

Using Social Media as a Pedagogical Tool in Graduate Public Health Education and Training

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Abstract

Public health is a complex field where current information and evidence available to inform best practices are constantly changing. With the rise of social media influencing public health actions, it is becoming more important for those working in the sector to have a proficient understanding of this form of communication. Social media use amongst public health organizations is also on the rise. Twitter, Facebook, and YouTube have been used to disseminate timely information as well as for public health education. We argue that formally integrating social media as a pedagogical tool in public health graduate programs would benefit both, educators and students as well as the public health field in which students will work. Communication skills have been included in core competencies for public health professionals as an essential skill. Critical in that skill is the ability to work with new methods of communication, such as social media. We bring forward the idea that social media should both be used in teaching and taught as an essential skill. Using social media as an educational tool is an opportunity to ensure that graduate public health programs train students with the competencies to work in public health.

Keywords: Public health; Graduate education; Social media

Introduction

Public health is a complex and interdisciplinary field, where current information and evidence available to inform best practices are constantly changing [1]. With the rise of social media influencing public health actions [2], it is becoming more important for those working in the sector to have a proficient understanding of this form of communication. Positions within public health for individuals with social media training and understanding are increasing [3], yet Masters of Public Health (MPH) programs have not yet adapted to this demand by integrating social media into the curriculum [4]. We argue that in order to meet the demands of the public health workforce, training for graduates in public health

should not only include training in social media but also include the use of such a tool in the learning process. This shift has been acknowledged at a system level. For example, in Canada, the Canadian Core Competencies for Public Health [5] reference social marketing and computer literacy as essential competencies for public health professionals. It states, public health professionals should be able to “mobilize individuals and communities by using appropriate media, community resources and social marketing techniques” (section 6.3). Section 6.4 also applies, and states the “use current technology to communicate effectively” as a key competency for the public health workforce [5].

New media is defined as using technology interactively to connect with others [6]. Social media is often considered part of new media and emphasizes the importance of the two-way interaction with the message content. In this way, social media allows for a conversation where both ‘senders’ and ‘receivers’ of a message have an active role in its creation, transmission and ultimate outcome. Public health graduate programs should aim to adapt to the changing social dynamics, core competencies, and innovative pedagogy that come with new media. We suggest that new media and social media should be an essential part of the MPH pedagogical tool kit and believe that social media should both be taught as a skill, and used as a teaching tool.

Current status

In Canada, 83% of households have Internet [7], and 95% of people with a university education use the Internet [8]. Social media is defined as websites and applications that enable users to create and share content or participate in social networking [9]. Social media is further categorized into different types including microblogging, which consists of posting brief messages via text or images online, such as Twitter and Instagram. Social network sites, such as Facebook and LinkedIn, allow users to create a profile, see a list of their own connections, and view others’ list of connections [10]. Media sharing, such as YouTube or Vine, allow users to watch and share videos. In all of these examples, the user is in control, and shared content is a key to the success. Living in a media and technology consumed society, it is of great interest to educators to integrate social media within the graduate public health classroom to enhance pedagogy.

Public health organizations have quickly adopted electronic media as information sharing portals for the public [9]. For instance, the Public Health Agency of Canada (PHAC), uses a combination of social media platforms to connect with citizens, including: Facebook, Twitter, YouTube, RSS Feeds, list serves, Blogs, and LinkedIn [11]. The links shared include themes of travel health advisories, flu shot promotion, infectious disease awareness, and chronic disease prevention. The Canadian Public Health Association (CPHA) uses social media by sharing current public health news and findings. The CPHA also publishes a quarterly online newsletter that is exclusively available online and shared via their social media accounts [12]. This widespread social media use is not unique to the Canadian context. Globally, social media trends are also on the rise where cell phone use is pervasive and can sometimes be the only means of communicating [13]. The World Health Organization's (WHO) website currently has a page titled "media centre", which is exclusively dedicated to social media and current news to be shared and disseminated [14].

Social media use is also on the rise in education. The traditional classroom is structured with lectures, academic reading materials, essays, and tests; however recent advances in pedagogy point toward a more effective learning environment when a variety of teaching methods are used [15]. The most common media tool used in the classroom were online videos and podcasts; while used less frequently, social media outlets, such as Twitter and Facebook were also used [16]. Social media is synonymous with quick information exchange and is a constantly changing avenue for progressing the way knowledge is accessed and transmitted; MPH programs should be forward thinking and build in social media training into their curriculum in an effort to better train the workforce in this method of communication. Beyond this, students should have an understanding for how future trends in new media may affect health – by providing a foundation for these skills, health professionals can be sufficiently trained in order to make the most effective use of this potentially powerful tool.

Considerations

Social media holds a key to a more open and accessible world. While traditional forms of information (such as peer-reviewed articles) may hold precedence and acceptability in academia [17], such venues are arguably not an ideal means to inform a population. New media, on the other hand is easy to access, relatively affordable to use, and has the ability to target message. One of the challenges is the speed at which technology changes and new social networking sites develop. These both limits the ability to create experimental, peer-reviewed evaluations of social media use [9] and also to develop sustainable social media presence. Another concern is in regards to the accuracy and credibility of the information that is posted on various social media sites, as the account controller is generally unknown [18]. Consumers of social media should also be cautious of incorrect messages, and public health professionals need to be aware of social media's potential to misinform the public. A recent example can be

found in Sweden where the 'low-carb diet' fad gained traction through social media, despite the lack of evidence on the effectiveness of the diet [19]. Despite these challenges, many public health organizations continue to, and are beginning to, engage in social networking [20, 21]. For this reason, pedagogy should focus not simply on learning how to use current social media sites, but instead on the skills of navigating social media. This is beneficial to not only to know about current social media nuances, but to also flexible and amenable to the next wave of social media trends.

Using social media in the classroom has become much easier with the abundance of resources and tools available to help; a simple example is creating public service announcements to post on YouTube [3]. The primary teaching objective of this study involved transferring knowledge to useable forms, while the secondary objectives included enthusiasm for teaching and promoting social responsibility in health professional students [3]. This is a strong example of "integrating emerging technology in to the graduate classroom" as a feasible and attainable educational opportunity [3].

Future directions

The rise of social media use in the classroom coincides with the awareness of the importance of a variety of pedagogical tools (traditional and new) to deliver competencies and skills [15]. Education of health professionals is shifting to focus more on promoting reasoning and communication skills, and less on memorization and transmitting facts [22]. With advanced information technology and increased use of new and social media, a change in competencies to match that shift, is expected [22]. Increasing training opportunities in social media is essential both for those currently in the workforce, and those about to enter it. While we have focused most of our discussion on training the next generation of public health professionals, current public health professionals can also benefit from improved communication and social marketing skills [23].

First, we encourage educators to teach using social media and incorporate 'real-time' learning with MPH students to analyze social media trends specific to population and public health. One example is analyzing social media trends in relation to food risk communication. Specifically, how social media efficiently enables food contamination information is disseminated in a timely manner [18]. Social media is also useful during public health emergencies, for instance using Twitter as a way to better understand the public perception of the Ebola Virus through the access of both correct and incorrect information [24]. In the case of Ebola, professionals with understanding of social media were able to see miscommunication and misperceptions and work toward better informing the public [25]. Another example is Google Flu Tracker which used search terms to predict (albeit not very successfully [26]) spikes in influenza [27]. There are also surveillance techniques that study specific words tweeted within a certain time frame that can be used to obtain useful public health information from the aggregation of tweets, such

as flu cases [28]. This data has high potential to reveal information about the illness, prevention, and treatment strategies used by people who are tweeting about their health [28]. The Center for Disease Control (CDC) had a social media campaign for the H1N1 and seasonal flu outbreak, focused on using multiple methods to disseminate information [29]. All of the above examples demonstrate that knowledge in public health combined with an understanding of new and social media can have a huge impact on how information is used – even when that information is incorrect. Formally integrating social media use within graduate classrooms has the potential to encourage students to engage in creative, analytical thinking and also to be mindful of the challenges and barriers inherent with the technology.

Second, students need to learn the tools of social media; educators should think creatively in how to use social media to enhance learning and information sharing. On-line learning is increasing in popularity due to its flexibility [30]. Students are engaged online, and facilitating this new style of teaching in the e-classroom has the potential to both improve learning and develop essential skills for a social-media world. An innovative, pedagogical shift would be to incorporate not only the most used social media platforms of today, but also a basis for understanding future trends and how to be flexible in an on-line environment.

There are several challenges to consider in integrating social media into public health curriculum, first and foremost the potential lack of capacity and expertise to teach this content. Comprehensive resources for integrating social media in graduate public health education are available to educators. The CDC published guidelines and best practices about how to communicate health information on an organizational level via social media [31]. Public Health Ontario has created a toolkit specific for public health units to enhance their social media strategies that include important information on skill development on effectively creating and utilizing social media [32]. Another challenge is around the evaluation and assessment of social media impact [33]. However, as more professionals become aware of, and use, the skills necessary to implement successful social media campaign, evaluation metrics for social media will also improve [34]. This is another area for future development in MPH curriculum.

Conclusion

The public health workforce is highly variable and constantly subject to change. We believe the curriculum ought to match the dynamic shifts and include education on new and social media. We have argued that social media should both be used in the classroom as a pedagogical tool, and also taught in the classroom as an essential skill or competency. Considering the global pace of technological developments in medicine and health, MPH programs should attempt to integrate new teaching methods in the academic classroom that allow students to grapple with the challenges of social media. Educating MPH students with new media holds potential to enable the next generation of professionals to navigate public health and the various facets of this field. By encouraging

learning through live, interactive, and changing technologies, learners will be challenged to think in real-time in a complex and dynamic environment; a skill that is necessary as a public health professional. The use of social media for creative learning opportunities can yield a tangible learning outcome, and value training for both educators and learners. We encourage other researchers to elevate the research in this area by sharing knowledge and experience. Social media in graduate education is of great value to current and future learners.

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