



F12 Intentional Biological Terrorism: Will Dental Students Assist Medical and Mortuary Personnel in the Event of a Mass Disaster?

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After attending this presentation, attendees will know if dental students would be willing to assist medical and mortuary personnel in the event of intentional biological terrorism.

This presentation will impact the forensic science community by encouraging governmental agencies to work with dental schools and other health science schools to provide sufficient mass disaster training for students and faculty.

International Public Health planners have concerns that thousands to millions of people will become affected in the event of a mass disaster caused by the intentional release of a biological agent into the community. Should a situation arise, where thousands of people are infected by a biological agent such as small pox, anthrax, or the plague, the public health planning community recognizes that local hospitals will be overwhelmed and staged immunization sites will be needed to provide pharmaceutical distribution and pharmaceutical delivery care to patients. If other responders beyond hospital personnel are available to care for the infected, the morbidity and mortality rate of all involved can be significantly reduced due to timely distribution and delivery of anti-infective pharmaceuticals. The Illinois Department of Public Health (IDPH) and the public health planning and disaster response community in Illinois, recognizes that the University of Illinois at Chicago (UIC) College of Dentistry (COD) provides National Disaster Life Support (NDLS) training through the Disaster Emergency Medicine Readiness Training Center for all dental students and faculty. The UIC COD is located several miles west of downtown Chicago. First year students are certified in Core Disaster Life Support (CDLS). Senior students are certified in Basic Disaster Life Support (BDLS). Illinois recognizes certified Dental Emergency Responders as qualified assistants during a mass disaster. The COD can provide additional clinical care for provider support, to the IDPH during an intentional biological terrorism event. Thus, reducing the risk for community, state, national, and global pandemics.

An IRB approved survey was given to UIC dental students during an introduction to forensic odontology lecture. At the beginning of the lecture pictures were shown of patients suffering from anthrax, plague, and small pox. The students were given a survey asking them if they would be willing to assist medical and/or mortuary personnel in the event of biological terrorism event. The following were used as qualifiers: gender, year in school, religion, marital status and children. It was hypothesized that married students, with and without children, would be less likely to assist medical and mortuary personnel during a mass disaster involving biological warfare. Also, with advanced training, more dental students would be willing to assist.

One hundred fifty-two students answered the survey. Second, third, fourth year, and international dental students (first and second year) responded to the survey. There was no difference between male and female dental students response. Approximately 85% of all students said they would be willing to help during a mass disaster of this magnitude. All classes were equally willing to help. The international second year students indicated more of a willingness to assist than the international first year students. Students who marked that religion played a role in their decision to help were more likely to say they would assist. No religious group was more willing to help than another. Single and married students were equally willing to assist. Single students said that marital status and children played a role in the decision to help. Married students did not feel that their marital status or children affected the decision to assist. Willingness to help correlated with interest in advanced training ($r = 0.42$, $p < .001$), and avoidance correlated negatively with interest in advanced training ($r = -0.19$, $p < .02$).

Overall, neither gender, year in school, religion, marital status, or children played a significant role regarding dental students' willingness to assist medical or mortuary personnel with a mass disaster of this magnitude. If advanced training was available, 90% of the dental students surveyed indicated a willingness to assist medical and mortuary personnel. Dental students and society could benefit if advanced training was provided to dental students interested in assisting medical and mortuary personnel after an intentional biological terrorist attack. Training should be considered for students in all health care fields.

Biological Terrorism, Dental Students, Mass Disaster