Sometimes they come back—the return of influenza

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H1N1 influenza virus in the 2009–2010 season evaded forecasts, schemes and plans for intervention, and showed how any attempt at modelling and prediction on an unknown influenza variant is futile [1]. In fact, for reasons that are poorly understood, viral interference of the H1N1 influenza virus appears to have somehow prevented the emergence of a ‘regular’ seasonal influenza across Europe in 2010, as confirmed by a decrease in the number of hospitalized cases of influenza during the first trimester of 2010. In the virology laboratory in Marseille, the number of diagnosed cases of influenza decreased very significantly in 2010 as compared with 2009, 2008 and 2007.

Finally, in 2009–2010, H1N1 influenza showed the peculiar characteristic of stopping at the time of the arrival of the winter cold, as opposed to usual seasonal influenza, which owes its very name to its association with winter cold (from the Italian ‘influenza di freddo’, or ‘influence of the cold’).

The catastrophic predictions of a new ‘Spanish flu’ did not match the reality observed in 2009–2010. The whole pandemic was not so dramatic, although in countries with impaired public health systems and in immune-impaired patients, such as preterm babies, pregnant women, and other vulnerable groups (such as obese and asthmatics), the symptoms were more severe and the impact was greater.

The lack of visible effects and poor communication led most people into mistrusting scientists and to not accept vaccination. As a result, immunization coverage is very low in many European countries, and this includes healthcare staff [2].


In England, the winter influenza epidemic is under way, with increasing proportions of specimens testing positive for influenza virus (56% in England during the second week of December, of which 67% were H1N1 virus (2009) and 33% were influenza B virus), and increasing numbers of severe influenza cases requiring intensive care (http://www.who.int/csr/disease/influenza/2010_12_17_GIP_surveillance/en/index.html).

According to the English press, the number of patients in intensive care has doubled weekly, and many of them belong to at-risk categories such as elderly or pregnant patients.

Should the current trend be confirmed, the return of H1N1 would certainly be a matter for general concern. An even greater concern would arise in the case of populations who are less protected by vaccination, such as those in southern and eastern Europe, and it might pose significant problems with serious influenza forms like those being observed in England. Interestingly enough, during the first week of December 2010, two such countries, namely the Russian Federation and Ukraine, have already reported levels of influenza-like illness above the seasonal baseline (http://www.who.int/csr/disease/influenza/2010_12_17_GIP_surveillance/en/index.html).

The current re-emergence of influenza has come as a surprise to many people, mostly if one considers the low influenza activity recently recorded in the southern hemisphere, where, however, both influenza incidence and vaccination rates in 2009–2010 had been higher than in Europe, certainly leading to more generalized immunization.

The British Medical Association has warned that the outbreak could be much more serious this year because fewer people are being vaccinated, and has appealed to the government to step up the influenza public awareness campaign, admitting that ‘many patients have concerns about the H1N1 component of this year’s seasonal flu vaccination and for this reason they are choosing to opt out’ and advocating ‘a concerted campaign to highlight the safety and effectiveness of flu jabs, and the risks of opting-out’ (http://web2.bma.org.uk/pressrel.nsf/wlu/SGOY-8C8FDV?OpenDocument).

The question of a resumption of emergency vaccination therefore arises, and we consider it a priority for public health in Europe. We strongly believe that promotion of the vaccine should be improved and that information should be promptly organized and structured far better than it was 1 year ago. It is noteworthy that all influenza A H1N1 (2009) viruses characterized to date, in samples from the
community, hospitalized patients and fatal cases in the UK, are antigenically homogeneous and similar to the vaccine virus A/California/7/2009 (http://www.who.int/csr/disease/influenza/2010_12_17_GIP_surveillance/en/index.html).

In 2009–2010, poor communication led to people not trusting scientists and public health officers, let alone politicians, and many did not get vaccinated. The apparent lack of serious consequences reinforced people’s belief that vaccination was not needed (and, according to many, even harmful). Now the consequences of non-vaccination, i.e. the return of influenza striking a non-immune population and the risk of igniting a new ‘emergence of influenza’ raises the question of whether people will finally be convinced or will retain their anti-vaccine attitude. This time, the consequences might well pass the visibility threshold and show that the dramatic forecasts of 2009–2010 were only wrong with regard to their timing.

References