Arch Bronconeumol. 2009;**45(7)**:313-314

ARCHIVOS DE BRONCONEUMOLOGIA

www.archbronconeumol.org

Editorial

Respiratory Medicine and the New A/H1N1 Flu: From a Mexican Point of View

La medicina respiratoria y la nueva gripe A/H1N1: la visión desde México

Rogelio Pérez-Padilla [a,*] and Luis Torre-Bouscoulet [b]

[a] *Dirección General del Instituto Nacional de Enfermedades Respiratorias, Secretaría de Salud, México DF, México*
[b] *Departamento de Fisiología Respiratoria, Instituto Nacional de Enfermedades Respiratorias, Secretaría de Salud, México DF, México*

March and April 2009 will be remembered for the epidemic caused by a new strain of influenza virus named A/H1N1 2009.[1] Where the virus first appeared is a topic for debate; however, we in Mexico suffered from its rapid contagion, which to date has caused thousands to be infected, many of whom risk dying.[2]

According to the National Institute of Respiratory Diseases (INER in Spanish) in Mexico City, the epidemic became apparent due to an exceptional increase in the number of patients with atypical pneumonias, with patchy bilateral radiographic opacities, normally without leukocytosis, with elevated lactate dehydrogenase levels, lymphopaenia, and frequently, elevated creatine kinase, and it was soon detected in an institution dedicated to respiratory illnesses. Emergency Services were overwhelmed by people with influenza symptoms; patients admitted with pneumonia, half of whom required mechanical ventilation, occupied the entire Intensive Care Unit and were found in other wards as well.[3] For weeks, reporters and television cameras surrounded INER, a former tuberculosis sanatorium, to air the voices of patients, family members and health workers who were all concerned about the epidemic. In this health problem, respiratory medicine as represented by our institute played an important role in identifying the outbreak and in diagnosing and treating the affected patients, as it did with tuberculosis (the "white plague"), or, more recently, in hospital treatment for patients infected with HIV, and as a centre offering evaluation and care to patients suspected of having severe acute respiratory syndrome. INER's participation in these health emergencies shows the important role that respiratory medicine plays in our society, especially in moments when both the population and health care personnel are afraid, a situation making the burden generated by the disease a more difficult one.

For a few days, newspapers put drug trafficking and the financial crisis aside and were saturated with news of the flu. The streets of Mexico City, a city where 20 million people live, were empty, as were parks, schools, football stadiums, restaurants, bars, and public spectacles. We saw taxi drivers wearing latex gloves and facemasks; these were so popular that chemist's shops ran out, and people turned to home-made solutions and spur-of-the-moment manufacturing. Compulsive hand-washing with alcohol-based solutions was seen not only in hospitals, where it had finally caught on after years of reminding people, but also among the general population.[4]

On 27 April 2009, an extraordinary meeting of the World Health Organisation's Security Council was held by telephone in order to decide to raise the pandemic alert from level 3 to level 4; this measure, while favouring disease prevention worldwide, implied a threat of restricting trade with Mexico. For some it was a mere formality, since the number of patients in Mexico was proof of sustained person-to-person transmission. In the middle of the session, at 11.50, we suffered an earthquake measuring 5.7 on the Richter scale, which was completely noticeable, although not very strong by our standards. What more could go wrong? We already had a global financial crisis, an epidemic and travel restrictions, which made the crisis worse.

The measures adopted by the Mexican government were completely correct in terms of public health, but at the same time, they were difficult to live with, since they made public and community life disappear. Epidemics bring out the best and the worst in people, institutions and groups, and perhaps they reveal their true personalities. Our e-mail filled up with offers for disinfectants, masks, gloves, and other safety measures, as well as offers for more or less miraculous treatments. All of the political parties mentioned health as a priority in their campaigns, in addition to scientific and technological development. Fantastic hypotheses of the origin of the epidemic circulated, which instead of being helpful, fed people's uncertainties.

The agent, influenza virus A/H1N1, was not the only important party involved, and never will be. The important fact is that the virus acts upon a susceptible population and adds to the fear that it generates in the population and the health care personnel. We should always consider the agent, the host, and the environment, including social environment, in order to have a better understanding of the epidemic.

* Corresponding author.
E-mail address: perezpad@gmail.com (R. Pérez-Padilla).
Available online June 24, 2009.

Mexico is experiencing a return to normality that gives us a daily reminder of how vulnerable we are, as individuals and as a society. It also teaches us essential lessons for the next time around, which could be as early as this autumn and winter. We are coming to the end of the first skirmish and the larger battle may be drawing near. On this occasion, respiratory medicine was in the vanguard of the struggle, or as one reporter said, "at the nervous centre of the epidemic." The lessons learned by both experienced and trainee staff were intensive ones. Perhaps the most important lesson is that we need to systematically apply measures for respiratory protection as urgently as when the appearance of HIV led us to establish universal protective measures. The epidemic also highlighted how pressing it is for our specialists to have better training in infectious disease, virology, and epidemiology, to name a few. However, this specialty's great strengths were also apparent, with its ability to detect the outbreak quickly and provide proper care for all manifestations of the flu, from the slightest cases to those causing respiratory failure and the need for intensive care.

References

1. Centers for Disease Control and Prevention (CDC). Outbreak of swine-origin influenza A (H1N1) virus infection – Mexico, March-April 2009. MMWR Morb Mortal Wkly Rep. 2009;58:467-70.
2. Centers for Disease Control and Prevention (CDC). Update: novel influenza A (H1N1) virus infections – worldwide, May 6, 2009. MMWR Morb Mortal Wkly Rep. 2009;58:453-8.
3. Sotelo J, Pérez-Padilla R. The flu epidemic in Mexico: the challenges for doctors. BMJ. 2009;338:b1820.
4. Grayson ML, Melvani S, Druce J, Barr IG, Ballard SA Johnson PD, et al. Efficacy of soap and water and alcohol-based hand-rub preparations against live H1N1 influenza virus on the hands of human volunteers. Clin Infect Dis. 2009;48:285-91.