

## Navigating a new terrain: how Twitter is changing hematologists

On 26 April 1958, the hematology universe converged on Atlantic City, New Jersey, as 300 hematologists met, just as they have every year since, to discuss the groundbreaking discoveries of the year before and the revolutionary shifts in medical care that would inevitably follow. This inaugural meeting of the American Society of Hematology (ASH) was set in the decade of innovation. It had been 5 years since aspirin was found to protect against myocardial infarction, 1 year since the description of the sickle hemoglobin mutation, and 1 year since the identification of the kidney as the source of erythropoietin. It was the year of the first description of a human leukocyte antigen on the erythrocyte and the decade of the first use of combination chemotherapy, setting the stage for the next century of cancer treatment. In short, there was a lot to talk about. Yet how many would hear about these pioneering discoveries? Few in the medical community and fewer among the general public. The conversations happening at that meeting were behind closed doors, only released out of context in a collection of abstracts, with no record of discussion, no measurement of excitement, and none of the dynamic nuance that we use to gauge the true impact of the science we consume during our academic conferences.

Much has changed since that first meeting, but the greatest shift has been in how we consume information. Social media have revolutionized medical communication and education in immeasurable and immense ways. Compare the 1958 ASH meeting with the 2020 ASH meeting. The addition of social media, specifically Twitter, to the localized landscape of innovation and collaboration taking place at the meeting has expanded its sphere of influence from an audience of perhaps a few thousand to one of a few hundred million. During the meeting period from 2 December 2020 through 10 December 2020, there were 34 589 tweets from 6161 users that were seen 159 624 410 times. The power of a social media platform like Twitter cannot be overstated. Twitter is a microblogging and social networking site where users communicate in character-limited posts called “tweets” that has long since moved beyond its early days of mindless meanderings in the mundane. The site has 330 million active monthly users, with 145 million accessing the application daily, and serves as a formidable tool for rapid dissemination of information and collaboration.<sup>1</sup> When used intelligently, it is a tool for collaboration and career advancement, for enhancing the care we provide to patients, and for exploring and acknowledging our expanding roles in a rapidly changing society. It has both helped and harmed our ability to practice medicine in the 21st century, and it is our responsibility to adapt to the rapidly evolving health information climate it has created.

For decades, medical professionals have played the part of silent spectator in the social media space. Often discouraged by hospital systems and senior colleagues, physicians find themselves torn over whether they should engage in this medium. Meanwhile, every day in clinical examination rooms around the country, physicians spend countless hours trying to unravel the misinformation that patients have consumed on the internet and social media. Discussions about vaccine safety and the use of natural supplements abound, as do opinions on therapeutic options and ongoing research. Patients are overloaded with medical misinformation and medical disinformation and do not stand a chance of navigating the onslaught. The increasing availability of “alternate truths” and conspiracy theories regarding our true motivations has harmed, and will continue to harm, our patients, as well as our therapeutic relationships with them. However, if we are not a part of the conversation, whom can we blame for their distrust but ourselves? This is an unprecedented time, with an extraordinary threat to the well-being of our patients that we have not sufficiently addressed with the sustained effort required to protect them.

Beyond simply allowing us a pulpit for our own defense, social media have allowed the amplification of our footprint in patient advocacy and disease awareness, to be the first stop on the information superhighway. We have personally used our combined platforms of over 20 000 followers across Twitter, Instagram, and Facebook to campaign for patients with sickle cell disease, bleeding disorders,

and COVID-19, and a multitude of other issues. We have successfully contested insurance companies on criteria for prior authorizations for access to new therapies; campaigned for health equity for sickle cell patients who are subject to bias, racism, and prejudice; and leveraged larger platforms like Technology, Entertainment, and Design (TEDx) to collaborate with us on these issues. Most recently, we have as a community launched a successful campaign tackling hunger, which received donations from thousands of individuals across the world. In its inaugural year, #HCWvsHunger raised over \$350 000 in the span of less than a week, all benefiting food banks and antihunger organizations around the world. The power of community is amplified when your community is larger.

Finally, social media in medicine have forged a new path in collaboration, mentorship, and continuing medical education. Each of the authors of this editorial has personally benefited from interactions on Twitter with prominent senior-level hematologists, freely accessible to us regardless of geography or hierarchy. This type of environment helps flatten the medical hierarchy, enabling access to and optimization of community, collaboration, and education. Discussions of complex disease management issues can lead to perspectives from experienced colleagues in your field and often fresh perspectives from other fields. Journal accounts promote fresh content continuously, filterable by keywords, that allow for rapid surveying of the medical literature. This type of engagement can generate instantaneous peer review and impromptu Twitter-based journal clubs that serve as wonderful forums for academic discourse. Twitter opens up a whole range of both on-demand and live educational opportunities, from succinct clinical pearls (Twearls) to Tweetutorials, Tweetstories, and chats, all free and openly available. Social media can in effect be an endless continuation of the ASH annual meeting involving not only members

of our own field, but other medical fields, scientific fields, politicians, social activists, and patients.

After a year that has changed society in innumerable ways, we hope that as a scientist/clinician community, we can recognize this instant as a watershed moment, one where we embrace the way society connects and learns and one where our voices and our message can be amplified on a scale previously unimaginable. Although we recognize that there are land mines in this new terrain for physicians, the thought of letting our patients navigate the terrain alone is too alarming. We wonder what the 300 hematologists at the inaugural ASH annual meeting, 60 years ago, would have said if we told them the content shared from the most recent annual meeting was seen 160 million times. Perhaps they too would remind us of the responsibility we have to our patients to meet them where they are with scientifically accurate knowledge and a strong voice of advocacy.

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## Reference

1. Weyand AC, Zaidi AU. Tweetopoiesis: a peripheral review of twitter for hematologists. *Am J Hematol*. 2021;96(1):7-8.