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Raising awareness about hygiene behavior education for nursing assistants in China

To the Editor:

In China, nursing assistants (NAs) are the fastest-growing sector in the whole health care system. As unlicensed but important members of the health care team, they provide bedside care—including basic nursing procedures—under the supervision of registered nurses and other health care personnel. They also perform support functions such as transporting patients, making beds, assisting therapists in treatments, and so on.

A growing body of evidence shows that health care-associated infection has been 1 of the major causes of illness in the world.¹ Poor compliance with hygiene guidelines among health care workers, which may facilitate cross-transmission of pathogens, importantly jeopardizes nosocomial infections control.² Accordingly, the World Health Organization regards improving health care worker hand hygiene as an essential tool for the prevention of infection.³ However, the low compliance of NAs with the guidelines of hand hygiene puts patients at risk in China.⁴

We investigated the hand hygiene rates of 57 NAs before and after patient contact. The results showed that only 21% (12 out of 57) of persons performed hand washing before touching patients, and 37% (21 out of 57) of persons performed hygiene procedures after patient contact; together just 18% (10 out of 57) performed hand hygiene practice totally following hand hygiene guidelines. Clearly, more attention to hygiene behavior education of NAs in China is needed to accomplish optimal hygiene competence and to improve in-hospital patient safety.

There are some reasons for the low compliance of NAs with the hygiene guideline. Unlike some developed countries such as the United States, China does not have state-authorized training and

certification exams for NAs. Accordingly, there are no entry standards about the quantification of NAs before they have permission to work in health care roles and have contact with patients. This partly explains why the majority of NAs in China have a low education level, some even without a high school diploma. In addition, despite the growing demand for NAs in China, generally the salary of NAs is still extremely low compared with that of licensed nurses. Further, patients just require NAs to perform some necessary assistant work and do not consider it important for them to have expensive health care training. However, they do not realize the unprofessional hygiene skills of some NAs may put them at risk of infection.

Fortunately, people are gradually realizing the importance of professional training for NAs in China. For example, in 2010 NAs began to be required to undergo training and pass the certification exam in Beijing.⁵ No doubt, this is the right thing for protecting patients from unprofessional health care workers.

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The Cocoon Strategy: Does it work for Latin American countries?

To the Editor:

We read with interest the report by Esolen and Kilheeny¹ about the mandatory pertussis immunization campaign for health care workers (HCWs) in their health system.¹ They assert that this intervention was implemented because nonimmune adults play a significant role in transmitting the disease and their vaccination prevents it.

We agree and we would like to strengthen their argument with the idea that it is also known that non-HCW adults and adolescents

are reservoirs of the bacteria and a potential source of infection, especially for infants younger than age 2 months who are unprotected and at higher risk of lethal disease because schedules all over the world initiate pertussis vaccination during the sixth week of life and beyond.²

Pertussis incidence has risen worldwide during the past few years,³ and obviously has reached Peru, which received a national epidemiologic alert during August 2012.⁴ Comparing cases reported with 2011, the final 2012 number was greater than double. This represents a high risk for the development of a wide epidemic in Peru.

With this in mind, strategies have arisen to protect susceptible infants from this infection. The Cocoon Strategy involves vaccination of in-household contacts older than age 12 years (ie, adolescents and adults), puerpera mothers, and HCWs.^{1,5} The strategy is controversial. A World Health Organization position paper on pertussis vaccination published in 2010⁶ and the final report of the XX Meeting of the Technical Advisory Group on Vaccine-Preventable Diseases of the Pan American Health Organization,⁷ held in October 2012, both recommend not to perform this strategy because of lack of evidence. However, the Advisory Committee on Immunization Practices of the Centers for Disease Control and Prevention⁸ as well as recent research⁹ suggest that cocooning is an effective measure in controlling the disease in the infants, the most important in-household contacts being the mother and the father. It is also important to consider that, in epidemiologic terms, any strategy that diminishes the number of potential infected contacts will reduce the probability of disease transmission.¹⁰

The Cocoon Strategy has been implemented in countries around the world, including some Latin American countries.⁵ For instance, Costa Rica implemented this strategy and found positive results with a reduction of cases and mortality rates in infants.¹¹

We believe cocooning is an important strategy that should be considered by health systems—more so in an outbreak setting—to maintain adequate standards of infant health. Further research on its efficacy needs to be performed in Latin America and other developing countries before it can be implemented as national policy.

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Avian influenza remains a challenge to China in the post-SARS era

To the Editor:

At the beginning of the 21st century, China has faced a set of challenges in controlling newly emerging infectious diseases that are transmitted from animals to humans, such as severe acute respiratory syndrome (SARS) and avian influenza. The novel avian influenza A (H7N9) virus has caused global concern as a potential pandemic threat. It seems that H7N9 avian influenza is the next chapter in a story that began with the SARS epidemic in China.

As wealth has increased in China, the number of animals raised for food, particularly poultry and pigs, has been expanding rapidly. It is estimated that China has a poultry population of 14 billion, 70% to 80% of which is reared in backyards.¹ Densely populated southern China with backyard poultry farming practices has been a breeding ground for new influenza viruses.² At typical wet markets in China, poultry confined in stacked metal cages could facilitate the transmission of avian influenza viruses. Furthermore, open-air butchering could expose the workers and consumers to avian influenza viruses more easily. However, China is immature in implementing animal disease detection and monitoring. Moreover, obstacles to the timely reporting of animal disease outbreaks still exist.² It is true that individual farmers have few incentives to report sick or dead poultry. The fragmented nature of the agricultural sector makes regulation implementation difficult, as a number of food safety scandals have demonstrated in the last years.³

There is no denying the fact that avian influenza remains a challenge to China during the post-SARS period. Even though China has learned a lot in the last 10 years, it is far from enough. The surveillance and reporting system for avian influenza in poultry has yet to be further improved.

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