Easier Said Than Done: Behavioral Conflicts in Following Social-Distancing Recommendations for Influenza Prevention

Lynn T. Kozlowski, PhD[a]
Marc T. Kiviniemi, PhD[a]
Pavani Kalluri Ram, MD[a]

SYNOPSIS

Preventing transmission of H1N1 and other infectious diseases can require individuals to change behaviors, but recommendations to change behavior can run counter to other powerful influences. For example, instructions to not shake hands or avoid certain public gatherings can run counter to substantial social pressures to shake hands or be in attendance. These behavioral conflicts are illustrated with an experience of the relative ineffectiveness of voluntary recommendations, which highlights the importance of considering these social pressures when determining what recommendations to make and how to make them. An analysis of how social pressures influence behaviors relevant to preventing disease transmission can aid public health officials in considering how to make effective recommendations concerning H1N1 and other infectious disease situations.

[a]School of Public Health and Health Professions, University at Buffalo, Buffalo, NY

Address correspondence to: Marc T. Kiviniemi, PhD, School of Public Health and Health Professions, University at Buffalo, 314 Kimball Tower, 3435 Main St., Buffalo, NY 14214; tel. 716-829-6955; fax 716-829-6040; e-mail <mtk8@buffalo.edu>.

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Advice on what people should do is a critical part of official responses to public health emergencies such as the H1N1 pandemic. Decisions about what preventive measures to recommend should consider the several and sometimes conflicting influences on what people will actually do. We provide an example arising from a university graduation ceremony during a time of concern about influenza and discuss its implications for advice from public health authorities.

RECOMMENDATIONS ABOUT SOCIAL BEHAVIORS: THE UNIVERSITY AT BUFFALO EXPERIENCE

The week before the spring 2009 graduation ceremonies at the University at Buffalo (UB) (held May 8 and 9, 2009), the seriousness of the then-novel H1N1 influenza virus was far from clear, but concern was increasing. At a meeting of the university's senior administrators on May 5, the decision was made to adopt precautions focused on individual hygiene measures—in particular, making waterless hand sanitizer available for participants and guests, and making handshaking on stage optional for participants. Making handshaking optional was thought to allow concerned students to exercise choice. (The graduation occurred four days before the issuance of interim guidance on public gatherings from the Centers for Disease Control and Prevention [CDC]).[1]

At the beginning of the School of Public Health and Health Professions (SPHHP) graduation ceremony (May 9), the Dean (LTK) announced from the stage, with all graduates sitting in the front rows: "I wanted to open with a few remarks about precautions being taken concerning the H1N1 flu. This will be a handshaking optional ceremony. If for any reason a graduate would prefer to NOT shake hands on stage, we would encourage that the graduate use, in keeping with academic traditions, a doff of the cap in receiving their certificate to signal respect." Sanitizer was available and offered in the robing areas for faculty and students, and was also offered as students were about to go on stage and just after they left stage. The Dean did not offer a handshake, unless he saw the graduate move to shake hands.

The results of the handshaking optional announcement were striking: of the approximately 200 participating graduates, *everyone shook hands with the Dean.* Moreover, the Dean observed that there was little or no hesitation about whether to shake hands when crossing the stage and, further, that the brief social interaction involving the handshake and a few words of congratulation was important to participants. Indeed, the Dean's general impression was that he and the students were caught up in a moment of great significance and emotional importance.

RITE OF PASSAGE VS. PUBLIC HEALTH PRECAUTION

Observations of the graduates' handshaking behavior suggest that despite the handshaking optional announcement, avoiding handshaking was not viewed as a genuine option. The behavior of individuals in social settings is based on a complex web of social and environmental forces guiding individuals toward or away from certain behaviors in certain situations.[2] A graduation is a socially significant gathering and a ritually charged ceremony marking a personally and socially important transition. A core feature of rites of passage such as a graduation ceremony is that the actions of the participants are ". . . dramatically scripted and acted out and . . . performed with formality, seriousness, and inner intensity."[3] Rites of passages include elements and procedures (e.g., special costumes, processions, music, speeches, formal settings, and audience) aiding individuals and groups to cope with important but potentially stressful life changes.

Handshaking is part of the "dramatic scripting" of the graduation ceremony and is an expectation of those who take part in it. In addition, university graduation can represent a milestone not just for the graduate, but also for the parents who may be marking an important further step to the independence of their child and a change in their own life. Given this significance, there can be great pressure to attend the ceremony, not only for participants, but also for their friends and family members. Both the shaking of hands and the "attend if at all possible" pressures are potentially in opposition to influenza prevention measures, which recommend avoiding social situations when ill and limiting contact with others.

In addition, powerful behavioral forces arise from the presence and behavior of other individuals. Such social modeling pressures are powerful; behavior is influenced by a person's perceptions of how other people think they *should* behave in a particular situation as well as observations of how others *are* behaving.[4,5] Because handshaking is a core expectation for social interaction in a setting such as a graduation ceremony, it is reasonable to expect that most people's perception of the norms surrounding the situation is that handshaking is expected. Moreover, given the novelty of the H1N1 virus at the time and the lack of reported cases in the Buffalo area, it is likely that most participants were uncertain about the actual degree of risk faced,

the importance of engaging in prevention behaviors,[6,7] and the extent to which choosing to not shake hands would actually reduce risk. The optional handshaking instruction did nothing to reduce the ambiguity about the behavioral choice. When the appropriate behavioral response is ambiguous and objective guides to behavior are not available, individuals observe the behavior of others to infer proper action.[8,9] Thus, seeing the first graduate shake hands may have started a perception of handshaking being a proper action, thus increasing pressure on the second graduate to shake hands, and so on.

The sum of the social forces in the situation combined to create a response conflict. Although the public health guidance to reduce disease transmission encouraged individuals to not shake hands, the social and situational demands of the graduation ceremony encouraged exactly the opposite behavior, thereby rendering the handshake optional policy ineffective.

THE UB GRADUATION EXPERIENCE AMID CDC GUIDANCE FOR PUBLIC HEALTH RESPONSES TO H1N1

After the ceremony, CDC released "Interim Guidance for Public Gatherings," which focused on preventing transmission. This guidance did not mention handshaking, but counseled to ". . . avoid close contact with sick people" and "follow public health advice regarding . . . social distancing measures."[10] CDC has since issued expanded guidance,[11,12] adding provisions to encourage those who are sick to skip class, increasing social distance between individuals, and canceling or changing the nature of public events.

Our experience would suggest that such social-distancing recommendations may be ineffective, especially for social events (e.g., graduations, weddings, and funerals) that are viewed as important rites of passage. Consider as examples the pressures on a father with a role in a daughter's wedding or on an individual desiring to attend the funeral of a lifelong friend. Especially when one's symptoms are mild or ambiguous, it could be very hard to make the decision to not participate in these rites of passage.

Given the powerful social and psychological forces, one could even argue that the situation in effect can have undue influence on handshaking or attendance regardless of the person's individual preferences and perceived risk. Thus, the assumption that handshaking or attendance is an individual choice in such situations and that a person can freely and easily "opt out" is a problematic assumption in the same way that large research participant payments are ethically problematic in terms of exerting undue influence on decisions to participate.[13]

The response conflict issue extends to other recommendations made regarding H1N1 transmission. For example, CDC recommends that individuals stay home from work and/or school if experiencing symptoms, that individuals with symptoms wear face masks when in public, and that institutions consider canceling public gatherings such as sporting events and graduation ceremonies if the disease is spreading.[11,12]

Each of these recommendations is likely to lead to response conflicts. Staying home from work or school pits health concerns against very real economic (lost wages) and achievement (learning and exam preparation) concerns. Similarly, because wearing a face mask is extremely rare in the United States, the mask recommendation is in conflict with social norms concerning public attire. As discussed previously, public gatherings are important and full of symbolic significance to individuals, creating response conflicts associated with their cancelation or other changes to normal operation. Moreover, although the analysis in this article focuses on response conflicts created by the social nature of the situation, there are likely to be other forces that create conflicts in individuals' responses to public health advice (e.g., economic pressures discussed previously).

These response conflicts may be especially problematic when prevention recommendations may be most effective—at the early stages of disease spread, when effective transmission prevention may stop an epidemic from occurring. The very characteristics that make transmission prevention important at the early stages may work against the effectiveness of recommendations in situations marked by response conflicts. At the early stages of a disease, issues of severity and susceptibility can be quite ambiguous. Ironically, the time when the situation is more amenable to health concerns winning out (when an epidemic is in full force and the risk posed by the disease is clear) is the time when it can be too late for preventive behaviors to be an effective control strategy.

CONSIDERING RESPONSE CONFLICTS IN DESIGNING PUBLIC HEALTH RECOMMENDATIONS

The conflict between health concerns and other social and situational pressures has implications for how we develop and present public health recommendations. Public health officials and others concerned with preventing disease transmission in public gatherings should understand that the social pressures at play

may create a need to take decisive, rather than advisory, action.

Outright bans on handshaking may be more effective than asking individuals to decide for themselves whether or not to shake hands. In the graduation situation, an announcement that handshaking would not be part of the graduation ceremony would alter the "script" for the highly ritualized situation, where behaving "correctly" according to ritual is important. As an example, in Indiana the State Health Commissioner made an explicit recommendation for action. In a press conference on April 29, 2009, she stated that ". . . starting today, I recommend that Indiana stop shaking hands."[14] Several universities in the state announced that no handshaking would take place at their graduation ceremonies,[15,16] citing the Commissioner's advice as the rationale. Observations of graduates' behavior at these ceremonies indicate the ban was adhered to.[17] There may be situations in which the desire to preserve the normal rites and behaviors precludes an outright ban. In these situations, other measures could be taken to reduce or eliminate the risks that shaking hands might lead to disease transmission (e.g., requiring use of hand sanitizer).

Our take-home message is this: beware of the power of social demands that conflict with public health advice. Preventing disease transmission by social distancing may often be easier said than done. It is critical that public health recommendations be directed at behaviorally practicable steps. Where public health recommendations oppose socially expected behaviors, definitive guidance may be needed. We recommend that communications provide guidance that is both socially and behaviorally practicable for prevention of infectious disease transmission in public gatherings, realizing that those practicable steps may require more extreme measures (e.g., banning handshaking or canceling events) if preventing disease transmission is to be truly effective.

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