EDITORIAL

Update on social media and otolaryngology: Pertinent positives and definite downsides

On April 9, 2021 at the spring Triological Society meeting, I had the privilege of participating in a panel on social media. This panel focused on topics such as: "why should I get involved in social media," "how do I differentiate between my personal and professional social media personas," and "where can I get into trouble with social media use." Having moderated and participated in several social media panels and projects in the past, it was telling that the topics had evolved from simply "what is social media?," "how do I sign up?," or "what is a hashtag." We've moved beyond the basics.

There has undoubtedly been a social media boom during this pandemic-induced period of remote learning, recruitment, and work. Nearly all otolaryngology residencies have created social media accounts on Twitter and Instagram. Many departments and divisions have created pages, as have individual surgeons. The impetus for and purpose of each accounts differs and all are substantive reasons to get involved in social media.

New in otolaryngology this year, social media accounts and the content they created have played a large role in the recruitment of new residents and fellows to otolaryngology training programs. Virtual social events, resident introductions, and even remote rotation experiences have been introduced in the past year. A popular website among otolaryngology residency applicants, @headmirror, kept a running feed of recruitment events happening via various departmental social media accounts.

Other community members have used social media to expand their professional networks. ^{1,2} My personal network of like-minded laryngologists has grown exponentially during this past year. Discourse on otolaryngologic topics as well as broader issues in medicine and public health has occurred across subspecialty, program, and even country lines. Discussing mutual challenges and setbacks has even been shown to decrease burnout by cultivating a sense of community. ³ It has certainly helped me feel more connected in this difficult year.

Some accounts have targeted education as their purpose. Whether teaching patients how to recognize symptoms of a sinus infection or reviewing best practices in the care of complex skull base tumors, education through social media is likely here to stay. Journals share their newest content and accounts targeted at medical students and residents review board-testable content. One example of an

educational account is Dr. Leslie Kim (@drlesliekim), a professor at the Ohio State University. She has garnered a large following on Instagram due to her well-researched and thoughtfully presented information during the COVID-19 pandemic. She now continues to use this platform to create and amplify evidence-based education content on a variety of otolaryngology and medical topics. Furthermore, Dr. Kim has a large number of patients who first found her via social media.

Practice building is an attractive reason for branching into social media and is exemplified by many of our facial plastic surgery colleagues. Remarkable "before and after" photos showcase the talent and range of otolaryngologic surgery. Procedural videos have become increasingly popular, as well. These allow learners to brush up on surgical steps and show patients what to expect when they arrive at our offices. Sometimes, as is the case for some of Dr. Steven Gold's (@drbooger) videos, they are just plain satisfying. During our panel, I shared my first experience of having a new patient come to my office and say "I followed you on Instagram!" This caused a moment of reflection for me.

While I have highlighted some of the pertinent positives to participation in professional social media, there are some definite downsides to digitizing doctors. After my patient mentioned looking me up on social media, I did a mental review of the content I had posted to various accounts. I wanted to ensure that the professional persona I wanted to create was represented in my social media. Professionalism has become a point of contention when discussing doctors on social media.

During our panel, we discussed the recent case involving a, now retracted, publication from the Journal of Vascular Surgery.⁵ This widely criticized publication purported to evaluate the professionalism of members of the vascular surgery community based on their social media content. The controversy came due to some arguably biased and antiquated classification of behavior.⁶ While I encourage all readers to delve into the details behind the #medbikini movement, the case highlighted a risk of being active on social media. We cannot control how others will react to our pictures, opinions, or, even, lack thereof. Professionalism is subjective and shifting and care should be taken when deciding what to post.⁷ As I quipped during our panel, "the internet is forever" and content should be treated as though it

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will be taken out of context. Some employers and programs have even proposed reviewing applicant social media for any "red flags." Our Triological panel collectively concluded this would be a difficult practice to justify given the significant potential for biased evaluation (as exemplified by the #medbikini scandal). Formal evaluation may not become commonplace, however, it is inevitable that social media may come into play during evaluations of candidates.

By presenting ourselves as part of the medical social media landscape, we open ourselves up to criticism and even culpability. Never giving out medical advice or conversing directly with patients via social media seems obvious, but there are other pitfalls that can result. Concrete advice that was given at a prior panel at the American Academy of Otolaryngology annual meeting⁸ was to become intimately acquainted with your institution's guidelines on social media. Professional society guidelines are useful as a starting point as well. 9-12 It should be pointed out that the otolaryngology leadership has not yet released any such guidelines. Obvious guidelines (and, in this case, laws) include that any patient-related content should have written permission and be disclosed as such. A clear disclaimer of the separation between your personal account from your institution is important as well. Keep close tabs on privacy settings. If you are separating your personal profile from a professional one, make sure you give access to only those you want seeing those accounts. More globally, as medical professionals we have a powerful voice and we must use it responsibly.

Careful fact checking and diligent research will help avoid some social media pitfalls we have seen from "experts." We must remember that patients and colleagues will take our posts at their face value and we have a responsibility to accurately reflect our understanding of the science and art of medicine. In an age when misinformation is spreading faster than ever, highlighted especially during the COVID 19 pandemic, it can be argued that countering falsehoods is a professional responsibility. ¹³ Happily, it has been shown that social media really can combat misinformation. ¹⁴⁻¹⁸ A best practice exemplified by many successful social media professionals is to cite primary sources for your content. It not only strengthens the point you are making, but also reiterates the importance of data and research in medicine. Some may recommend avoiding controversial or debated topics, but a more useful approach may be to present those subjects as exactly that: a scientific unknown.

Speaking of controversial, another interesting topic that arose during our panel this year was whether we, as medical professionals, have a responsibility to participate in public discourse about social justice or medical topics that have relevance to our lives. Dr. Romaine Johnson, the moderator for our panel, shared a powerful story about his family's legacy as leaders in social justice. He reflected that he had avoided topics that might be politically charged to distance his professional persona from that history. He, and subsequently I, wondered whether we were doing a disservice to important causes like diversity in medical training or social determinants of health by not actively participating in the online conversation. It would be interesting to see studies looking at whether patients look for this type of advocacy in

their providers, or, alternatively, if they value an online persona, which comments only on science and medical facts.

Research in social media and medicine is difficult and limited thus far. Much of the established body of research looks at the spread of medical misinformation on social media and whether social media can be used to change patient perceptions, knowledge, or behavior. ^{19,20} A recent review examined the use of social media as a medical education tool for providers. ²¹ They review the rise of "knowledge translation" in social media friendly formats like infographics or visual abstracts. ²² Dr. Michael Johns (@laryngologist) and Dr. Jennifer Villwock (@jenvillwockmd), my co-panelists, have previously published about and encouraged the use of visual abstracts within the otolaryngology community. ^{22,23} This is one of very few articles within otolaryngology related to social media.

To review the current state of the literature regarding social media in otolaryngology, one can find general categories of publications. Most examine the rise of social media by quantifying the number of accounts and content that exist in our field. 1,24-31 These publications typically review current uses of otolaryngology in our specialty and a majority have at least some discussion of the potential directions social media might take in otolaryngology. 32-34 Importantly, there is just one publication that suggests a standardized ontology, or terminology, within the field of otology to encourage seamless interaction around common otolaryngology topics.34 This uniformity of terminology has been used in other fields to increase discourse around their topics of interest. 35-37 The ontology has been integrated into some subspecialty social media guidelines to encourage a uniform message and terminology. Finally, there is one study within otolaryngology that suggested that residency ranking was correlated with increased social media presence, though reasons for this are unclear.27

Future research in social media has huge potential. By going beyond the descriptive studies, formally establishing best practices, and evaluating the effects of social media participation, we can approach engagement in an objective way. As has been done in other specialties, proactive and formalized guidelines on social media use specific to otolaryngology would assist individual societies, journals, departments, and providers in effective and safe social media engagement. As part of the specialty guidelines, systematic establishment of a common ontology would assist in uniform messaging within and from our field. Other potential areas of study within otolaryngology and social media should address patient perceptions and interactions with our social media accounts. Quantification of patient education and outreach campaigns will establish best practices for future advocacy. Outcomes research related to implementation of social media and online-based medical education is necessary to justify and/or encourage a shift in traditional provider education. Correlation between social media engagement, or lack thereof, and promotion, citation, and leadership within otolaryngology would give tangible evidence for active participation. Prospective trials relating to implementation of formal guidelines in our field will assist in avoiding the aforementioned potential pitfalls. Formalized processes for evaluating

providers' social media could allow content to be considered when evaluating candidates for positions or promotions.

I have been excited and honored to be a part of the discourse relating to social media in otolaryngology. Serving on committees such as the Triological Society social media committee and co-managing institutional accounts has given me a unique perspective on engagement within our community. Panels such as this year's Triological Society panel push me to reflect on social media in my professional life. I will end with a call to action. Let otolaryngology be a leader in optimizing social media benefits and minimizing the downsides. Let us bring our established reputation of evidence-based practice to social media via rigorous study of the subject. Oh, and when we do, let us not forget to share what we discover via a tweet or Instagram post!

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CONFLICT OF INTEREST

The authors declare no potential conflict of interest.

Hayley Born MD (1)



Department of Otolaryngology-Head and Neck Surgery, Sean Parker Institute for the Voice, Weill Cornell Medical College/NewYork-Presbyterian Hospital, New York, New York, USA

Correspondence

Hayley Born, MD, Department of Otolaryngology-Head & Neck Surgery, Sean Parker Institute for the Voice, Weill Cornell Medical College/NewYork-Presbyterian Hospital, 240 East 59th Street, New York, NY 10022, USA.

Email: hlb7001@med.cornell.edu

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ORCID

Hayley Born https://orcid.org/0000-0001-8296-285X

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