond solely promoting the digital engagement of rheumatology journals through social networking platforms. We propose that SM editorship is, in fact, a trinomial: a technical engagement-ethical guidance-cultural challenge. These three terms must be carefully seen to.

Deficient technical engagement implies ignorance of operation settings, terms of service, privacy concerns, and updates from each SM platform to which SM editors subscribe. Handling an institutional Twitter account also means confronting fake news, disinformation campaigns, trolling, and hate speech, testifying to the threats of scientific misinformation and the level of resolution involved in neutralizing that misstatement [25].

Insufficient ethical guidance on procedures for authors’ and editors’ demeanor in the new SM ecosystem means that investigations of ambiguous, frivolous, or unfounded complaints may waste scarce journal resources and be detrimental to the academic publishing community [22]. Also, any of these could encourage skepticism and distrust [26].

Finally, SM editors require diverse qualifications and skills to deal successfully with a worldwide cultural and mindset diversity that is evolving into a dynamic context and that involves learning new cross-cultural and transgenerational negotiations [27].

As part of this cultural defiance, the SM editor must be cognizant of that SM posting is subject to negative communication phenomena such as “venting” (posting comments to manifest negative emotions like anger, hate, or grievance) and “trolling” (a deliberate act to antagonize others online by posting inflammatory, false, or offensive comments) [28, 29].

Thus, in this era of instant communications and growing interest in rheumatological research, SM editors should approach public pronouncements and postings with caution, using precise, neutral, and measured language [19].

## Compliance with ethical standards

**Disclosures** None.

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