Social Media in Public Health: Strategies to Distill, Package, and Disseminate Public Health Research

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ABSTRACT

The worldwide expansion of users on the Internet has popularized the access of individuals to information that may not be obtained otherwise. Social media has fostered interactions between individuals and health organizations by changing the nature and speed of engagement. While it is known that many public health organizations use social media to engage their audiences, little is known about effective strategies and best practices for the dissemination of knowledge and audience engagement. Many barriers exist in the dissemination of public health messages, including limited funds to support information sharing. Blogs and social media networking sites can be dynamic, cost-effective communication tools with the potential to reach scientific, practitioner, and public audiences who may be missed through traditional outlets. This article describes rudimentary processes of developing a blog and using social media to disseminate public health information and potential applications in the day-to-day activities for other public health organizations. With the growing demand for instant communication and concise information, a strong Internet presence could help organizations maximize their reach and impact.

KEY WORDS: blog, Facebook, Internet, multimedia, social media, social networks, Twitter

As noted by Brownson et al, "The gap between discovery of public health knowledge and application in *practice* settings and policy development is due in part to ineffective dissemination."[1(p102)] Passive methods of dissemination, such as the publication of consensus conferences in professional journals, are generally ineffective and produce little change in practice.[2] Social media has become a cost-effective way for public health practice to inform audiences of health issues, enhance communication during public health emergencies or outbreaks, and respond to public reporting of a particular public health issue.[3-5] Scientists are increasingly using social media to share journal articles, promote scientific opinions, post updates from conferences and meetings, and circulate information about professional opportunities and upcoming events.[6] Social media is more regularly being leveraged by public health organizations, such as the Centers for Disease Control and Prevention (CDC), state and local health departments, and other health agencies, to enhance existing dissemination practices.[7] Yet, many researchers and practitioners alike remain uncertain of how to best utilize social media for disseminating their evidence-based research to increase implementation.[8-10] This article describes efforts to increase the impact of the *Journal of Public Health Management and Practice* (*JPHMP*) in improving practice, research, and policy in a rapidly changing environment. We first describe efforts to maximize engagement and use of *JPHMP* by expanding reach and accessibility and then summarize Internet-based dissemination strategies that researchers, practitioners, or public health agencies can use to impact public perception, increase awareness of evidence-based information, and encourage implementation of scientific discovery.

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Maximizing Engagement and Expanding Reach and Accessibility

In September 2014, with support from the de Beaumont Foundation, *JPHMP* convened a strategic planning session to review and adjust, formulate, and implement strategic effectiveness. Four priorities were identified: (A) maximize engagement and use by expanding reach and accessibility; (B) align content with the field's emerging needs; (C) develop strategic partnerships to enhance journal reach and capacity; and (D) align journal operations and resources with changing needs. While priorities sometimes overlap, we focus here on "priority A."

In March 2016, *JPHMP* hired a full-time editorial associate to build a blog and expand *JPHMP*'s social media presence on Facebook and Twitter. At that time, content on both platforms was generated by dlvr.it, an automated social media scheduling tool. Most of the generated content consisted of text-based posts of article titles and descriptions in *JPHMP*'s RSS feed. There was virtually no engagement from either of the social networking sites. In September 2016, JPHMP Direct was launched as a companion blog Web site to *JPHMP*, designed to engage a deeper conversation with public health thought leaders, researchers, practitioners, and students. Initially, the blog featured author Q&As and blog posts on a variety of public health topics. Over time, podcasts, infographics, videos, and tools for authors and students were added to the blog's repository of content. JPHMP Direct has attracted more than 100 000 unique site visits and more than 50 000 visitors; provided an array of tools, resources, and information to students, practitioners, and researchers; highlighted research published in *JPHMP*; increased awareness of the journal; directed traffic to the journal's Web site; and created promotional opportunities for authors who publish in the journal.

Concurrently, 2 marketing firms were hired to help *JPHMP* develop a communications plan. In July 2016, the first firm began gathering information to establish a baseline of readership engagement with *JPHMP* and to develop a comprehensive tactical marketing strategy. The second firm assisted in establishing a social media presence for *JPHMP* and optimized the blog search and usability functions. The social media accounts were rebranded with a consistent look that represented *JPHMP*, and an updated process was established for manually scheduling posts at optimal times to social media. As a result of the rebranding and updated processes, the number of users following *JPHMP* on Twitter increased 12-fold and the number of users following *JPHMP* on Facebook quadrupled.

When JPHMP Direct was launched, the capacity to execute a comprehensive communication strategy was limited. Initially, the strategy focused on producing quality blog content and disseminating through Facebook and Twitter. As the blog received more traffic and traction on social media, *JPHMP* expanded its reach through creating other social media accounts, such as Instagram and LinkedIn, and venturing into podcast and video sites, such as Sound Cloud and YouTube. A summary of best practices *JPHMP* has learned while developing and implementing a comprehensive digital strategy is summarized in the Table.

If You Blog It, They Will Come

More public health agencies and organizations are seeing the benefits of creating professional blogs from which to share reliable, evidence-based information—and help dispel misinformation—with both public and professional audiences. Health agencies, such as Public Health-Seattle & King County (Public Health Insider Blog), Big Cities Health Coalition (Front Lines Blog), National Association of County and City Health Officials (NACCHO Voice), CDC (Public Health Matters Blog), and other organizations are creating open-access content, such as infographics, podcasts, videos, and blog articles, that can be shared on their blogs to audiences in their local communities or around the globe.

Even for individual scientists and practitioners, a well-regarded, fact-based blog can help establish authority and increase social media influence. Blogger David Harlow of the popular Health Blawg, a health care law blog, has nearly 18 000 followers on Twitter, a respectable following by most estimations. Dr Sandro Galea, a physician, epidemiologist, and dean at Boston University School of Public Health, maintains a personal blog where he writes about LGBT health, abortion, homelessness, and other public health issues. Even guest-blogging for reputable public health blogs is a viable option for researchers and practitioners to talk about their work to established audiences interested in public health issues.

Know Your Audience on Social Media

Developing a social media presence requires more than just showing up to the party to hand out evidence-based research. In today's highly politicized climate, even well-intentioned public health social media campaigns may be attacked by "astro-turfing" (ie, fake grassroots groups or other opponents of controversial public health topics) as happened with the Chicago Department of Public Health (CDPH) when more than 600 "Twitter bombs" from opponents of

TABLE

Best Practices and Approaches for Disseminating Journal Content[a]

Best Practice	Tool	Time Commitment	Approach
Understand and use appropriate channels to disseminate content	Blog	Medium-high	• Start with user-friendly content management systems such as WordPress. • Intermediate experience needed for blog/Web development, SEO optimization, domain registration, etc. • Time commitment varies, depending on complexity of site and frequency of posts.
	Social media	Medium	• Understand what channels your audience is on (eg, Twitter, Facebook, LinkedIn, and Instagram). • Conduct environmental scans to understand what is being discussed around your topic area on social media.
Consistently generate relevant digital content that engages stakeholders	Resources and tools	Medium-high	• Create content that can be used perpetually, such as tutorials, guides, or content that repeats seasonally. May take time to develop. But once it is done, it has a long shelf life. • It may require software such as PowerPoint or MS Word or podcast/video-editing software such as Camtasia.
	Regular blog posts	Medium-high	• Create blog posts, interviews, podcasts, videos, etc, solicited from outside sources. • Make an ongoing effort to reach out to potential contributors. • Keep in mind that more time is required to onboard new contributors. • Establish a number of regular (weekly/monthly/quarterly) bloggers as well as an ongoing practice of soliciting content from special guests.
	Multimedia content	Medium-high	• Create podcasts, tutorials, and videos. • Intermediate experience is needed for using editing software such as Camtasia as well as podcast (SoundCloud, iTunes, Stitcher, etc) and video (YouTube, Vimeo, etc) hosting platforms. • Time commitment varies depending on complexity of product (editing podcasts may take less time than creating tutorials or editing videos).
Use highly visual images or videos	Infographics	Low	• Use stock photographs and graphic design elements from Getty Images, Shutterstock, Pixabay, or Canva. • Use user-friendly design platforms such as Canva.
Understand the level of effort and use resources/tools to streamline processes	Internal resources	High	• Dedicate at least one full-time employee to manage blog and social media. • Intermediate experience recommended.
	External resources	Low-high	• If resources are limited, consider hiring interns, part-time employees, and/or consultants on occasion.
Evaluate your efforts and make adjustments	WordPress Metrics	Low	• Use analytics built into WordPress platform to understand what is working and what is not. • Beginner level. • No additional expense.
	Google Analytics	Low	• Set up Google Analytics immediately when you create your blog to begin capturing analytics. • Intermediate-advanced experience recommended.
	Social media analytics	Low	• Use analytics built into social media networking sites such as Twitter, Facebook, LinkedIn. • Beginner level.

[a]Level of commitment based on our experience: low = less than 3 hours at one time; medium = between 3 and 10 hours at one time; high = almost daily effort, or more than 10 h/wk.

Implications for Policy & Practice

- Public health blogs create repositories of evidence-based research and information such as infographics, podcasts, videos, articles, and tools that are freely and widely available to public and professional audiences around the globe. Blogs are cost-effective means by which to increase evidence-based information and help dispel misinformation.

- Reputable, fact-based public health blogs not only disseminate evidence-based research but can also help establish researcher and practitioner authority and influence in social media communities such as Twitter, LinkedIn, Facebook, and Instagram.

- With growing demand for instant communication, the use of social media can help organizations share timely information related to research or practice, but avoiding potential attacks to well-intentioned public health campaigns may require strategic communications planning from professional marketing firms.

proposed regulation tried to derail CDPH's e-cigarette campaign.[11]

Every social media site is its own unique community, with many smaller communities stacked inside it. To leverage social media for disseminating evidence-based information, we must listen to the conversations taking place in those communities and craft messaging that stands the highest likelihood of being effective. For an introductory overview of using social media, CDC provides a social media tool kit, guidelines, and best practices at https://www.cdc.gov/socialmedia/tools/guidelines/index.html.

Conclusion

With the growing demand for instant communication and concise information, a strong digital strategy rooted in best practices, consistency, and awareness of your target audience is essential for maximizing engagement and expanding reach. A blog can complement the content being disseminated, while social media networking sites allow individuals and organizations to widely share content that is appealing to diverse consumers. By providing relevant, consistent, and engaging content to audiences across online platforms, public health research can be disseminated more comprehensively than by nondigital means alone.

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