

More and more, the world depends on electronic information. The Internet has changed how we communicate, learn, and discover. In this issue of *Kidney News*, a series of articles explores the impact of the Internet on nephrology. Dealing with a deluge of information? Looking for new ways to connect? We have some answers.



## The New World of Medical Tweeting

By Afreen I. Shariff, MD, and Tejas Desai, MD

Twitter has taken the world by storm. No one could have predicted that just 6 years after its inception Twitter would have 300 million users generating 300 million messages every day (1). If you are among the uninitiated, you should become familiar with how Twitter works and why it's one of the most popular micro-blogging websites in the world.

Twitter is an open forum for sharing real-time information through "tweets." A tweet is a short message of 140 characters or less that can convey absolutely anything to your "followers" (people who subscribe to your "feed" of tweets). And with Twitter you aren't just limited to text. Using third-party providers, you can insert Web addresses and link to photos, videos, and more. If you like a message you can copy and paste it to your followers, or in Twitter parlance "retweet it," which is how a message is amplified. A recent study found that although 40 percent of messages on Twitter were pointless babble, 38 percent were conversational—transferring information and spreading content (2).

The popularity of Twitter with the media, celebrities, and public figures is well documented, but members of the medical community seem hesitant to associate themselves with it. There could be many reasons for this: physicians may be unaware or unfamiliar with Twitter, they may be too busy, or they may fear potential privacy issues (3). Anticipating this, the American Medical Association has released a public statement about professionalism in social media:

"Participating in social networking and other similar internet opportunities can support physicians' personal expression, enable individual physicians to have a professional presence online, foster collegiality and camaraderie within the profession, provide opportunity to widely disseminate public health messages and other health communication. Social networks, blogs, and other forms of communication online also create new challenges to the patient-physician relationship. Physicians should weigh a number of considerations when maintaining a presence online." (4)

Because Twitter is a large pool of raw information and opinions, there are networking opportunities for those who can tap its potential. The news media analyze Twitter posts to gain insights into elections, and politicians focus campaigns based on public sentiment sifted from the site (5). This concept can be used in medical conferences for networking within the medical community and with patients. Journals and conferences, including the American Society of Nephrology (ASN) Kidney Week, want to reach the widest possible audience, and using the large platform and audience Twitter provides ensures their important information is carried far and wide. By analyzing Twitter messages sent with conference or journal "hashtags" (short unique identifiers starting with "#"), it is possible to identify and understand patterns and how these impact a message's reach. During ASN Kidney Week 2011, we identified 172 unique tweeters who produced 993 tweets. Analysis of the content, citation, and sentiment have led to some interesting findings about conference-based tweeting and ways to improve conferences' impact and popularity.

This opens a door to advanced medical informatics where physicians can interact with patients and network with consultants, students, and prospective residents. Twitter has many potential health care applications, such as recruiting potential organ donors, creating online communities for families with special needs, reporting new advances in therapy, initiating clinical case discussions among attending physicians and residents, and health marketing.

In a recent *JAMA* study (6), investigators analyzed 5156 tweets from physician accounts and found a majority (78 percent) identified themselves with their full name, with surgeons occupying the top spot for the highest number of tweets (39 percent) closely followed by internal medicine (29 percent). Physicians holding MDs (70.2 percent) were also more likely to tweet than their DO friends (2 percent) (6). Another group of researchers followed 125 students over a semester and found that those students in the Twitter-based education group were more engaged in the subject and scored better than their other classmates (7). These data suggest that Twitter can be a strong educational tool. Research-

ers at East Carolina University are studying the use of Twitter to communicate during conferences and are developing strategies to better engage the student and physician populations.

In summary, Twitter has the power to spread knowledge and engage many people in conversations. It is the best one-to-many communication system to build your brand, network, give advice, or just have fun. Especially in an age of shrinking health care budgets, Twitter is an effective solution to the need for cheap mass communication (8). With Twitter, the future of communications is here, and it's both free and easy. ●

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