

"For Me, the Biggest Benefit Is Being Ahead of the Game": The Use of Social Media in Health Work

Social Media + Society April-June 2017: 1–10 © The Author(s) 2017 Reprints and permissions: sagepub.co.uk/journalsPermissions.nav DOI: 10.1177/2056305117702541 journals.sagepub.com/home/sms



Deborah Lupton and Mike Michael²

Abstract

Using social media in the workplace raises a number of issues for any occupation. In this article, we report the findings of a study that investigated how social media are used in a field of health work. The study uses semi-structured interviews conducted by telephone with 15 participants working in communicable disease in Australia. We identified several key features shaping the use of social media. These included the sociomaterial aspects of the workplace (to what extent employees were provided with access to and allowed to use the Internet), the affordances of social media technologies (fast and real-time communication and sharing, opportunities to easily connect with peers as well as the public, and the casual tone of interactions), tacit norms and assumptions about professional behavior and social media (whether social media are considered to be appropriate tools to use for work and how they should best be used), the specific nature of people's work (how sensitive, stigmatized, contentious, or political were the diseases they focused on), and the nature of people's own experiences (how other social media users responded to them, what value they perceived they gained from using social media for work, and the types of networks they were able to establish). The findings of this study highlight the importance of context when considering how people use social media in the workplace.

Keywords

health, work, professional, social media, medical

Introduction

Using social media in the workplace raises a number of issues for any occupation. Work organizations can often see social media use by their employees as positive in terms of increasing morale and feelings of cultural belonging, developing professional networks, sharing and accessing knowledge and information, and enhancing communication with clients, consumers, and other stakeholders. However, they are often concerned about the legal and policy implications of their employees using social media and the potential for them to waste time using these media or to post content that could be potentially damaging to the professional reputation of the individual and the organization (El Ouirdi, El Ouirdi, Segers, & Henderickx, 2015).

The blurring of boundaries between home and work to which technologies such as email, laptops, mobile computing, and Wi-Fi contribute means employees often use social media while at work for both personal and professional purposes. They must negotiate these boundaries, as well as make decisions about which social media platforms are most

appropriate for work use (Gregg, 2011). The Pew Research Center (Olmstead, Lampe, & Ellison, 2016) survey of American workers discovered that they turn to social media at their place of employment to make or support professional connections, to find information to solve work-related problems, to build or strengthen relationships with co-workers, to learn about someone they work with, and to ask questions of colleagues both inside and outside their organization. However, more people use social media for personal purposes: to take a mental break from their job and to connect with friends and family while at work. Pew found that relatively few people used social media for specific work-related

¹University of Canberra, Australia ²The University of Sydney, Australia

Corresponding Author:

Deborah Lupton, News and Media Research Centre, Faculty of Arts & Design, University of Canberra, Bruce, ACT 2601, Australia. Email: deborah.lupton@canberra.edu.au

purposes (19% said they used Facebook, 14% LinkedIn, and 3% Twitter). Their survey also found that the intimacy and personal nature of social media interactions could be a problem for those using these media for work-related purposes. The content shared on these platforms can not only improve colleagues' professional opinions of each other but also undermine such opinions. More than half of the respondents reported that their workplaces had instituted policies about employees' use of social media while working, while one-third said that their workplace had a policy about how employees should represent themselves online.

In this article, we present findings from a semi-structured interview-based study investigating social media use among employees in a specific area of health work in Australia. There is currently much publicity and discussion in the medical and public health literature and the popular media about the potential of digital health technologies to offer new or improved methods of delivering health care and promoting health and to generate data about health behaviors, illness, and disease. People working in public health are often encouraged to use social media as part of health communication and health education strategies (Neiger et al., 2012; Norman, 2012) or to engage in digital disease surveillance (Hill, Merchant, & Ungar, 2013; Salathé et al., 2012). Some major public health organizations, such as the World Health Organization and the Centers for Disease Control and Prevention, have social media accounts with large numbers of followers and have used these accounts to effectively disseminate information about preventive health and disease outbreaks (Hart, Stetten, & Castaneda, 2016).

Most research on the use of social media in health work has focused on health care professionals delivering clinical care. A systematic review of research published on these health workers' use of social media for communicating with other professionals (Rolls, Hansen, Jackson, & Elliott, 2016) identified that many found their engagements useful for networking, professional development, and sharing information. The research showed that a culture of altruism, trust, collectivism, and reciprocity underpinned the professionals' engagement. Those who used social media, discussion forums, and other information-sharing platforms (such as wikis and listservs) appreciated the opportunity to engage in the community of knowledge established on such sites, particularly if they were closed groups designed only for the interaction of professionals working in a relevant medical field. The practices of conference tweeting, tweet chats, and journal clubs on social media were also shown to be emergent uses by health care professionals.

Previous studies have identified a wide variation in how different professional groups in health work have taken up social media for professional purposes. Australian research involving a survey of health care professionals' attitudes to and use of social media conducted in 2009 (Usher, 2011, 2012) found that less than 10% of the respondents used social media for work purposes. The main reason for not adopting

social media use for health care delivery was lack of understanding about how to do so. A more recent survey of Australian doctors (Brown, Ryan, & Harris, 2014) identified that while most used social media privately, only a minority did so as part of their work. Few were even using email to communicate with their patients. A survey of American oncologists and primary care physicians (McGowan et al., 2012) revealed that a quarter of the respondents used social media regularly to access medical information, with a far smaller percentage (14%) contributing medical information to social media. Health care organizations have begun to use social media sites, online forums, and their own blogs and websites to provide information about their services and about preventive health and medical treatments in general. These efforts are particularly evident in the context of the more privatized and commodified health care system in the United States. One study of American hospitals (Griffis et al., 2014) showed that nearly all had adopted at least one social media platform, with more than 90% using Facebook, Yelp, and Foursquare and 40% a Twitter account.

Only a handful of studies have asked public health workers to provide their experiences of using social media in their work. A survey of public health researchers at Johns Hopkins University in the United States (Keller, Labrique, Jain, Pekosz, & Levine, 2014) found that few used any of the major social media platforms for work purposes. Although the respondents were positive about the possibilities of using social media as part of their work, most were either uninterested in trying it for themselves or actively opposed to professional engagement. Social media were viewed as avenues for promoting health information to the public rather than as sources of information for public health research or as a means for career advancement. Another American survey of health education professionals revealed that only one-third of respondents were using social media in the workplace (Hanson et al., 2011).

A small number of researchers have directed attention to how health departments use social media, predominantly focusing on Twitter. Harris, Choucair, Maier, Jolani, and Bernhardt (2014) showed that local health departments in the United States on Twitter were followed by more organizations than individuals and only had modest numbers of followers. This suggests that the primary use is for departments and organizations to share information with each other, contributing to a professional network of public health organizations. Tweets that focus on reaching the public with messages about their health-related behaviors, therefore, may simply be a matter of organizations tweeting to each other rather than reaching members of the public. Another US-based study (Thackeray, Neiger, Smith, & Van Wagenen, 2012; Thackeray, Neiger, Burton, & Thackeray, 2013) found that 60% of the public health departments sampled were using social media: mostly Twitter, followed by Facebook and YouTube. This research also noted that the departments tended to treat social media as a one-way communication

channel, focusing on disseminating information and inviting little engagement from the groups they were targeting.

Our Study

To build on and extend the research reviewed above, we conducted a semi-structured interview-based study in Australia directed at understanding how health workers are using social media. The specific health work field of communicable disease control was chosen as the focus because both of us were involved in a research group at the University of Sydney which sought to make connections between the humanities and social sciences and the Marie Bashir Institute for Infectious Diseases and Biosecurity (we both worked at this university at the time of data collection for this study). One of the key areas for research identified by the research group was that concerning how social and other digital media were used in the field of communicable disease. We were provided with some seed funding to engage in an initial small-scale project to begin to investigate this area. The study was structured to address the following research questions: How are professionals in communicable disease using social media to communicate with publics? How are they using social media to make connections and share information with each other? What do they see as the benefits, drawbacks, and future possibilities of using social media for their work? Have they experienced any ethical or political issues in using social media?

Previously published research on social media and health work is dominated by survey-based research. We decided to use the semi-structured interview method because we wanted to elicit people's experiences and explanations of their practices in more detail than quantitative survey questions can usually allow. Our funding provided for the study to include 15 participants. Each participant was involved in a semistructured interview conducted by telephone by the research assistant working on the project. We used telephone interviews to encourage the participation of people spread across different geographical locations. The recruitment process involved beginning with some initial contacts known to the researchers and using snowball sampling to recruit further participants. We used this method because we were focused on finding people who were actively using social media for work in communicable disease, and thus drawing on a limited pool of possible participants which would have been difficult to identify without using pre-existing professional networks. We make no claims as to the generalizability of our findings.

Prospective participants were first contacted by email with details of the study and the telephone interview was set up once they had agreed, by return email, to be involved. The study was approved by the human ethics committee of the University of Sydney. All interviews were audiotaped using a digital recording device attached to the telephone. The audiotaped interviews were partially transcribed by our

research assistant. The audio-files and partial transcripts comprise the research material that we used for the analysis. Both of us listened to the interviews and read through the transcripts repeatedly to identify key themes recurring in the interviews.

The results are presented under these key areas of discussion. We provide summaries of the participants' responses for each area, illustrated and supported with selected quotations from the interviews. To ensure anonymity, details about the participants' work that could possibly identify them have not been revealed. Participants are identified below only by their study number and gender (denoted as F for female and M for male).

Findings

Characteristics of Participants

Of the 15 participants working in the field of communicable disease recruited for interviews, the specific areas of work included patient care and diagnosis, research, health education and promotion, infection control, epidemiology, immunization, and disease surveillance. Two participants had direct contact with patients in health care roles (as a specialist and a nurse, respectively), but the former also worked in a senior managerial position in a health care facility. Four other participants worked in management positions in hospitals or health clinics. Six participants held research positions that for several of them included health education or policy roles. A journalist who runs a medical news blog and is a public health activist was also interviewed. Most people (13) were employed in Sydney and Melbourne, with one working in a large regional city and another based in a rural location. Seven participants were female and eight were male.

While all of the participants used social media as part of their working practices, they varied considerably in the extent to which they did so. The most commonly mentioned social media platforms used for work were Twitter (10 participants) and Facebook (6). Two participants had experimented with blogging. One participant used YouTube and Instagram and another said she used SlideShare to share her conference presentations. Those who used Twitter did so primarily to interact with other professionals in their area and with the public and to disseminate health communication messages. Facebook, YouTube, and Instagram were mostly used for running health education campaigns and publicizing infectious disease surveillance initiatives and health services.

Benefits and Value of Social Media

The participants all attested to the value of social media for their working lives. The principal benefits they described were the opportunity to easily access and disseminate information, establish professional networks, and connect and

communicate with lay people, groups, and organizations outside of their peer networks.

Most people said that they were neither expected nor encouraged to use Twitter for their work, but this did not stop them from following other people's discussions and information sharing with other professionals in health care and public health. One feature that many people found helpful was the ways in which Twitter, in particular, could be used to keep up-to-date with the latest research and practice: "to feel the pulse of what's going on out there," as M05 put it. F01 commented that she appreciated the instant and real-time nature of Twitter, noting that on the platform, information "comes to me rather than me searching for it." For several of the participants, Twitter use helped them feel better connected to their peers by expanding their connections and allowing them to regularly engage in exchanges with them on the platform. As F05 noted,

I guess I like that I have a (Twitter) presence and that people are aware of me. And I do like to disseminate my research, and I think that is a positive. However, I really find it very useful for being across what everyone else is doing, other people's publications. I really use it as a way to keep informed. For me, the biggest benefit is being ahead of the game.

F04, a researcher and health advocate, said that "I feel like I am part of a community within Twitter." She contended that this platform has provided her with access to networks of peers, helped her to disseminate her research, and "can address professional isolation." She remarked that her Twitter connections and conversations had "influenced, even instigated" whole research projects. M08, also a researcher who engages in public health communication, engages in live-tweeting at conferences. He said that this use of Twitter helps him to focus on the content of the presentation and can be the catalyst for expanding "my real-life circle of networks."

F03 drew attention to the participatory and international dimensions of Twitter: "Twitter has really broadened the input. It's also much more global." This participant is a journalist who runs an online medical news site. She noticed that she has been able to draw more international attention to the site by using Twitter strategically to publicize new stories. She emphasized that if those using Twitter for professional purposes recognize that "it's a two-way thing, you're most likely to get benefit out of it." Twitter users should view their engagement as a "service to your followers." She has found that the platform has become her major source of news, but also works to disseminate new information herself via her Twitter engagement.

Beyond establishing and strengthening peer networks, most of those who used Twitter remarked on the possibilities it offered to engage with publics. According to F04, being active on this platform by discussing issues related to her field of work meant that she could communicate with individuals and groups to whom she would not usually have

access or would never meet in other circumstances. Some of these individuals and groups disagree with how the health issue she works on is managed, while others are engaged in political activism concerning her area of research. She contended that using Twitter, she was able to be exposed and respond to their views in ways that might not be possible without Twitter. She argued that her Twitter use helps her to monitor what issues are considered important or controversial by members of the public, and thus, "Twitter for me is like a bit of a barometer of sentiment."

Those people working in outreach and health education roles also commented on the use of social media for conveying messages to the general public or targeted groups. F07 noted that these media offered possibilities for reaching larger audiences than traditional media, and their engagement with the content could be monitored in real-time. For M05, Twitter and Facebook were conceptualized as "push technologies" and as therefore offering opportunities to better target the public with health messages. M04 works in HIV/AIDS prevention and education, and commented that gay men now meet each other using social media and apps rather than initial face-to-face meetings in places such as bars. His work has consequently needed to adapt to these changes to better provide information and resources to his target audience of gay men: "We believe that using online platforms is kind of like the only way in which we could sustain continuous dialogue with the gay community." This man observed that campaigns using traditional media such as newspaper and magazine advertising, billboards, and posters in gay publications and meeting places no longer have the reach that they used to. His organization makes sure to integrate social media with its website so that the targeted audiences can be offered maximum exposure to the information it offers. The aim of recent social media campaigns was to engage with people by "humanising the whole social media aspect of things. I think a lot of people like to know what their peers are doing." His organization sought to do this by using its Facebook page to provide narratives of people deciding to seek HIV testing, attempting to emulate the Facebook genre of sharing personal stories.

The clinic at which M03 works also provides health care to people with HIV/AIDS and other blood-borne diseases, as well as acting in a health education role. The clinic uses a Facebook page to encourage people to come in and be tested for HIV, sexually transmissible diseases, and hepatitis and provide details of the clinic's services. M03 described how new HIV acquisition is commonly among younger people, most of whom are on Facebook. The clinic is therefore using Facebook as a "lure" to attract people in for testing. F02 works in an area that focuses on communicating to the public about the importance of immunization. She observes that the media unit in her department has been suggesting social media to address the "myths" around vaccination promulgated in these platforms by anti-vaccination advocates.

M08's primary role is as a medical researcher in communicable disease, but he also seeks to engage with the public about his area of research. He does so using social media such as Twitter to attempt to publicize health risks. He has found that Twitter works well as a medium for public health communication: "I guess what I am trying to do is, just sort of, just amplify all of those messages that we would already be doing through traditional media." This participant referred to his recent experience of publicizing a particular health message to the Australian public using Twitter. He was successful in reaching a wide audience, facilitated by the retweeting and sharing possibilities of the platform:

Even though I had, you know, a fairly modest number of followers on Twitter, because of the networks that I kind of moved in, I think, sending out messages to tens of thousands, well, it was at least reaching tens of thousands.

M02 works in communicable disease surveillance. He commented that social media can be a fast and easy way of communicating information about disease outbreaks to the public. He has used Twitter to publicize outbreaks of infectious disease. He gave the example of such an outbreak in a nightclub, noting that Twitter message might be "Were you in such and such a venue on . . .?" This participant believed that "you're more likely to get to a younger person through one of these devices" than using traditional media such as radio news or newspaper advertisements.

Drawbacks and Difficulties of Social Media

Several drawbacks and difficulties of using social media in the workplace were identified by the participants. These included problems with access to the Internet at work, the lack of interest in or disdain of social media by managers and co-workers, lack of skills or confidence in knowing how to use social media, worrying about the appropriate content of social media, time pressures, and issues around defining boundaries between private and professional use.

Many of the participants worked for government health organizations (public hospitals, health departments, and health agencies that are part of Australia's state-funded health care system). Some of these people commented on the difficulty of adopting new approaches in a government agency: "everyone gets a bit twitchy because you're meant to be a bureaucrat" (F02). It was noted by several people that at some workplaces, employees were prohibited from access to the Internet. According to M02, although he can access the Internet at his workplace, many others in his state working for government health agencies cannot:

That's one of our sort of big problems in regards to using them more readily. It's a way of making sure people don't use it for their own personal use. It's something that we're trying to overcome. We need to illustrate that it is critical to our work

processes, so that will probably happen over time if outbreaks come up.

M03 observed that his workplace had only just recently acquired Internet access. He said that he and his colleagues previously had to undertake all work-related Internet activities, including information searches, from home: "They, the Ministry, were probably afraid that people would end up abusing Internet usage—we are actually using Internet for what we are supposed to be using it." This participant observed that "life [at work] has been easier ever since we started using Facebook, Google, and all other Internet access."

Several participants drew attention to the problem that other employees or supervisors in their workplace held the view that social media are mostly used for trivial or personal matters, or are primarily a young person's form of communication. For example, F01 commented that Twitter is not a tool that is promoted widely for use in her kind of work and is still viewed as a fringe activity. She considers herself "a bit of an outlier" for using the platform for work purposes, as "the Department of Health is a bit of a dinosaur sometimes when it comes to new technologies." F04 is also aware that it can be a "bad look" to be seen on Twitter while at work for those who do not understand its benefits: "what does that say about the way you use your time?"

As one of M02's roles is communicating to the public about disease outbreaks, he finds it frustrating that he and his colleagues are barred from using social media more readily as a communication avenue. He commented that those in managerial positions in the bureaucracy tend to view social media as a "more a younger generation sort of tool." F02 felt this generation gap herself. She commented that she viewed herself as less knowledgeable than her younger staff members—"the kids"—as she referred to them. She said that she relied on them to lead the way in suggesting ways to use social media and other strategies such as apps for health education.

Most participants related accounts of dealing with colleagues' lack of knowledge or awareness of the potential of social media. M08 said that he was often questioned about his use of social media for work by colleagues: "They say, 'Aren't you too old to be using social media?' or they are too old, or they don't understand." He argued that people really needed to try social media for themselves before they could fully understand their possibilities for work use. According to F05, the general attitude among her co-workers toward social media was as follows: "It's new, it's new, it's new, it's all too hard and what's the deal?" She went on to note, however, that "as soon as they start using it, everyone likes it!" F03 thought that the main barriers to health workers using social media effectively were "lack of skills and confidence." She further observed that the power relationships and rigid hierarchies of health institutions often work against adopting new technologies:

The old communication model was very tightly controlled at the top, very centralised. And, you know, the whole thing about the Internet is power moving out from the centre and the decentralisation of power is difficult to deal with. The best people in your organisation to do social media may not be those central ones.

Another difficulty can be in demonstrating the effectiveness of using social media for health communication. As M07 argued, "If things like Facebook and Twitter are shown to work in terms of, you know, prevention effort, then there should be a big investment in those, but I'm not sure how that's to be understood or measured."

Several participants drew a distinction between the relative appropriateness of using Facebook and Twitter for work. Some had decided to keep Facebook as a personal platform while using Twitter for work. According to M08, "generally speaking, I keep Facebook for personal stuff. One of the reasons I haven't used Facebook for work is, you know, it's a more complicated beast to manage." F01, who is a senior manager working in a large public hospital, observed that she did not agree with using Facebook in the workplace because she thought that people mostly used it for personal purposes. Twitter was a different matter—she uses this platform herself and finds it useful to keep in touch and communicate readily with peers. She argued, however, that the Department of Health may see it as the "thin end of the wedge—why would you let people use it?"

Some people also considered the content they created for social media and were aware of the possible pitfalls of disseminating inappropriate, useless, contentious, or inaccurate information. M08 noted that he was aware that he is a government employee, and accordingly moderates the content he posts on Twitter: "I sort of have my own kind of rules that I very rarely, if ever very often, make any sort of political kind of messages, which probably reduces any controversy." F04 similarly noted that she was careful to present a professional demeanor on Twitter, in line with what she saw as expectations of someone who is a senior academic. She commented that she is "naturally quite a playful person" but "because I've got this identity as a senior researcher on Twitter, I feel an obligation to conform my behaviours to that identity" so that she upholds the reputation of her organization, her title, and the university. F01 said that she tended to "lurk" on Twitter rather than actively contribute content, because she felt she could not usefully contribute: "I don't tweet because I don't have anything interesting to say. I don't want to say anything that is really boring." She also expressed her concern that if people are commenting on work matters, they might say the wrong thing or at least it might be received in the wrong way: "Sometimes the casualness of the language (on Twitter) can betray the seriousness of the conversation."

The difficulties of managing the time commitments demanded by social media were also identified as a potential barrier to using them for work purposes. For example, F01 noted that one of the challenges of using a social medium like Twitter for work: "there is this information overload. Our lives are very busy, and it's another thing." F04 was reflective about how best to negotiate the boundaries between work and personal life. She has found that she has to be aware of how Twitter can tend to eat into her personal time: "You know how work tendrils can get into your personal life with current technologies? Well, Twitter facilitates that, it almost amplifies that—it can be quite addictive." This participant said that she sometimes struggles to limit the time she spends on the platform: "My family will often complain that I'm on Twitter too much, so I have to actively resist the temptation to check my tweets too much."

Ethical and Political Issues

Several ethical and political issues related to social media for work use emerged in the participants' accounts. Some participants recognized some ethical issues, but were relatively unconcerned about them. One example was M05, who observed that the ethical issues associated with using social media are no different from those of other media. Health professionals just need monitoring and training in how to use social media appropriately. He contended that "there will be errors [in tweets], but the errors will be more than made up for by the enhancement of credibility and transparency." M02 discussed the possibilities that contacting people through social media to communicate health risk messages could be viewed by some people as "an invasion of privacy." He argued, however, that if people are perceived to be at risk, then it "overrides that ethical dilemma."

Few people made mention of patient data privacy or security issues when discussing their use of social media for work. One exception was M08, who drew attention to the importance of maintaining patient privacy when using social media. He commented that this may deter health workers: "some people might think that it's all too hard, or that they're too scared of inadvertently making a mistake." F07 noted that the intimacy of personal information exchange offered by social media like Facebook was potentially helpful for learning more about people's health behaviors and providing further information to them for preventive health. However, this raised issues of data privacy that needed to be considered by health workers. She contended the health workers and health organizations needed to more seriously consider how they represent themselves on social media and to be transparent about how they were using people's personal information.

Those people who were working in highly sensitive or contentious areas of infectious disease control and management tended to be alert to the ethical and political issues involved in formulating the content of public health messages in social media, as they were confronted with dealing with these issues regularly as part of their working lives. Several of these participants worked in the field of HIV/AIDS and other sexually transmissible diseases. They drew

attention to the importance of considering the stigmatized nature of these diseases and the risk groups for infection and the personal and political sensitivities that surrounded them. These participants observed that their staff at their clinics needed to be very careful about what kind of information they uploaded and shared on social media and the tenor of their online communications. According to M02, for example, "we're limited as to exactly what we can put on Facebook. You know, there is so much red tape—a lot of consultation has to be done." He went on to say that "this is exactly what limits, you know, a lot of success to be achieved when it comes to talking about health—it's always so politicised." M06 also discussed how using Facebook to spread public health messages around sexually transmissible diseases should involve acknowledging that:

It's not just a one-way delivery of information—you're getting feedback from people as well. It's just a bit difficult depending on the topic, like, sexual health I guess is a very personal and sensitive topic, because Facebook is a very public forum.

The sometimes political nature of work in communicable disease means that people who are active participants on social media can be open to criticism and abuse. F03 noted that professional and ethical considerations include basic codes of etiquette for interacting on social media platforms. She commented that "I'm quite amazed often that you see people being really quite vicious on social media." F04 and F05 work on a communicable disease prevention strategy that is highly contentious and often targeted by dissenters and activists. As a consequence, they have become the target of significant criticism and abuse on Twitter. F05 saw this "bullying" as one of the negative aspects of her Twitter use. She contended, "if you weren't a strong enough person" such attacks could easily undermine one's professional confidence and lead one to relinquish Twitter use.

F04 had been the target of extensive criticism on Twitter. She vividly described this experience as "you feel like you're surrounded by a pack of salivating wolves." She said that the "pile-on" effect can occupy a lot of time, "especially when I am trying to manage my own distress around it." She went on to comment that her professional identity and confidence has been sometimes shaken by these experiences.

Future Uses

Despite the difficulties and barriers several participants had experienced in adopting social media, all expressed positive opinions about prospects for the future of these technologies in public health work. Most participants envisaged these media as becoming more acceptable for health work use as their possibilities were progressively realized. According to M02, "I can't see us going backwards—I can only see us going forwards and we'll be using them (these technologies) more and more readily." M03 contended that health care and

public health workers who are currently resistant to social media will need to adapt: "they realise that as well." F04 argued that health workers should be provided with social media training and policies of their organizations should be generated to provide guidelines on how they should use social media productively and ethically.

Several participants acknowledged that they had only just begun to use social media effectively and understand how the public was engaging with these media, and that many possibilities had not yet been realized. According to M06, "we know it is there [social media for public health promotion] but we're probably not using it as best we can at the moment. So there's lots of room to work with it in the future I think." Participants who used social media to disseminate health messages were aware that they were competing for target audiences' attention and accordingly needed to think carefully about content. The problem of "message fatigue" was identified by F07 who noted that while social media had the potential to reach large audiences, the content needs to be fresh and interesting. M06 similarly noted, "I think getting the ingredients right—actually getting people interested and looking at your page is a real challenge."

It was recognized by some people that social media affordances are changing, and health workers needed to be responding accordingly. M03 observed that

digital media just evolves and proliferates. People are using more kinds of technologies and combining them in different ways. How are they combining, how are they actually doing it? That is the really big open research question.

F04 outlined several possibilities for the future of these technologies in public health work, such as open peer-review, collaboration of consumers in planning and analysis via a wiki, and analyzing social media for what they reveal about health behaviors and disease outbreaks: "it's just boundless—it's such a great time to be in academia, because of the web and web 2.0 in particular." F07 was also interested in further exploring the possibilities of using big data for disease surveillance or health promotion.

Discussion

We identified several key features shaping the use of social media in the field of communicable disease health work. These included the sociomaterial aspects of the workplace (to what extent employees were provided with access to and allowed to use the Internet), the affordances of social media technologies (fast and real-time communication and sharing, opportunities to easily connect with peers as well as the public, and the casual tone of interactions), tacit norms and assumptions about professional behavior and social media (whether social media are considered to be appropriate tools to use for work and how they should best be used), the specific nature of people's work (how sensitive, stigmatized,

contentious, or political were the diseases they focused on), and the nature of people's own experiences (how other social media users responded to them, what value they perceived they gained from using social media for work, and the types of networks they were able to establish).

There are several parallels in this research with a previous study undertaken by one of us on academics' use of social media (Lupton, 2015a). The benefits of social media use identified by the academics in this previous research also included connecting and establishing networks not only with peers but also with people or groups outside the workplace, promoting openness and sharing of information and the publicizing and development of research. The health workers shared some of the concerns expressed by the academics as well. These included issues of privacy and the blurring of boundaries between personal and professional use, the risk of jeopardizing their career through injudicious use of social media, lack of credibility, the quality of the content they posted, time pressures, and becoming a target of attack. There were some distinct differences, however, between these two occupational groups. The health workers referred less to using social media to give or receive support to peers than did the academics. Because health education and communication with the public about disease outbreaks were two of the primary uses of social media for the health workers, this feature received greater emphasis in their interviews. The context of the communicable disease workplace in dealing with infectious diseases that are often stigmatized and involve political and personal sensitivities as well as discussion of intimate behaviors such as sexual activity meant the health workers needed to consider these issues more carefully than did most of the academics. Given the highly bureaucratic and conservative nature of the environments in which many of our participants worked, they confronted greater barriers to using social media than did the academics, including difficulties accessing the Internet from work.

As we noted in the introduction, American studies on the use of social media by health departments (Harris et al., 2014; Thackeray et al., 2013; Thackeray et al., 2012) and public health researchers (Keller et al., 2014) found that they tended to "tweet to the choir," as Harris and colleagues put it, and view the use of social media as a one-way channel for distributing educational messages. Our research similarly found that some health workers are failing to recognize that a central feature of social media is their "participatory culture" (Beer & Burrows, 2010) and ethos of sharing and reciprocity (John, 2013; Lewis, 2015). Professional perspectives that view social media as one-way information-delivery channels tend not to acknowledge the diversity of opinion and challenges to expert knowledge on the part of lay publics and other interested parties that such media promote. Two participants had found themselves the brunt of negative attention on Twitter, and their personal experiences had alerted them to the openness and potentially anarchic nature of such forums. Others acknowledged the importance of ensuring that the content they contributed was politically sensitive. Yet, there was still a tendency to conceptualize social media channels as routes for the conveying of expert knowledge to uninformed and passive publics. A rather traditional contrast between "objective experts" and "irrational" or "ignorant" lay publics seems to be performed here: issues around the perceived trustworthiness of that information, or its disruptive impact on local existing knowledge and practices, go unacknowledged.

For the most part, our participants did not conceptualize social media use as a channel by which members of disadvantaged or marginalized social groups could receive a voice, but instead as simply a newer and potentially more effective way to disseminate targeted messages developed by experts or to monitor disease trends and dissenting public opinion. The potential to use social media more radically to engage publics as active and equal contributors to health knowledge, and beyond this, to promote activist causes challenging health and social disparities and inequalities (Lupton, 2015b, 2016) was not raised in the participants' accounts. Social media knowledge production and sharing were primarily viewed as affordances for professional peers rather than as elements of communication with publics. Nor did factors of digital social inequalities, such as disparities in access to digital technologies and digital literacies based on sociodemographic factors such as age, geographical location, education level, and race/ethnicity (as identified by Baum, Newman, & Biedrzycki, 2014; Newman, Biedrzycki, & Baum, 2012), receive acknowledgement.

In the medical and public health setting, a range of profession-specific issues arise, relating to patient privacy and confidentiality and protecting the authority and status of health care and public health professionals. Issues related to the boundaries between patient and doctor breaking down, confidentiality, and patient privacy issues when social media are used as a medium for communication between doctors and patients have received extensive discussion in medical ethics journals and websites (Chretien & Kind, 2013; Gholami-Kordkheili, Wild, & Strech, 2013). Health care and public health workers in Australia must conform to the Australian Privacy Principles outlined in the Privacy Act when dealing with personal medical data. This Act outlines strict limitations on how much personal information can be collected about people and to whom it can be disclosed without the patient's knowledge or consent. The Medical Journal of Australia has produced a set of guidelines on social media use for health care workers in which conforming to these principles are central, as well as issues of maintaining professional and ethical standards of behavior (Mansfield et al., 2011).

We found that while many of the health workers in our study who were engaged in public health initiatives were considering the ethical and political issues related to their professional presentation on social media and the type of content they generated, few had begun to consider data

privacy and security issues for the publics they targeted in health communication strategies using these media. There are many possibilities for personal health and medical data to be exploited by Internet and data mining companies and to be implicated in data breaches, hacking, and other cybercriminal activities (Libert, 2014; Sarasohn-Kahn, 2014). Some information ethicists have begun to discuss personal health data ethics in the context of medical practice (Mittelstadt & Floridi, 2016; Mostert, Bredenoord, Biesaart, & van Delden, 2016). This type of discussion is almost entirely absent in public health ethics literature, or indeed the wider literature on public health (Lupton, 2015b).

Our findings draw attention to the importance of taking into account the context in which people use social media for work purposes. Future research building on these findings could include investigating other areas of medical and public health work, exploring how other digital media, such as apps, are used in the health workplace and on health data privacy and security issues. Another possible area of research stemming from our findings, and taking a somewhat different direction, is going beyond investigating the uses of social media for communication in the workplace to addressing the question of how these media can be understood as resources that contribute to health (and other) professionals' efforts to "formulate" and "enact" particular versions of their institutional, public, and political settings and their own positioning within these.

Author Note

Author Mike Michael is now affiliated with University of Exeter, UK

Acknowledgements

The authors thank the research assistant, Ian Flaherty, for his work in arranging and conducting the interviews and the participants for taking the time to be interviewed for the study.

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: This study was funded by small grant funding from the Marie Bashir Institute and the Department of Sociology and Social Policy, both at the University of Sydney.

References

- Baum, F., Newman, L., & Biedrzycki, K. (2014). Vicious cycles: Digital technologies and determinants of health in Australia. *Health Promotion International*, *29*, 349–360.
- Beer, D., & Burrows, R. (2010). Consumption, prosumption and participatory web cultures: An introduction. *Journal of Consumer Culture*, 10, 3–12.

Brown, J., Ryan, C., & Harris, A. (2014). How doctors view and use social media: A national survey. *Journal of Medical Internet Research*, 16, e267. Retrieved from http://www.jmir.org/2014/12/e267/

- Chretien, K. C., & Kind, T. (2013). Social media and clinical care: Ethical, professional, and social implications. *Circulation*, 127, 1413–1421.
- El Ouirdi, A., El Ouirdi, M., Segers, J., & Henderickx, E. (2015). Employees' use of social media technologies: A methodological and thematic review. *Behaviour & Information Technology*, 34, 454–464.
- Gholami-Kordkheili, F., Wild, V., & Strech, D. (2013). The impact of social media on medical professionalism: A systematic qualitative review of challenges and opportunities. *Journal of Medical Internet Research*, 15, e184. Retrieved from http:// www.jmir.org/2013/8/e184/
- Gregg, M. (2011). Work's intimacy. Cambridge: Polity Press.
- Griffis, M. H., Kilaru, S. A., Werner, M. R., Asch, A. D., Hershey, C. J., Hill, S., . . . Merchant, M. R. (2014). Use of social media across US hospitals: Descriptive analysis of adoption and utilization. *Journal of Medical Internet Research*, 16. Retrieved from http://www.jmir.org/2014/11/e264/
- Hanson, C., West, J., Neiger, B., Thackeray, R., Barnes, M., & McIntyre, E. (2011). Use and acceptance of social media among health educators. *American Journal of Health Education*, 42, 197–204.
- Harris, K. J., Choucair, B., Maier, C. R., Jolani, N., & Bernhardt, M. J. (2014). Are public health organizations tweeting to the choir? Understanding local health department Twitter Followership. *Journal of Medical Internet Research*, 16, e31. Retrieved from http://www.jmir.org/2014/2/e31/
- Hart, M., Stetten, N., & Castaneda, G. (2016). Considerations for public health organizations attempting to implement a social media presence: A qualitative study. *JMIR Public Health Surveillance*, 2. Retrieved from http://publichealth.jmir.org/2016/1/e6/
- Hill, S., Merchant, R., & Ungar, L. (2013). Lessons learned about public health from online crowd surveillance. *Big Data*, 1, 160–167.
- John, N. (2013). Sharing and web 2.0: The emergence of a keyword. New Media & Society, 15, 167–182.
- Keller, B., Labrique, A., Jain, M. K., Pekosz, A., & Levine, O. (2014). Mind the gap: Social media engagement by public health researchers. *Journal of Medical Internet Research*, 16, e8. Retrieved from http://www.jmir.org/2014/1/e8/
- Lewis, S. C. (2015). Reciprocity as a key concept for social media and society. *Social Media + Society, 1*. Retrieved from http://sms.sagepub.com/content/1/1/2056305115580339.abstract
- Libert, T. (2014). Health privacy online: Patients at risk. In S. P. Gangadharan, V. Eubanks, & S. Barocas (Eds.), *Data and discrimination: Collected essays* (pp. 11–15). Washington, DC: Open Technology Institute.
- Lupton, D. (2015a). *Digital sociology*. London, England: Routledge. Lupton, D. (2015b). Health promotion in the digital era: A critical commentary. *Health Promotion International*, 30, 174–183.
- Lupton, D. (2016). Digitized health promotion: Risk and personal responsibility for health in the Web 2.0 era. In J. Davis & A. M. Gonzalez (Eds.), *To fix or to heal* (pp. 152–176). New York: New York University Press.
- Mansfield, S. J., Morrison, S. G., Stephens, H. O., Bonning, M. A., Wang, S.-H., Withers, A., . . . Perry, A. W. (2011). Social media

and the medical profession. *Medical Journal of Australia*, 194, 642–644.

- McGowan, S. B., Wasko, M., Vartabedian, S. B., Miller, S. R., Freiherr, D. D., & Abdolrasulnia, M. (2012). Understanding the factors that influence the adoption and meaningful use of social media by physicians to share medical information. *Journal of Medical Internet Research*, 14, e117. Retrieved from http://www.jmir.org/2012/5/e117/
- Mittelstadt, B. D., & Floridi, L. (2016). The ethics of big data: Current and foreseeable issues in biomedical contexts. *Science and Engineering Ethics*, *22*, 303–341.
- Mostert, M., Bredenoord, A. L., Biesaart, M. C., & van Delden, J. J. (2016). Big Data in medical research and EU data protection law: Challenges to the consent or anonymise approach. *European Journal of Human Genetics*, *24*, 956–960.
- Neiger, B. L., Thackeray, R., Van Wagenen, S. A., Hanson, C. L., West, J. H., Barnes, M. D., & Fagen, M. C. (2012). Use of social media in health promotion: Purposes, key performance indicators, and evaluation metrics. *Health Promotion Practice*, 13, 159–164.
- Newman, L., Biedrzycki, K., & Baum, F. (2012). Digital technology use among disadvantaged Australians: Implications for equitable consumer participation in digitally-mediated communication and information exchange with health services. Australian Health Review, 36, 125–129.
- Norman, C. D. (2012). Social media and health promotion. *Global Health Promotion*, 19, 3–6.
- Olmstead, K., Lampe, C., & Ellison, N. B. (2016, June 22). Social media and the workplace. *Pew Research Center*. Retrieved from http://www.pewinternet.org////social-media-and-the-workplace/20160622
- Rolls, K., Hansen, M., Jackson, D., & Elliott, D. (2016). How health care professionals use social media to create virtual communities: An integrative review. *Journal of Medical Internet Research*, 18, e166. Retrieved from http://www.jmir. org/2016/6/e166/
- Salathé, M., Mabry, P. L., Vespignani, A., Bengtsson, L., Bodnar, T. J., Brewer, D. D., . . . Khandelwal, S. (2012). Digital epidemiology.

- PLoS Computational Biology, 8. Retrieved from http://www.ploscompbiol.org/article/info%3Adoi%2F10.1371%2Fjournal.pcbi.1002616
- Sarasohn-Kahn, J. (2014). Here's looking at you: How personal health information is being tracked and used. California, USA: California Healthcare Foundation.
- Thackeray, R., Neiger, B., Smith, A., & Van Wagenen, S. (2012).
 Adoption and use of social media among public health departments. *BMC Public Health*, 12, 242. Retrieved from http://www.biomedcentral.com/1471-2458/12/242
- Thackeray, R., Neiger, L. B., Burton, H. S., & Thackeray, R. C. (2013). Analysis of the purpose of state health departments' tweets: Information sharing, engagement, and action. *Journal of Medical Internet Research*, 15, e255. Retrieved from http://www.jmir.org/2013/11/e255/
- Usher, W. (2011). Types of social media (Web 2.0) used by Australian allied health professionals to deliver early twenty-first-century practice promotion and health care. *Social Work in Health Care*, 50, 305–329.
- Usher, W. (2012). Australian health professionals' social media (Web 2.0) adoption trends: Early 21st century health care delivery and practice promotion. *Australian Journal of Primary Health*, 18, 31–41.

Author Biographies

Deborah Lupton (PhD, University of Sydney) is Centenary Research Professor in the News and Media Research Centre, University of Canberra, Australia. Her current research interests focus on the sociocultural and political aspects of digital technologies, including self-tracking practices, big data cultures, digital health, dataveillance of children, digital food cultures, and app studies.

Mike Michael (PhD, University of Durham) is a Professor of Sociology at the University of Exeter, UK. His research interests include the relation of everyday life to technoscience, the role of culture in biomedicine, and the interplay of design and social scientific perspectives.