Epidemic Response Archetypes: Negotiating Unknowns in Pandemic Planning

By Tess Laidlaw

From beyond Canada's borders, the disease made a slow but ominous entrance into the country. Early cases progressed quickly and treatments seemed ineffectual. Uncertainty regarding the presence of the disease fueled alarm and rampant speculation, while its unusual epidemiology caused confusion as cases appeared among those normally considered least susceptible to infection. Amid the upheaval, the press reported that "a panic of an almost indescribable nature seems to have taken hold."[1]

The disease described above is not influenza A H1N1 but cholera, and the year is not 2009 but 1832. Yet, the sense of what made one vulnerable or safe and the fear of a rampaging, mysterious infection seems oddly familiar. Societies have responded to epidemic diseases in similar ways through history, yet the manner in which people interpret the risks posed by new diseases remains relatively unexplored by the medical community.[2] Such knowledge would be invaluable in pandemic planning.

Ideas about how diseases are caused or prevented have both intellectual and social counterparts.[3] Medical historian Charles Rosenberg describes epidemics as accompanied by "archetypical" responses: As societies strive to make sense of outbreaks, patterned methods of interpretation recur.[3] To illustrate, many methods of protection from diseases have existed through history and were generally based on medical knowledge of the time. However, some were purely symbolic, such as scapegoating, which emphasizes the perceived high-risk status of an "Other," [4] a person or group that symbolically ensures one's own safety. Scapegoating could, in pandemic situations, lead to victimization of targeted groups.[2] While cholera infection in the 1830s was related to perceived moral failings of immigrants,[1] early media coverage of H1N1 in Canada highlighted the threat posed by Mexico as the source of risk.[5,6]

Contemporary populations have also associated H1N1 flu susceptibility with levels of sexual activity.[2]

The archetypal phenomenon of "symbolic" disease protection could explain why governments were caught off guard by the public's apparent indifference to the availability of a vaccine in the fall and winter following the H1N1 outbreak, despite the earlier panic.[7,8,9] A majority of individuals assessed the level of risk posed by H1N1 through its presence in individual communities,[9] or through the opinions of peer groups, which could either heighten[2] or lessen risk.

Implicit in the development of public health messages during the H1N1 pandemic was the attempt to anticipate the motivations behind human behavior: what messages would create adherence to advised public health measures? A framework tying the application of epidemic response archetypes to human motivation is suggested by Kenneth Burke, whose book *A Grammar of Motives* rests on the central question, "What is involved, when we say what people are doing and why they are doing it?"[10]

Because of his interest in issues of "universal" significance,[11] Burke's theories have impacted numerous disciplines, including medicine.[12,13] Burke argues that aspects of situations can be categorized via the terms "Act, Scene, Agent,

Agency, [and] Purpose," which together form the "dramatist pentad."[10] The pentad can then be studied to reveal human motivation.[10] By identifying these key elements in a situation or projected scenario, an observer can determine which element exerts the most influence, and proceed toward possible consequences. As part of a scenario development process in pandemic planning, the pentad could improve the authenticity of a given scenario[14] and take regional influences on populations into account, such as epidemic threats from additional sources of infection (e.g., avian influenza).[2]

Burke recognized that in catastrophic situations, a "scene-act" ratio would prevail. The scene would govern which acts took place: one could look to the behavior of the participants for expression of "the motivating influence of the crisis."[15] When the primary motivating influence becomes something other than the crisis itself, audiences of public health messages may act in unexpected ways. During the H1N1 outbreak, a contagion of indifference to H1N1, or ambivalence toward the H1N1 vaccine,[7,9] overshadowed literal contagion in public health significance. The pentad could highlight what epidemic response archetypes may play a role in a given situation—such as the H1N1 pandemic "scene" involving a concurrent decline in mortalities and increase in vaccine availability. In short, Burke's pentad enables investigation of a number of perspectives based on examination of the five elements of a situation,[10] while epidemic response archetypes provide variables for consideration in those perspectives.

Epidemic response archetypes are available in the historical record and thus represent tools in pandemic planning. It has been said that "H1N1dsight is a wonderful thing."[8] So too would be a glimpse of the future.

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Author Profile

Tess Laidlaw is currently pursuing a PhD degree in Rhetoric & Popular Culture at the Graham Centre for the Study of Communication (University of Saskatchewan). She had previously completed a MA degree in journalism at the University of Western Ontario, and is mainly interested in studying the rhetoric of disease and medicine, and the role that science plays in society.