it might be insufficient as a stand-alone intervention in reducing the sharp increase in diarrhea rates that was observed among KiBS infants during the weaning period. Early and rapid weaning does not appear to be a healthy practice in such environments. Although Ms Peletz and Dr Filteau are correct that “[WHO]…did not fully endorse abrupt weaning,” the WHO reference that they cited did note that the best duration for the transition between exclusive breast-feeding to complete cessation of breast-feeding is unknown [4]. There is an urgent need to determine the minimum period for which infants of HIV-infected mothers should be breast-fed to provide adequate nutrition and immunologic protection, as well as the optimal weaning practices to minimize exposure to supplemental foods from a risky environment.

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References


Pandemic Influenza: Severity Must Be Taken into Account

To the Editor—In the midst of the first influenza pandemic in 4 decades, the historical review by Morens and colleagues [1] helps begin an important and timely scholarly discussion about the use and utility of the label “pandemic.” Their findings indicate that the conception of pandemics has changed over time, representing different things to different people, and has been applied differently depending on the disease. Given this complex history, it seems almost inevitable that the 2009 global outbreak of novel H1N1 influenza—declared a pandemic by the World Health Organization (WHO) in June 2009—was marked by confusion over the exact meaning of that word. Nonetheless, Morens et al [1] characterize the confusion as essentially a risk communications problem wherein experts (who were largely in agreement about the meaning of a pandemic) had difficulty translating complex scientific concepts to a scientifically illiterate public. I believe this explanation is insufficient, for it understates the degree to which the H1N1 influenza outbreak challenged experts’ assumptions about pandemic influenza, and it also leaves important political aspects of defining pandemics unexplored.

Pandemic preparedness is an expansive and expensive public health policy that is based on the assumption that “pandemic influenza” describes an event qualitatively different from the threat of influenza in its variously termed “epidemic,” “interpandemic,” “seasonal,” or “nonpandemic” forms—and thus requires a special response. As reflected in official pandemic planning assumptions, pandemic influenza was constituted as an unprecedentedly severe event. The WHO and the United States, for example, were preparing for a future pandemic that would kill, at a minimum, 4 and 6 times as many people as nonpandemic influenza, respectively [2].

This association of influenza pandemics with severity is not new and can be traced back to at least the 1950s, when Richard E. Shope wrote that “the word ‘pandemic’ has acquired a connotation of severity as well as extent of distribution” [3]. Even before the first cases of highly pathogenic avian H5N1 influenza were discovered in 1997, pandemic influenza continued to be a threat singled out for its “potential for devastation” [4]. More recently, but prior to the current 2009 H1N1 influenza pandemic, the UK Department of Health wrote that although the precise morbidity and mortality impact of the next pandemic could not be known with certainty, “we can assume, however, that [the next pandemic] will be of greater magnitude than even the most severe epidemic of ‘ordinary’ flu” [5].

Beyond their association with severity, influenza pandemics came to be associated with 2 additional qualities: the emergence of a novel influenza virus and the widespread geographic distribution of that virus. That catastrophic mortality would result as a consequence of these 2 factors is an assumption reflected in official statements such as the following by the WHO: “An influenza pandemic occurs when a new influenza virus appears against which the human population has no immunity, resulting in epidemics worldwide with enormous numbers of deaths and illness” [6].

It is only in the wake of the mild H1N1 influenza outbreak that pandemics and severity have begun to become decoupled. In May 2009, days after the emergence of novel H1N1 influenza, the WHO removed the phrase “enormous numbers of deaths and illness” from the above definition and stated that high mortality is not an inevitable but rather an exceptional quality of a pandemic [7]. Similarly, the Public Health Agency of Canada now says that “an influenza pandemic does not necessarily cause more severe illness than seasonal influenza” [8], and the US Centers for Disease Control and Prevention, which once stated that “the hallmark of pan-
demic influenza is excess mortality” [9], more recently said that “there are some pandemics that look very much like a bad flu season” [10]. Accordingly, high-end estimates of the mortality of the current H1N1 influenza pandemic are substantially lower than previous low-end estimates of future pandemic mortality (Table 1).

These changes highlight more uncertainty among experts as to just what an influenza pandemic is than Morens and colleagues [1] acknowledge. Although the authors conclude by recommending that a pandemic (of any disease) be defined as a “large epidemic,” adopting such a definition for influenza, an infection that goes global every year, would render influenza an ever-present pandemic disease. Such a definition would erase any meaningful distinction between seasonal and pandemic influenza. If other classic aspects of pandemics that the authors identify—such as high attack rates and, in particular, severity—are not taken into consideration, what is the remaining public health policy rationale for treating pandemics any differently than we treat seasonal influenza?

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References


Table 1. National Estimates of Pandemic Influenza Mortality

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<tr>
<td>United States</td>
<td>209,000–1,903,000 [11]</td>
<td>30,000–90,000 [12]</td>
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<tr>
<td>United Kingdom</td>
<td>50,000–750,000 [13]</td>
<td>3000–19,000 [14]</td>
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