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Scepticism about influenza vaccine efficacy in Japan

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SIR—Prevention of influenza has been a major public health concern, and a programme of vaccination has been promoted, especially to high-risk individuals such as the elderly.¹ In Japan, the efficacy of the present inactivated vaccine is regarded as very low or none at all. This deep-rooted scepticism seems to originate in a disease concept called "kaze" (meaning cold), which is unique to the Japanese. "Kaze" is the commonly used general term for acute respiratory symptoms, and has little aetiological meaning. Patients with respiratory symptoms, irrespective of whether they are febrile or not readily accept a general diagnosis of kaze throughout the year. People are confused and believe that kaze is a single disease entity, and therefore say "I have contracted kaze, even though I received an influenza vaccine". Misunderstandings also arise among many medical professionals. They are more concerned about influenza as a type of kaze rather than as a virus infection. Thus, vaccine efficacy has been assessed as a simple relation between vaccination and disease, without taking into account the cause—ie, exposure to the influenza virus.

With the policy of universal influenza vaccination programmes covering schoolchildren in Japan since the 1970s,² studies have usually been done in this group. Comparisons have been made of frequencies of kaze, severe kaze, or absenteeism due to kaze between vaccinees and non-vaccinees, without laboratory confirmation. Moreover, the observation period ranged over the intense kaze season, usually three months or longer, whereas influenza outbreaks in the school setting usually cease within one or two months. Since the illnesses ascertained in such a study design involve a substantial number of kaze other than influenza, it is hardly surprising that vaccine efficacy has been evaluated as almost nil. Similarly designed studies with healthy adults are even more likely to show no efficacy. Little attention has been paid to the inclusion of many subjects with immunity, because of disinterest in viral infection. Thus, several studies by would-be investigators have so far reported little, if any, vaccine efficacy. Since these studies are simple and understood by the general public, scepticism about vaccination has become deeply rooted in Japanese society.

The report of the vaccination programme in schoolchildren² has shown a steep decline in coverage—from about 80% in the late 1970s to 18% in 1992—and this project is now being re-evaluated. An immunisation policy could be effective if it were based on common indications in high-risk groups.¹ However, scepticism is so overwhelming that only a few individuals will probably volunteer to receive the vaccine. Pharmaceutical companies are reducing to a minimum or discontinuing vaccine production, but the population aged 65 or older in Japan is estimated to be 17%, exceeding that aged 0–14 (15%) by the year 2000. The voice calling for influenza prevention has become hoarse. We have grave misgivings about an imminent influenza crisis in this country.

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- 1 CDC. Recommendations of the Advisory Committee on Immunization Practices, prevention and control of influenza: part 1, vaccines. *MMWR* 1994; **43** (RR-9): 1–13.
- 2 Dowdle WR, Millar JD, Schonberger LB, et al. Influenza immunization policies and practices in Japan. *J Infect Dis* 1980; **141**: 258–64.