

Health workers too close to make vaccination call: study

Doctors, nurses may be too emotional to decide on vaccinations against disease outbreaks at home, research says

BY ANDREW TOBIN | August 26, 2014, 4:55 am |

Doctors and nurses know more than ordinary people about vaccinations, but an Israeli study indicates that when the case is an outbreak at home, they may allow other factors, like emotions, to interfere with their decision-making process.

Health workers in the study were significantly more likely than other Israelis to adopt medically grounded views on vaccinating against a bird flu outbreak overseas — but not in Israel, where opposition to vaccination appeared to increase. Their reasoning when their own country was involved tended to be based on emotion and personal experience, not on science, the small study found.

The issue could arise in the current struggle in Africa. Health workers are crucial to the international effort to deal with outbreak of Ebola centered in the west of the continent.

“When the risk is remote, it is easier for health care professionals to maintain a professional point of view as representatives of the system,” said Anat Gesser-Edelsburg, a public health researcher at the University of Haifa, who led the small, cross-sectional study. “When their close environment is at risk, they behave similarly to the general public and base their decisions on normative emotional barriers.”

The researchers say their findings, published in the *American Journal of Infection Control* in June, could help health workers in information campaigns regarding public health issues.

Earlier this month, the World Health Organization declared Ebola a public health emergency of international concern. Though the UN body said many countries would probably not have any cases, it tasked all states with informing the public about the deadly outbreak and about methods to reduce the risk of exposure — a directive that depends on the help of health workers.

To investigate how health workers perceive the risk of such potential pandemics, the researchers asked 109 Israeli doctors and nurses and 131 Israelis who were not health workers to rate their support for countrywide vaccinations in two scenarios: the real outbreak of bird flu in China in

2013 and a theoretical outbreak in Israel. The participants were asked to explain their positions in their own words.

In the China case, data analysis shows the health workers were significantly more supportive of vaccination, by an average of 0.353 points, than the other Israelis were. Compared to the other Israelis, the health workers tended to explain their positions more analytically, systematic human interpretation shows. They said things like, "In the last avian flu, the vaccine proved to be extremely effective and safe, so why not vaccinate?" in 43 percent, compared to 11 percent of the time.

In the case of the imagined bird flu outbreak in Israel, the average difference between the health workers and the other Israelis disappeared. Both groups were less supportive of vaccination when it involved them. But the health workers' positions changed more dramatically to fall into line with those of everyone else, leaving no significant average difference between the groups.

Like the other Israelis, and to the same average extent, the health professionals explained their positions on vaccination in Israel mostly in terms of their emotions and past experiences, saying things like, "I don't know why, it just sounds unsafe"

In both the China and Israel cases, participants who supported vaccination were significantly more likely to explain their positions analytically.

"When the case is remote, medical professionals respond rationally and analytically, but when the risk is closer, concerns grow, the unknowns increase, and even concern over causing public panic brings additional considerations into the picture that did not previously exist," said Gesser-Edelsburg. "The findings of the study showed that when the risk of disease is real, most health care workers behave exactly the same as anybody else and base their positions more on emotions and personal experience than on analytical knowledge."

According to professional guidelines, Israeli health workers should support vaccination against bird flu. Israel, like the United States, recommends flu vaccinations for everyone over the age of 6 months.

The researchers suggest health workers may be guided by their medical training when thinking about China, which is geographically and culturally far away. But when they consider their own lives in Israel, the researchers say, they may be swayed by intuition and emotion – ironically causing them to downplay the risk posed by an outbreak.

Research shows that barriers to bird flu vaccination include mistrust of the authorities, fears about vaccine safety and side effects, and the perceptions that vaccines are only partially effective and not necessary for healthy people.

Another factor may be "optimism bias," the well-documented psychological tendency of people to

believe that they are at less risk of experiencing a negative event than others, they say.

The researchers suggest that when it comes to convincing health workers to promote vaccines and other protective measures against disease outbreaks, the solution can be the goal: involve doctors and nurses in the development of public health information campaigns, educating them to educate the public.

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