

Crying Wolf or Sobbing Swine: Examining Post-H1N1 Perceptions of Risk and Threat of a Future Influenza Epidemic

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Abstract: When a Community is susceptible to an epidemic, it is important to understand its vulnerabilities and health risks, both perceived and actual. By examining perceptions of threat of the H1N1 'Swine Flu' influenza epidemic outbreak of 2009, this study explores the preventative and responsive measures put in place to protect the health of the Kenyon College Community and asks Community members to gauge their efficacy. By investigating the attitudes toward the outcome of these preventative and protective measures and studying the Community's response to a hypothetical future influenza epidemic, this research probes the complex web of socio-cultural interactions that constitute "health" at Kenyon on both the individual and group levels in order to shed light on and improve responses to future influenza and other possible epidemics.

Introduction: As Singer et al. (2009:202) suggest, "[l]ike the bodies they afflict, diseases are simultaneously physical and symbolic artifacts that are 'both naturally and culturally produced, and securely anchored in a particular historical moment.'" While a disease is physically communicated from one host to the next, it is only within the medium of culture that this spread of disease and the gravity of its effects become truly comprehensible.

In March of 2009² it became clear that Kenyon College and its Community Members were susceptible to the advancing H1N1 influenza epidemic, commonly referred to as 'swine flu'. In response to the threat of H1N1, the Kenyon Administration followed the Center for Disease Control's (CDC) health guidelines³ (see Fig. 1):

Fig. 1

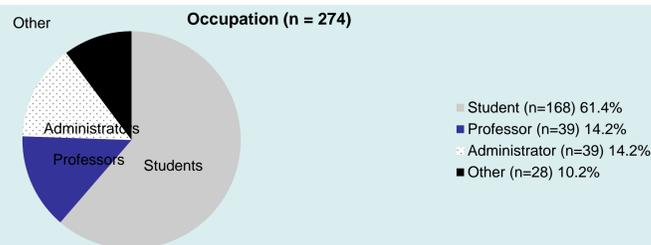
H1N1 Prevention Guidelines

- Vaccination is the best protection we have against flu. CDC is now encouraging everyone to get vaccinated against 2009 H1N1. The vaccines to protect against 2009 H1N1 are widely available. Supplies of seasonal flu vaccine may be limited.
- Influenza is thought to spread mainly person-to-person through coughing or sneezing of infected people.
- Take everyday actions to stay healthy.**
 - Cover your nose and mouth with a tissue when you cough or sneeze. Throw the tissue in the trash after you use it.
 - Wash your hands often with soap and water. If soap and water are not available, use an alcohol-based hand rub.
 - Avoid touching your eyes, nose and mouth. Germs spread that way.
 - Stay home if you get sick. CDC recommends that you stay home from work or school and limit contact with others to keep from infecting them.
- Follow public health advice** regarding school closures, avoiding crowds and other social distancing measures.

This study attempts to determine what measures the members of the Kenyon Community undertook in its response to H1N1 and how its members think they would respond to a future influenza-like epidemic. Insights acquired from this research can aid in re-evaluating Kenyon College's health policy and the Community's understanding of health practices.

Methods: To facilitate comparisons with other studies investigating community responses to H1N1, the research instrument created for this project was modeled on the instruments utilized by Akan et al. (2010)⁴, Poland (2010)⁵, and Van et al. (2009)⁶. After receiving IRB training and approval, the survey instrument was made available to the Kenyon Community at large. Data were collected online during the summer and the beginning of the fall semester of 2011. Voluntary interviews were conducted with respondents to assist in clarifying the context in which the data were collected.

Fig. 2



Results: Total, there were 274 Kenyon Community members who participated in the survey (see Fig. 2).

Table 1

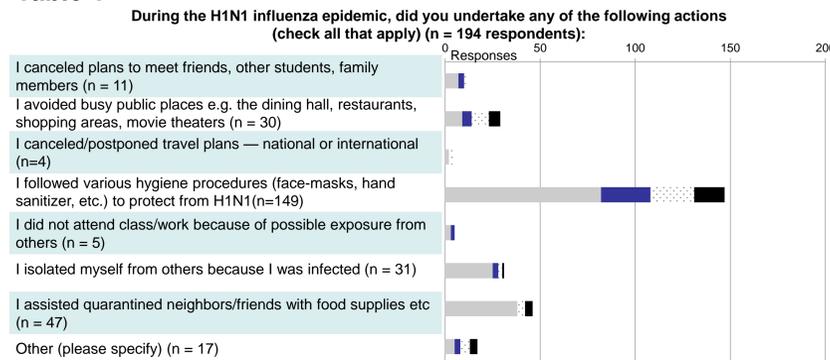
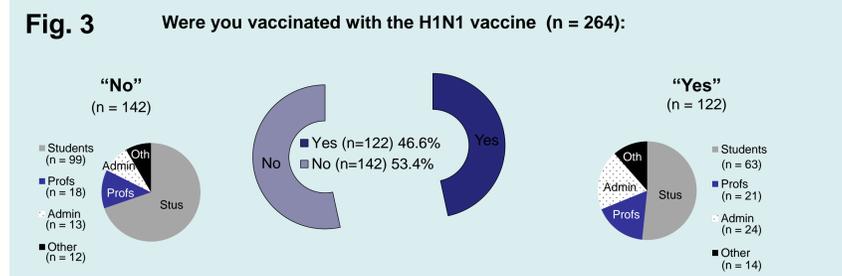


Table 1 shows that the majority of respondents indicated following various hygienic procedures to defend against H1N1. Interviews and written survey responses indicated that these procedures were most often using hand sanitizer and increasing frequency of hand-washing.

Fig. 3



When asked about H1N1 vaccinations (see Fig. 3), about 50% of respondents that stated they were not vaccinated. When examining the occupations of the respondents, the majority of individuals who were not vaccinated indicated "student" as their occupation. The majority of respondents who listed occupancies other than "student" did receive vaccinations. Major factors in determining whether or not students surveyed received vaccination were indifference, perceptions of risk, and professional opinion (see Tables 2 & 3).

Table 2

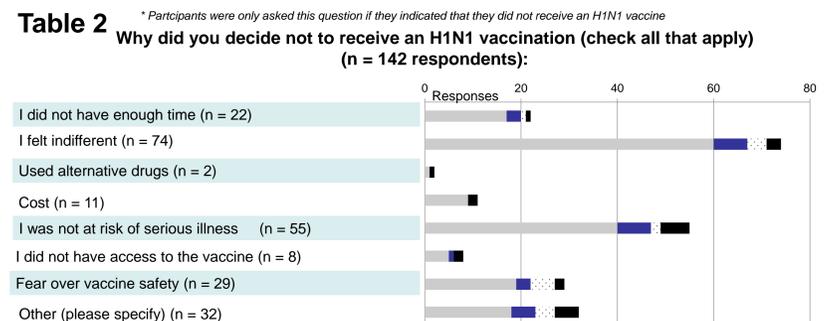
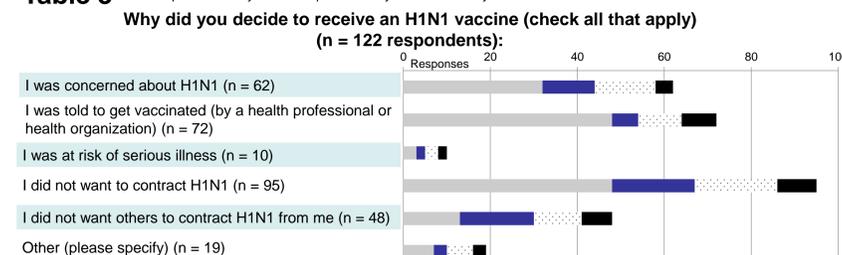


Table 3



When questioned about behaviors during illness (see Table 4), about 20% of respondents claimed they attended class while experiencing symptoms of an influenza-like illness. Further examination of the data showed that only about half of these respondents had reported receiving an H1N1 vaccine.

Table 4

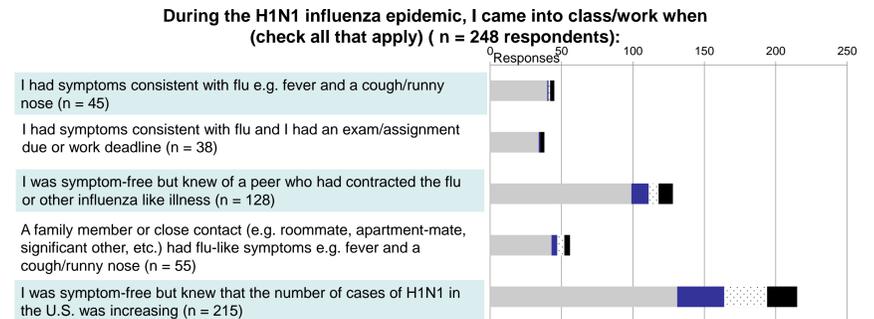
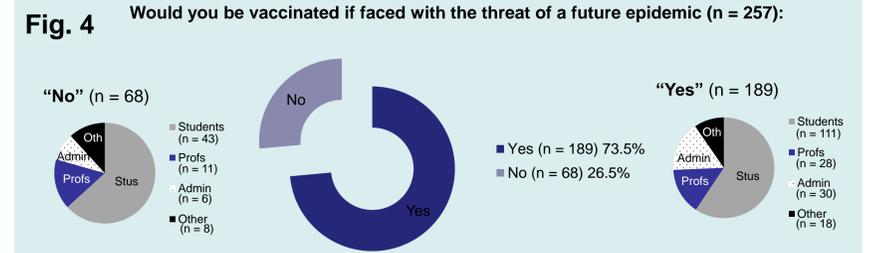


Fig. 4



When asked about future vaccination plans (see Fig 4), half of the individuals who decided against H1N1 vaccine responded that they would receive vaccination for the future influenza epidemic if it were available.

Discussion:

While the H1N1 influenza epidemic was about two years ago, making it difficult for respondents to accurately report specific behaviors of the time, a recent study by Holmes et al. (2011)⁷ points out the limitations of social distancing and hygienic preventative measures. By surveying the number of strains introduced to a university campus during the H1N1 epidemic of 2009, Holmes et al. emphasize that the wide variety of virus strains reflect the many possible entry points of H1N1 into the community. Even though Kenyon is a smaller campus and only a sample of the Kenyon Community was surveyed, it remains that H1N1 is primarily spread from person to person³. Many respondents continued with daily routines when they or a member of their household were experiencing influenza-like symptoms, behaviors which defy social distancing recommendations. Even if the Kenyon Community focuses on measures of social distancing and hygiene to protect its members, it is not isolated from the possibility of outside "contamination". The spread of a virus such as H1N1 cannot be combated effectively with the practices currently in place.

The Kenyon Community must refocus its future efforts when faced with an epidemic. Social distancing and hygienic efforts are not as effective as previously thought⁷ yet these were the primary responses to the H1N1 outbreak of 2009. Vaccination appears to be the best defense against a future influenza epidemic^{3,7}, yet the majority of the Kenyon Community does not receive vaccinations – with students composing about 70% of individuals who chose to forgo vaccination. Results of this study would recommend the earlier promotion of vaccinations in conjunction with educational reminders of how disease is spread, who is at risk, and explanations of why those individuals are at risk.

Works Cited:

- Akan et al. (2010). Knowledge and attitudes of university students toward pandemic influenza: a cross-sectional study from Turkey. *BMC Public Health*, 10:413. Retrieved January 26, 2011 from <http://www.biomedcentral.com/1471-2458/10/413>
- Centers for Disease Control and Prevention. 2009 H1N1 Flu. (2010, April 11). Retrieved September 28, 2011, from <http://www.cdc.gov/h1n1flu/>
- Centers for Disease Control and Prevention. The 2009 H1N1 Pandemic: Summary Highlights, April 2009-April 2010. (2010, June 16). Retrieved January 29, 2011, from <http://www.cdc.gov/h1n1flu/2009response.htm>
- Holmes et al. (2011). Extensive Geographical Mixing of 2009 Human H1N1 Influenza A Virus in a Single University Community. *Journal of Virology*, 85 (14), 6923-6929. doi:10.1128/JVI.00438-11
- Poland (2010). The 2009-2010 influenza pandemic: effects on pandemic and seasonal vaccine uptake and lessons learned for seasonal vaccination campaigns. *Vaccine*, v. 28, Supplement 4, doi: 10.1016/j.vaccine.2010.08.024.
- Singer. (2009). Pathogens Gone Wild? Medical Anthropology and the "Swine Flu" Pandemic. *Medical Anthropology*, [No Volume/Issue], 199. doi:10.1080/01459740903070451
- Van et al. (2009). University life and pandemic influenza: Attitudes and intended behaviour of staff and students towards pandemic (H1N1) 2009. *BMC Public Health* 2010, 10:130. doi:10.1186/1471-2458-10-130

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