

Social Internet Sites as a Source of Public Health Information

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- Viral marketing • Web 2.0 • YouTube • Twitter
- MySpace • Facebook • Social media

Patients rely on the Internet more frequently than their physicians as a source of health care information, and emerging social media Web sites play an increasing role in online health searches.¹ Socially oriented sites, such as YouTube, Facebook, MySpace, Twitter, and Second Life[®], comprise part of the user-generated content constituting Web 2.0 and are popular particularly among Americans aged 18 to 30, two thirds of whom say they visit the sites frequently.^{2–4} A health-specific social Web site, <http://www.patientslikeme.com>, even allows patients who have similar illnesses to communicate and share medical experiences.⁵

SOCIAL MEDIA MARKETING

“Social media marketing” encompasses advertising and promotional efforts that use social media Web sites.⁶ It is a form of viral marketing, a term coined by Harvard professor Jeffrey F. Rayport in 1996, to illustrate how a message spreads through an online community rapidly and effortlessly.⁷ The content of social media marketing campaigns often is user generated; companies, such as General Motors, JetBlue, and Sony, have sponsored contests for viewers to submit videos promoting their products, simultaneously involving customers in the marketing process and obtaining

creative new ideas virtually free of charge. Creative videos often are then widely disseminated by viewers via e-mail and hyperlinks on personal Web sites. Analogously, in the dermatology community, the Sulzberger Institute for Dermatologic Education⁸ is sponsoring an Internet contest for the best video promoting sun safe behavior.

SOCIAL NETWORKING WEB SITES

In contrast to the music and film industries, which rapidly adapted social media marketing, this medium remains underused by public health professionals despite its low cost and wide reach. MySpace and Facebook pages for musical bands and new movies abound, encouraging fans to listen to new tracks or view theatrical trailers. Political campaigns also reach out to young adults through social networking sites: 8% of people polled under age 30 became an online “friend” of one of the presidential candidates in the 2008 election.⁴ Physicians similarly could be “friended.” The young adult demographic using social media sites are attractive to media for spreading public health messages targeting this population, such as sun safety awareness, tobacco cessation, and human papillomavirus vaccination education. Just as young adults can “friend” their favorite

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band, movie, or political candidate, they could add a link on their personal page to a skin health site with updates on acne treatment and other health messages.

YOUTUBE

More than 100 million videos are viewed on YouTube daily, and that number continues to rise.⁹ Several recent public health studies have looked at the content of videos hosted on YouTube that have tobacco and human papillomavirus vaccination messages.^{10–12} Researchers point out the potential power YouTube holds for personal health decision making. A cursory search on YouTube for the term “Accutane” results in 87 hits with titles

ranging from “An Accutane Story: The Chapstick Chronicles” to “Accutane is POISON! DO NOT USE IT!!!!” The majority of videos are mainly positive accounts by Accutane users sharing their personal experiences with other viewers. An overview of the top three videos by relevance is provided in **Table 1**.

A similar YouTube search for the term “Botox” returns 2750 videos; the top three videos sorted by relevance are provided in **Table 1**. Many of the top Botox videos actually are advertisements posted by Botox providers. These promotional videos often include footage of Botox injections and personal testimonials by patients receiving treatments. Frequently, the patients receive discounts for their participation, raising ethical

Table 1

A summary of the top three videos ranked by relevance^a resulting from a YouTube search for “Accutane” or “Botox” on August 15, 2008

Video Title	No. of Views	Time Since Posted	No. of Comments	Description
“Accutane” results				
“My Acne Story (Accutane)”	16,264	10 months	249	An Accutane patient’s personal story of how the medication helped him, a warning of side effects, and a request for other patients to share their experiences.
“Accutane Before and After”	11,939	4 months	69	An Accutane patient’s before and after photos.
“Accutane”	17,188	2 years	187	An advertisement for Accutane suggesting that Accutane will help you get out and participate in life.
“Botox” results				
“Learn about Botox injection- Upper face The Institute”	79,700	21 months	70	Video of botox injections followed by a smiling patient, phone number, and Web site address of the provider’s office.
“Alexis gets quarterly dose of botox” (video contains adult language)	24,325	15 months	32	Video of a patient joking before and during a Botox procedure, mentioning the provider’s name.
“Kelly Ripa—to botox or to not Botox?”	29,976	16 months	11	Morning talk show host Kelly Ripa talks about a book describing alternatives to Botox and states that she has not had any injections.

^a Relevance refers to the default ranking for YouTube queries and is determined by a proprietary algorithm.

questions.¹³ Paid testimonials may not reflect patient experience accurately. Social media marketing currently lies outside the realm of governmental regulation. It is important for the dermatology community to be aware of dermatologists advertising on these new media. Such monitoring will promote the integrity of the profession.

SECOND LIFE®

Second Life® is an incarnation of Web 2.0 that creates a virtual realm in which people can interact through 3-D characters, named “avatars.”¹⁴ The site serves as a physician teaching tool for trainees and patients and a new forum for exchanging scientific information and holding scientific meetings. Second Life allows users to interact in many formats, including audio, video, images, and text, and brings people “together” in virtual space while they remain geographically distant.¹⁵ A dermatology Second Life® realm could offer patients a site with expert opinions from across the globe or an online support group for specific diseases.

TWITTER

Microblogging is another expanding feature of Web 2.0 that enables users to rapidly provide others with video, image, and text updates. Twitter¹⁶ is the most prominent site, with more than 3,300,000 registered users,¹⁷ although other microblogging sites exist, such as <http://jaiku.com>,¹⁸ and MySpace and Facebook offer similar features in the form of “updates.” Companies, such as JetBlue, Whole Foods Market, and H&R Block, are using Twitter to reach their customers with new offers and to answer questions and concerns.¹⁹ Microblogging also has potential as a medical support group format; currently a Twitter site exists for mothers of children who have attention deficit disorder.²⁰ Physicians could reach their patients through Twitter to update them with therapeutic advancements, to answer disease-related questions, or simply to remind a large group of engaged consumers to wear their daily sunscreen.

CHALLENGES

Social media marketing has its own set of regulatory challenges.^{21–23} Authorship is difficult to determine, sources rarely are provided, and users may post their personal opinions as comments. The Health On the Net (HON) Foundation has created a set of eight major criteria, such as stated authorship, patient privacy, and attribution of information, that Web sites must meet to display the “HONcode” logo.²⁴ Criteria such as these cannot

be applied, however, to social media Web sites, and thoughtful action should be taken to provide patients with sound medical advice within online social networks.

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