Commentary

Pharmacy 2.0: A scoping review of social media use in pharmacy

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Abstract

New "social" information and communication technologies such as social media and smartphones are allowing non-experts to access, interpret and generate medical information for their own care and the care of others. Pharmacists may also benefit from increased connectivity, but first there needs to be an understanding of how pharmacists engage with social media. A scoping review methodology was used to describe pharmacist and pharmacy student participation in social media networks and to describe the gaps in research. Three themes that emerged from reviewing social media use in pharmacy education were student engagement, boundaries and e-professionalism. For pharmacists, the themes of liability and professional use were prominent. Few pharmacy leadership organizations are providing guidance on social media but that appears to be changing. As the control of medical knowledge shifts from health professionals to the larger social community, pharmacists need to be present. Social media use and training in undergraduate programs is promising but experienced pharmacists also need to join the conversation.
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Introduction

What would happen if the healthcare community no longer controlled medical information? Historically, clinicians and scientists have produced and controlled medical knowledge.[1] The modern practice of medicine continues this approach. Using the term coined by Gordon Guyatt in 1992, today's "evidence-based medicine" (EBM) requires clinician

experts to appraise and integrate the best medical information with patient values to make decisions about care.[2,3]

But new "social" information and communication technologies allow non-experts to access, interpret and generate medical information for their own care and the care of others.[4] Through user-generated content and shared experiences, medical knowledge is now being created outside the control of medical experts (p178)[5] and it is challenging the very foundations of medical decision making.

The term "social media" refers to a set of tools that people use in the digital age to share content and information through conversation and communication (Table 1).[7] In some important sense, EBM de-emphasizes the power of anecdotes but social media seems to emphasize them. Online, patient stories are woven into the fabric of collective medical knowledge.

Much like medical and scientific professionals of the past, lay audiences are now invited, if not expected, to use and shape medicine's knowledge base. The Pew Internet & American Life Project estimates that one third of all adults have used the Internet to diagnose a medical condition.[8] Of those who access the Internet, one third have looked for the medical experiences of others on blogs, online newsgroups and websites and 6% have contributed content through comments, posts, photos, audio files and reviews of health professionals or institutions.[9] In addition, a quarter of people living with chronic disease have looked online for others with similar health conditions.[10]

The shift of medical knowledge from the experts to the community raises several critical questions for pharmacists. Pharmacists have long struggled to find their place in the medical community. Inwardly, they speak of being drug experts and purveyors of drug information but outwardly they project the image of drug dispensers. The contemporary pharmacy is characterized by the sale of products, social isolation and subordination to physicians.[11] Community pharmacists struggle with ethical and interpersonal conflict and decision-making, further challenging their roles in the health system.[11–13]

How do pharmacists and pharmacy students use social media to communicate within the pharmacy profession, with the medical community and with patients? In the same way that information and communication technologies are enabling the lay public to access and influence the creation of new medical knowledge, social media could also free pharmacists from the confines of professional isolation and subordination. But first we need to understand how pharmacists use and engage with social media. To explore areas for improvement and professional growth in social media use, the primary objective of this paper was to perform a scoping review of pharmacist and pharmacy student participation in social media and to identify the available guidance for pharmacy professionals engaging with social media.

Table 1
Glossary of terms used to describe social media

Social media is the use of digital media, including internet and mobile, to engage with other users and form self organized networks. Typical elements of social media include the ability to: 1) create a profile 2) "friend" or follow others to see their activity streams 3) create content such as text, photos, audio or video and 4) share, tag, rate, comment on or vote on content created by others. Blogs, Facebook, wikis, Twitter, social voting sites and virtual worlds are all examples of social media.

eProfessionalism refers to "the attitudes and behaviors reflecting traditional professionalism paradigms that are manifested through social media."[6]

A **blog** is a website, or online journal, where current topics and news are discussed. Bloggers engage in discussion with their readers, and generate a lot of social interaction thought to be useful in knowledge creation.

Facebook is the massively popular social networking site that connects you to friends and others in your network. It is used by over 1 billion people worldwide to upload photos, share links and videos, and to communicate.

Twitter is a microblogging service where users send and receive messages less than 140 characters called tweets often using a mobile (cell) phone or the Internet.

A **wiki** is a website, or collaborative writing platform, where anyone can create (or edit) content i.e., Wikipedia. Wiki stands for "what I know is".

Second Life is a virtual social space where a user, represented by an avatar, can socialize, connect and engage with others. For fun and exploration, Second Life may be a good place to start to learn about virtual worlds.