Editorial

Influenza immunization of the health care workers: a patient safety issue

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The recent outbreak of avian influenza in Asia is a timely reminder of the ever-present possibility of a human influenza pandemic in the near future. Even in the absence of a pandemic, influenza-associated respiratory and circulatory illness results in more than 200,000 hospitalizations and 36,000 deaths each year in the United States, according to recent estimates.[1] It kills more Americans annually than AIDS. Today, we have significant numbers of health care associated influenza infection in addition to community-acquired infections.

The medical literature has clearly documented the transmission of influenza from patients to health care workers (HCWs), from HCWs to patients and between HCWs.[2] Data suggest that between 14% and 37% of health care workers become infected with the influenza virus each year, and spread the illness within their facilities.[3] Rates of serious illness and death are highest among persons aged >65 years, children aged <2 years, and persons of any age who have medical conditions that place them at increased risk for complications from influenza.[4] The virus can be transmitted to patients and other employees by both symptomatic and asymptomatic health care workers, and simply "staying home from work" is an insufficient strategy for preventing nosocomial transmission.[5] Worse yet, it is shown that health care workers continue to work despite being ill with influenza, thus increasing exposure of patients and coworkers.

Annual influenza vaccination is the most effective method for preventing influenza virus infection and its complications. The Centers for Disease Control and Prevention's Advisory Committee on Immunization Practices (ACIP) has been recommending annual vaccination of health care workers since 1981. The expected benefits of this policy include reduction of nosocomial influenza infection among high-risk patients and reduction of infection and illness and absenteeism among HCWs. Higher rates of influenza vaccination among health care workers in the United Kingdom have been associated with lower rates of patient deaths and during one 12- year study, the rate of hospital-acquired influenza among patients decreased from 32% to 0%, while vaccination rates among health care workers rose from 4% to 67%.[6] The ACIP 2008 recommendations include new and updated information.[7] Influenza vaccines now can be administered to any person more than six months (who does not have contraindications to vaccination) to reduce the likelihood of becoming ill with influenza or of transmitting influenza to others. Trivalent inactivated influenza vaccine (TIV) can be used for any person more than six months, including those with high-risk conditions. Live, attenuated influenza vaccine (LAIV) may be used for healthy, non-pregnant persons aged 2-49 years.

Despite the burden of illness caused by influenza in both patients and HCWs, and the demonstrated benefits of HCW vaccination, HCW vaccination rate is only 42%.[8] The reasons health care workers give for declining influenza vaccination consistently include a lack of knowledge about the vaccine, doubts about its safety and effectiveness, cost, dislike of injections, fear of adverse effects, inconvenience, and limited support from leadership.[9] It is unfortunate that many of these responses reflect misinformation and/or insufficient attention to the 'duty of care' that HCWs owe their patients.

Low rates of immunization among health care workers pose a public health threat, in particular to hospitalized patients already vulnerable to nosocomial infection. A number of effective strategies are used to increase the rate of influenza vaccination among HCWs.[10] The mobile carts have been successfully used to take free vaccine to the work areas on all work shifts. Assignment of occupational nurses to organize a vaccination campaign has proven to be effective. Many institutions have increased vaccination with the use of employee reminder-recall systems, designated influenza vaccination days, vaccination fairs with refreshments or prizes, vaccination of supervisors in front of employees, vaccination at Grand Rounds, and vaccination during community or hospital outbreaks.

The various accreditation organizations, including the Joint Commission on International Accreditation have supported the idea of protecting health care workers and the patients they care for by pursuing vaccination initiatives. Knowing the facts and not acting upon them with a comprehensive, effective, and reasonable manner is a dereliction of the responsibilities of the medical community to the safety of the public whose care they are entrusted with. HCW vaccination can be viewed as a patient safety

issue, by protecting patients from influenza exposure and the related mortality seen among vulnerable populations and should be presented as such to both HCWs and the hospital leadership.

The medical community is now armed with clear and unambiguous data demonstrating that health care workers are vectors in nosocomial influenza outbreaks as well as data proving that influenza vaccination is safe, effective, cost efficient, and successful in reducing patient morbidity and mortality. Among the myriad of reasons to vaccinate HCWs, there are few, if any, down sides. The current policy of voluntary vaccination of health care workers is not effective in achieving acceptable immunization rates and thereby endangers the vulnerable patients we care for and are entrusted with. Requiring influenza vaccination of health care workers is the right thing to do. It benefits the patient, the employee, and the employer.

Infection control practitioners and hospital epidemiologists can successfully prevent influenza infections with a multifaceted approach, including vaccination, education, and traditional infection control methods. We believe that with an integrated approach we will not only fulfill our mission to prevent infections in our institutions, but also contribute significantly to the prevention of influenza disease in our communities at large.

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