



Potential Role of Twitter at an Annual Congress in Japan

— Narrative Literature Review of “Tweet the Meeting” —

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Background: Twitter has become increasingly popular at annual medical congresses as a platform to communicate to attendees. In contrast, Twitter is not as frequently used in Japan as compared with other countries. Herein, we reviewed the literature and discuss the potential role and risks of “tweet the meeting” in Japan.

Methods and Results: We performed a literature review to consider the recent trend of tweeting the meeting, including benefits and how to tweet, as well as potential risks. Upon officially deciding to tweet the meeting, a number of societies and professional organizations developed strategies to enhance the attendees’ experience using multiple modalities and guides. Although there are several risks, we provide a concise guide to tweeting the meeting for the Japanese audience, which could be useful for understanding what should be done before and during a conference.

Conclusions: The use of Twitter at medical congresses has many possibilities, and there are numerous potentials in many areas. We should discuss this in the light of the benefits for congress attendees in Japan.

Key Words: Cardiovascular disease; Conference; Congress; Twitter

Social media consists of online tools with which users can create online communities to share information, ideas, messages and other content, including videos and images.¹ Social media has become an integral part of health communication, with recent applications such as promoting healthy behavior, disseminating medical knowledge, and facilitating professional networking. Of the various social media platforms for academic purposes, Twitter (Twitter Inc, San Francisco, CA, USA) is very popular, especially in the professional congress setting. For example, a number of “tweet the meeting” publications illustrate an increasing trend in the sharing of pearls and highlights of meetings through the use of Twitter.² Several

features of Twitter, including its microblogging platform, explain why Twitter is the preferred social media engagement platform at professional meetings. Kalia et al summarized the following 3 reasons for its popularity: (1) short-form messaging conducive to high-paced interactive environments such as meetings; (2) simplified 1-click sharing process (“retweeting”); and, perhaps most importantly, (3) easy organization and cataloging of messages into hashtags, preceded by a “#”, which can be searched at a later time and referenced by users across the world who can retrieve the highlights of a meeting without being physically present at the meeting.²

In contrast, many physicians did not use Twitter as a

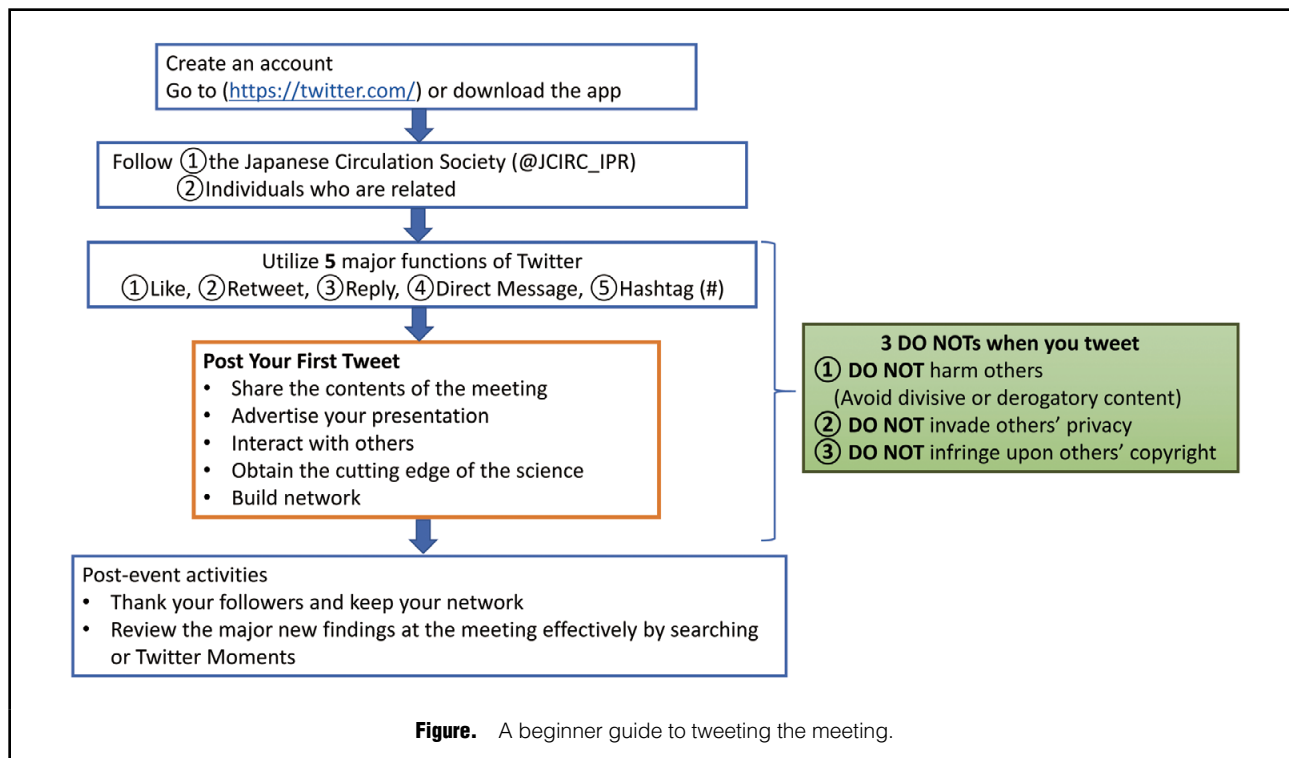
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posting tool or discussion tool in Japan. We considered that this might be related to the still on-going strong restriction of dissemination of presentation material in Japan, compared with the rapidly changing policies in other countries.^{3,4} Herein, we reviewed the literature (**Supplementary File**) and discuss the potential role of tweeting the meeting in Japan.

Recent Trend of Tweeting the Meeting

Recent uses of Twitter for communication and information dissemination at conferences and congresses have been reported as “tweeting the meeting”, which can provide real-time international conversation, critical appraisal, and networking.⁵ The use of social media at medical conferences has been increasing in a range of specialties, including generalists,⁶ emergency physicians,⁷ pathologists,⁸ urologists,⁹ cardiothoracic surgeons,⁵ pediatric physicians,¹⁰ and geriatric physicians.¹¹ Finally, several cardiovascular societies have also started using Twitter.^{12–14} The main content was conference-related education, which might be beneficial for many Twitter users including both specialists and non-specialists.¹⁴ In addition to doctors, other healthcare professionals also engage in the use of the platform.^{15,16}

When considering the nature of the ease of data sharing and spreading using Twitter, there is some concern and anxiety about potential decreases in the physical attendance rate at conferences and congresses. We could not, however, identify consistent reports to support this concern. Approximately 95% of tweeting results from physical attendance at a meeting.¹⁷ Also, a report by the American Society of Radiology found no relationship between the total number of registrants and the total number of tweets.¹⁸ In contrast, 65% of tweets generated from a major emergency physician conference came from Twitter users not presenting at the meeting.¹⁹ A recent analysis of 3 annually occurring major

cardiovascular scientific sessions in the USA (American College of Cardiology, Heart Rhythm Society, and Transcatheter Cardiovascular Therapeutics) found that the number of conference attendees mildly decreased (from 42,764 to 40,954) despite a great increase in the number of conference Twitter users (from 3,212 to 10,362) from 2014 to 2016.¹³ Considering, however, that physician tweeters comprised only a small percentage (2–13%) of meeting attendees,²⁰ there does not appear to be a need to fear a huge negative impact at the present time.

Potential Measures of the Impact of Tweeting

As mentioned previously, a number of studies have already analyzed the impact of Twitter activity both before and after a professional meeting. Several measures, such as followers, followers lost, retweets, mentions, users receiving retweets, impression and engagement rate (which can be measured easily) should be considered.²¹ For example, at a European Society of Cardiology congress between 19 August and 2 September 2018, #ESC Congress was used in 56,823 tweets, and 408 million impressions,¹⁴ which is similar to the total tweets number of 72,698 for the American Society of Clinical Oncology Annual Meeting 2016.²² Direct comparison of such measures could be useful to measure the impact of the meeting.

From the attendees' perspective, the usefulness and the tangible experience of Twitter could be assessed using five easy questions, such as “was Twitter a useful tool for my learning at the conference”.¹² Previous articles summarized the benefits for attendees, such as rapid dissemination of information, building of a brand, educational adjunct, networking and mentorship.

The context of a tweet can be categorized into several categories, such as: session related, social (networking), logistic (resource sharing), advertising, and other (self

promotion etc.).^{15,23,24} Session-related tweets typically account for 30–70% of total tweets.^{17,25}

Furthermore, the direct relationship between tweeters can be analyzed using NodeXL, which is a popular means of visualizing connections.^{14,26} Although the meaning of visualization is not clear at the moment based on previous literature, we might, for example, consider analyzing network centrality by comparing with co-authorship networks in the future.²⁷

Rules and Potential Risks of Tweeting the Meeting

As mentioned previously, several rules should be followed based on previous guidance before tweeting the meeting. Logghe et al recently summarized the recommendations from major and surgical organizations regarding social media use and misuse.²⁸ The recommendations consisted of confidentiality, employment and online behavior, conflicts of interest, defamation, the illusion of privacy and the permanence of the Internet, supporting colleagues, active maintenance of a professional online profile, and professionalism.²⁸ For example, to avoid specific steals marketing or direct marketing, conflict of interest disclosures are highly recommended.^{29,30} The European Association of Urology, the British Journal of Urology International, ASCO, and Ekins and Perlstein have all proposed their own respective 10 simple rules.³¹ Furthermore, during the 2018 European Society of Cardiology congress, the Society developed twitter guidelines in an effort to enhance the tweeting (https://twitter.com/ESC_Journals/status/1032945714232483840).

These rules included both benefits and risks when using social media platforms such as Twitter.² Risks included handling of unpublished data, consent from the presenter, propagation of potential misinformation, misrepresentation of complex topics as “soundbites”, violation of intellectual property, and informed consent from the patients.

When managing these risks, we identified 2 major reasons to forbid live tweeting: the Chatham house rule, and the Ingelfinger rule. The former devised in 1927 by the Royal Institute of International Affairs, noted that “When a meeting, or part thereof, is held under the Chatham House rule, participants are free to use the information received, but neither the identity nor the affiliation of the speakers, nor that of any other participant, may be revealed”.³² The latter was introduced in 1969, and noted that “with the understanding that neither the substance of the article nor any of its pictures or tables have been published or will be submitted for publications elsewhere”.³² Groves mentioned that Twitter could be considered as an exception from these rules.³² Finally, Light et al summarized the potential risks, especially regarding intellectual property and delegates’ rights.³³ There seems to be a consensus that the rules for sharing slides on social media should be made by either the individual congress or by the individual speaker. Because these various guidelines and rules may not be applicable from an ethical perspective, it is suggested that each Society create its own guidelines to proceed with official Twitter activities.

Generalizability and Applicability in Japan

Finally, we should discuss the generalizability of previous reports. Dincelli and Goel reported on the cultural/social influence on social media behavior.³⁴ Compared with people in the USA, many Japanese people seem to prefer hiding their identity such as their name in nicknames and avatars,

and the retweet rate is considered relatively lower than in other countries, which could affect the spread and impact of tweet the meeting activity in Japan.^{34,35}

Facebook is another popular social network service in Japan. Due to its higher security and its features more conducive to closed discussions than Twitter, some physicians might prefer Facebook to Twitter.³⁶ Twitter, however, is the better format for achieving outreach and participation in discussion.²¹ In addition, the motives of professional advancement and expressive information networking are stronger for the user of Twitter than for Facebook users, including the Asian population.³⁷ Given, however, that there are no previous data on tweeting the meeting activity in Japan, we await further trials and data in order to discuss this topic appropriately.

How to Tweet Effectively at an Annual Conference

Before directly introducing Twitter at their annual meetings, a number of societies and professional organizations used several strategies to introduce and promote the use of Twitter at conferences. Winandy et al implemented multimedia channel strategies using Facebook, Flickr, Liveblog, websites and e-mail.²¹ The authors mentioned the usefulness of a 6-month active promotion phase prior to a particular conference to increase followers. In the case of the Society of Thoracic Surgeons, Luc and Antonoff introduced “how to tweet the meeting”.⁵ This kind of how-to information might be useful considering the low prevalence of tweeters among physicians. Moreover, many other societies also introduced several famous relevant tweeters and popular relevant hashtags to help the beginner to start. Based on a previous step-by-step guide to tweeting by the Society of Thoracic Surgeons, the Information and Communication Committee of the Japanese Circulation Society has produced a simple guide “How to tweet in the meeting” for use during the Japanese Circulation Society annual meeting, which might be useful for many beginners (**Figure**).

Conclusions

In this narrative literature review, we found great benefits and some risks of tweeting the meeting. Considering the recent popularity of Twitter at medical congresses worldwide, more discussion and provision of guidance for the use of SNS at scientific meetings in Japan are expected.

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Supplementary Files

Please find supplementary file(s);
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