

Twitter for microblogging in oral health care, research, and academics: Road map and future directions

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Abstract

Current times have seen growing use of social medial tools, including microblogging sites like Twitter as an efficient method to disseminate information related to health amongst patients, students as well as health care workers. This article explores the role of this short, effective messaging platform in oral health care, teaching, research and learning. The concepts of “tweeting the meeting” and aggregation of conversations via “hashtags” is advocated for academic conferences, which will extend the conference reach to give the users better access to the instructors and enhance the related outcomes. Tweeting and retweeting the required research content may increase the academic footprint of the conducted research and researchers. In addition, it has served an immense role in the current COVID-19 pandemic by the regular circulation of information to the public and helped governments in policymaking and showcasing the areas of public concern. However, it still has a huge potential yet to be explored, with collective efforts towards strengthening the aspects of authenticity and standardization of the shared content.

Keywords: COVID-19, hashtags, microblogging, oncology, oral health, social media, Twitter

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INTRODUCTION

Usage of social media tools for research and academics is under-utilized.^[1] However, these tools have the potential of instantaneous scientific dialogue with large population groups, which includes health care workers (HCWs), medical students and patients. Microblogging platforms such as Twitter could become a successful channel through which HCW and patients can interact, engage and transfer medical-related information.^[1,2] At present, Twitter is the most popular socializing tool used for healthcare-related

communication,^[3,4] though “some argue that social media has no place in healthcare, while others claim that the open sharing of information enabled by social media would revolutionize accessibility to medicine.”^[3]

The current short communication explores the role Twitter can play in sharing information in an oral health care (OHC) research and academics perspective. The suggestions generated by us are based on thorough literature search and can prove to be useful in the OHC context.

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UNDERSTANDING TWEETING

Twitter is an online social media platform for sending short messages amongst groups of recipients by using personal computers or mobile telephones. Maximum texting of 280 words per tweet is allowed and the importance of a single tweet can be gauged by a count of “retweets” and “likes.”^[1,5]

TWEETING AND ORAL HEALTH CARE

Tweeting has been utilized and discussed concerning various medical sub-domains including vascular surgery,^[1] oncology/cancers,^[6,7] cardiology,^[8] psychiatry,^[2] breast cancer prevention^[9] and bowel disease.^[10] Although Twitter usage in pathology context has been published,^[11-18] but its usage OHC context is still in infancy and needs to be documented and utilized fully. Twitter can be used in OHC and disease, especially in oral cancers context for rapid science dissemination, global engagement audience and for real-time coverage of related congresses.

EVIDENCE-BASED TWEETING IN ORAL HEALTH CARE

Tweeting has been serving various purposes in dentistry, including analyzing the practitioner’s perspective of patient expectations,^[19] and for patient information and feelings (positive/negative) in orthodontics,^[20] and dental pain monitoring during public health surveillance.^[21] However, the disadvantages reported related to information on Twitter include lack of standardization, limited content upload without peer review, hence no validity of the information.^[22] All this highlights the need of authentic evidence-supported interactions on Twitter.

Djuricich 2014 described the concept of Evidence-Based Tweeting (EBT) as “A format for providing links to evidence and referencing peer-reviewed publications through Twitter. EBT is accomplished by including Uniform Resource Locator (URL) links to PubMed articles in tweets outlining a particular topic.”^[23] EBT has been discussed in various medical fields^[1,8] and should be utilized by oral HCW (OHCW).

“Twitter journal clubs” and “Twitter chats” have been suggested related to medical education.^[2] These can be tweeted for OHC discussions along with web links of authentic sources to make the interactions evidence supported.

TWITTER USE IN ORAL HEALTH CARE CONFERENCES

Many national and international conferences related to

oral health (care research, academics and surgeries) remain scarcely attended by many attendees due to multiple reasons such as time constraints, visa requirements, financial liabilities and more recently COVID-19 threat. It has been tested for perceptions of students in an oral and maxillofacial radiology course conducted in the United States and reported improved accessibility of instructor, better viewing of radiographic examples and overall an enhanced experience for learning and teaching.^[24]

At present Twitter is intertwined with almost all industries, with medical/dental conferences being no exception. It has been established that “Twitter participants for a conference is positively associated with Twitter activity metrics.”^[25] Luc and Antonoff 2018 have discussed the utilization of Twitter for maximizing the conference participation, using the “tweeting the meeting” concept. This is done for real-time interactions related to scholarly activity in the conference, critical appraisal and broadened networking venue both synchronously and asynchronously.^[26]

Organizers of OHC related conferences can utilize the Twitter platform for enhancing engagement beyond the conference walls.^[27] Involving registered/unregistered participants and the general public can play a critical role to decrease the economic and oral-disease burden related to OHC diseases like oral cancers, dental caries, etc. EBT by increasing the distribution of information during the conference to the scientific community and general public.

Conference organizers should use a social media strategy and promote the use of Twitter conference hashtags before, during and after the event. Hashtags of the conference can aggregate conversations so that all stakeholders can be engaged irrespective of they may or may not be present in the conference.^[27,28]

USING TWITTER MICROBLOGGING FOR ORAL HEALTH CARE, RESEARCH AND ACADEMICS

Thompson *et al.*^[29] have provided prelude for implementing Twitter for the busy HCW. Table 1 enumerates few uses of Twitter in OHC, research and academics and what to tweet for the same. It has been pointed out that very few PubMed-listed articles are tweeted, suggesting underutilization of the Twitter platform.^[30] Twitter should be used for increasing the academic footprint of own research work^[31] and frequently divert online traffic towards the thrust scientific work. OHCW and students should utilize Twitter microblogging effectively for patient care, research and academics while being ethically correct and maintaining credibility.

Table 1: Usage of Twitter in oral health care, research and academics

Uses of twitter	What to tweet
For notifications	New research (thrust topics like oral cancers, dental caries etc.,/published research/unpublished research) Announce deadlines Emergency support requirement Employment opportunities Event tweeting (brochure, real-time coverage)
Research and academics	Collaborate for projects (national/international, multidisciplinary e.g., microbiology, biotechnology and bioengineering) Finding latest and trending topics
Data collection	Taking Polls i.e., www.twitpol.com Oral health related epidemiological survey Checking preliminary opinion (trend)
Sharing resources	Sharing URL*/DOI* of research work for increasing academic footprint and early detection of problems in scientific papers Sharing pictures i.e., www.twitpic.com leads to more engagement
Networking and promoting activities	Connect researchers and students Follow mentors and researcher working in the same field Usage of hashtags for diverting online traffic Organising and highlighting scientific activities for creating awareness towards research topic Promoting awareness in general public about disease aetiology and pathogenesis for prevention and subsequently decreasing oral disease burden

*URL: Uniform resource locator, DOI: Digital object identifier

Information about fudged data, erroneous methodology and scientific misconduct can disseminate fast on Twitter and can be an early warning sign for papers.^[32] However, many simple queries or confusions related to publication can be managed “away from the journal” on the Twitter platform.

TWITTER IN COVID-19 AND ORAL HEALTH CONTEXT

Plenty of literature has been published related to COVID-19 and Twitter.^[33-37] Important information related to OHC, national/international guidelines for OHCW, COVID-19 vaccination, COVID-19 diagnostics, etc., needs to be tweeted and retweeted for benefit of OHCW and patients. A recent study analyzed tweets for circulation of oral health information related to COVID-19 on Chinese Social Media, and found that it is useful in providing better facilitation of oral health-related communication and thus aid policy decision and showcase public concern.^[38]

CONCLUSION

The current article is a novel insight into the plausibility of social media Twitter handles in the distribution of health-related information, in multiple disciplines of medicine and dentistry. In addition, it creates evidence to support the use of these microblogging sites for studying patients and practitioner’s perceptions for varied treatments indicated by their positive or negative responses. The conduction of conferences or courses for teaching and learning has been revolutionized by instant dissemination of content and real-time interaction with the course faculty or by image sharing. It has served in the facilitation of news, data, or report sharing related to COVID-19, in terms of vaccinations, oral health-related

information, or diagnostics, which has thus benefitted the governments in formulating policies or guidelines. However, the aspects of research and academics are still neglected in Twitter domains and may be explored further to promote ethical redistribution of scientific content.

Through this short communication, we make a humble submission to authorities of both Indian Association of Oral and Maxillofacial Pathologists and its official publication *Journal of Oral and Maxillo-Facial Pathology* to utilize Twitter platform to explore tweeting potential in acquiring or notification of evidence-based information and utilizing live tweeting in its organized events.

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Conflicts of interest

There are no conflicts of interest.

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