Improving How We Communicate about Infectious Disease Risks

Several strategies are available to engage diverse stakeholders, correcting misperceptions and empowering them to act

Robert S. Littlefield

Although preventing and controlling infectious diseases have raised life expectancy rates, public awareness about these diseases and how they can be controlled has declined. Inaccurate information, misperceptions, and questionable practices thus threaten to reverse gains made in public health.

These threats fall across a broad spectrum. For example, inaccurate information about the hazards of immunization has led to decreased vaccination rates, increased consumption of raw milk has led to a rising number of illnesses and deaths linked to dairy products, misuse of antimicrobial agents has resulted in the emergence of multiple antibiotic-resistant organisms, and the widening use of antisepctic products such as triclosan is raising environmental concerns. In facing these threats, microbiologists and policy makers need to develop communication strategies to engage the public when dealing with these issues. These strategies define key terms and then build a framework for introducing communication strategies into public discussions surrounding infection disease control and prevention.

Communications Strategies

Start with Key Definitions

Key terms need defining, beginning with risk and crisis communication. Risk and crisis communication can be defined as “an interactive process, exchange of information and opinion among individuals, groups, and institutions ... revealing various threats or risks to the community,” according to Michael J. Palenchar of the University of Tennessee, Knoxville, and his colleagues. Risk communication involves multiple entities, whose diverse members disagree about the nature and severity of particular risks.

Risk may be considered the sum of perceived hazards plus the level of outrage felt by those most directly involved, according to consultant Peter Sandman of Brooklyn, N.Y. If the hazard and outrage are high, the perception of risk is great. If either the severity of the hazard or the level of outrage is low, the perception of risk will vary. In either case, without consensus, decision-makers face difficulties gaining compliance with their instructional risk communication.

To be successful with multiple publics, agencies and organizations cannot merely ignore or minimize the concerns of those who disagree or question their views. Merely dismissing them as “the crazies” because their arguments seem illogical or appear to manipulate the facts is ineffective. Rather, organizations need to keep the lines of communication open with their stakeholders and publics, even when the agencies do not value the views that are being introduced.

A second term to define is vulnerable pub-

SUMMARY

Several strategies help when reaching out to different stakeholders, some of whom are difficult to communicate with, to correct misperceptions and empower them to act when facing infectious diseases.

These strategies define key terms and build a framework for holding more productive public discussions surrounding infection disease control and prevention.

Risk may be considered the sum of perceived hazards plus the level of outrage felt by those most directly involved in dealing with a particular risk, particularly stakeholders and vulnerable publics.

Decision-makers need to realize that vulnerable publics respond differently to risks than do other groups.

Three broad strategies are available to engage different publics and to help them respond better to risks.
lics. According to the late 20th-century social philosophers Chaim Perelman and Lucie Olbrechts-Tyteca, the universal audience is intelligent, reasonable, rational, and willing to accept the opinion of authority. Within the context of the universal audience are particular audiences, to which messages being conveyed may have specific meanings or relevance.

I, and other contemporary risk and crisis scholars, identify these particular audiences as “publics,” including stakeholders and vulnerable publics. Further, in my view, vulnerable publics typically have at least one of the identifiable personal circumstances, such as low socio-economic status, within a general circumstance, such as susceptibility to exposure to an infectious disease, to be labeled as vulnerable. Other scholars agree that vulnerable publics are those most affected by crisis events.

A third concept needing definition relates to the manner by which cultural considerations are included in the process of creating or disseminating risk messages. Mohan Dutta of the National University of Singapore points to three frameworks for explaining differing approaches: culture neutral, culturally sensitive, and culture centered. The culture-neutral approach is perceived as insensitive and controlled by those sending the message. Culturally sensitive communication takes into account the sender’s beliefs. However, the decision about how to develop and present the message is still under the control of the agency or organization.

In contrast, the culture-centered approach involves stakeholders and different publics in the process of creating the message and determining how to transmit it. When organizations are developing messages to describe risks and suggesting how to handle them, research suggests that the appropriate publics are more likely to respond positively if the organization follows a culture-centered approach.

**Challenges Facing Decision-Makers**

With those definitions in mind, it is appropriate to consider some of the challenges facing organizational decision-makers regarding how to develop and present risk and crisis messages. Two key challenges include the need for decision-makers to shift to an audience-oriented focus with knowledge of cultural variables, and that vulnerable publics respond differently to risks than do other groups.

Dealing with the first challenge requires organizations to develop a more nuanced understanding and application of cultural variables. Early risk and crisis scholars focused on strategies an organization could use to improve or restore its image with stakeholders or publics affected by the crisis situation. However, this sender-focused analysis reflected the perspective of the organization and failed to take into consideration the perceptions of the receivers of the risk messages.

Larry Sarbaugh of Michigan State University sought to change this approach by identifying four variables to manage when adopting an audience-oriented focus. They include use of code systems, perceptions about relationships and intent, knowledge and acceptance of normative beliefs and values, and worldviews. A code system refers to the words used when discussing specific risks. If the audience is unfamiliar with terminology being used, there is less likelihood that the messages being conveyed about those risks will be understood. If the terminology is complex or includes acronyms that are unfamiliar to the audience, the message will not be well received.

When vulnerable publics question the intent of an organization, they are unlikely to comply with the directives that it issues. For example, if the organization has a bad history with a particular individual or group, there is less likelihood that group members will perceive the intent of the organization as helpful. Rather, the individuals in the group may suspect the organization of having an ulterior motive to harm them.

A third variable involves learning about and accepting normative beliefs and values of the affected publics. Vulnerable publics and organizations have different belief systems. For example, if a vulnerable public subscribes to a magical or spiritual approach to health, claiming that vaccinations allow infectious illnesses to be inflicted upon healthy bodies, members of this public group are likely to reject standard treatments because of the belief that those treatments will cause harm to whoever is vaccinated. Organizations thus need to consider the beliefs and values of those who will receive the message and consider how they can account for those conflicting perspectives when presenting their messages.

Finally, conflicting worldviews challenge organizations seeking to instruct their stakeholders and publics about how they should behave or
respond to risks. Essential elements of worldview include nature of life, purpose of life, and relationship of humans to the cosmos. If members of a vulnerable public believe that the nature of life is hardship, the purpose of life is to prepare for the afterlife, and their relationship to the cosmos is one of subordination, they may be unlikely to believe that vaccines or medical treatments will be useful or even appropriate. Because they are prepared to accept their fates, taking steps to mitigate or reduce the risk of the disease being faced would be considered a wasted effort. Thus, designing and presenting messages to this group requires careful consideration.

The challenge of adopting an audience-centered focus contributes to the second issue facing risk and crisis communicators. In being vulnerable, publics respond differently to risks. For example, how do they compare the risk of food poisoning from consuming contaminated hamburgers to that of becoming infected by the Ebola virus? The risk of illness and death from consuming raw milk may not stop individuals from using such dairy products. Moreover, the perceived risk from being vaccinated may be considered greater than the perceived risk of contracting an infectious disease.

Depending upon one’s ethnicity, country of origin, economic status, education level, access to information, literacy, and social standing, the receiver of a message may be more or less likely to respond according to cultural beliefs and values than directly to the content of the message. The variability in responses from different publics receiving risk messages complicates message making for organizations seeking to account for differing attitudes towards those risks. The belief that one message can have the same effect on all receivers is flawed. Even in those situations where one might expect the same response from all receivers from a warning, different perceptions about the best response may prompt different levels of compliance to that warning message.

### Strategies to Improve Compliance

Three strategies are available to engage different publics and to help them respond better to risks. These strategies involve using elements from the IDEA Model of Instructional Risk Communication, applying decision-making tensions, and becoming more mindful of socio-cultural variables that affect compliance.

Instructional risk communication specialists Deanna Sellnow and Timothy Sellnow at the University of Kentucky introduced the IDEA Model of Instructional Risk Communication. According to that model, three key elements affect message compliance: internalization, explanation, and action. First, messages need to be designed to connect with their intended audiences, capturing their attention and enabling them to internalize the contents of each message. To be appropriately explanatory, messages must provide details of what is happening, why, and what is being done to mitigate or remove risks. Finally, messages need to provide options for action because people want to know what to do to protect themselves and their families or communities against the risks they face. Ideally, these three elements will be balanced to create a message that audiences receive well, according to Sellnow and her colleagues.

The second strategy, which my collaborators and I developed, takes into account decision-making tensions faced by organizations creating and disseminating risk messages to the public. We identified seven tensions that decision-makers face when responding to risks: 1) timeliness of the information, 2) amount of information, 3) certainty about the information being released, 4) control of the organization’s narrative about the risk, 5) level of responsibility for the crisis, 6) prioritization of interest, and 7) emotional connection with the publics (see table). For each tension, extremes exist. For example, for the tension of timeliness, organizations must decide whether to release the information immediately or how long to delay its release.

In determining what levels of tension must be accounted for when creating and disseminating messages, organizations taking a culture-centered approach can expect to benefit more from understanding how cultural variables affect compliance.

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<th>Table 1. Decision-Making Tensions in Risk Communication</th>
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<td><strong>Tension</strong></td>
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<td>Timeliness</td>
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<td>Amount of Information</td>
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<td>Certainty</td>
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<td>Control of Media/Narrative</td>
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<td>Prioritization of Interest</td>
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the most. For example, including stakeholder groups and members of different publics on the risk communication team within an organization will provide insights about how to account for tensions and respond most effectively to different target groups.

A third strategy involves being mindful of socio-cultural variables that affect how messages are received. For example, in following this strategy, my team, including Kimberly Cowden and Will Hueston, developed practical strategies for engaging New Americans, immigrants, and Native Americans when developing risk messages. Thus, we included members of different multicultural community groups on our team when we developed messages about specific risks, and then we asked cultural agents, who are trusted by their communities, to present that information.

We found it valuable to take time to build relationships with different cultural communities to increase credibility and trust, to explore different ways to listen to and involve publics in discussions about risk and crisis situations, to understand that cultural views about health crises vary, to take religion and cultural practices into account when selecting spokespersons, creating the message, and disseminating it to stakeholders and the public; to recognize that individual learning styles vary and what one group may find preferable, another might not value; to understand that the literacy levels of the publics will affect their ability to follow written directions; and to account for whether affected groups have had an adversarial or hostile relationship with organizations, including government agencies, because it may affect their feelings and how willing they will be to accept risk instructional communication.

Following these three strategies can improve the likelihood that those receiving instructional risk communications will respond as directed. Focusing on internalization, explanation, and action helps organizations pay closer attention to how risks are affecting particular members of the public and how best to prevent or mitigate a crisis. Identifying the tensions and using members of the affected publics to gain insight on finding the balance between these tensions while a crisis is in play will help organizations to navigate situations in the best interests of all who are involved. Finally, being attentive to cultural variables will enable decision-makers to build a fuller understanding of different factors that affect receptivity among vulnerable publics.

Conclusion

Vulnerable publics having differing cultural perspectives continue to question health professionals about the safety of vaccines, forcing health officials to tailor risk and crisis messages that better provide relevance, meaning, and application of those messages to skeptics. If health professionals engage stakeholders and publics in ways that address their concerns and misperceptions about infectious disease prevention and control strategies, the scientific community will be more able to control these diseases in the future.

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Suggested Reading


