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Influenza Vaccine: Delivering the Goods

This issue of the *Journal* contains an interesting and provocative article for practitioners of preventive medicine—Fedson and Kessler's description of a hospital-based influenza immunization program.¹ Official recommendations of the Immunization Practices Advisory Committee (ACIP) of the Centers for Disease Control have been consistent over the years in urging annual vaccination of persons at high risk for morbidity and mortality from influenza. This high-risk group has been defined broadly to include all of the elderly and persons of all ages with a variety of chronic diseases, especially cardiopulmonary diseases. Although millions of doses of influenza vaccine are made and sold each year, only about 20 per cent of the more than 40 million people in the United States who could be considered at high risk actually receive the vaccine.^{2,3} The official policy has not been successful and it appears reasonable to speculate on whether more effective policies can be developed.

Under the assumption that attention should be devoted to persons at high risk for complications of influenza, it is surprising that there has been so little work on defining categories of risk within the broadly defined high-risk group. For example, although conditions such as chronic obstructive lung disease have a relationship to the risk of dying from influenza, the risk is not likely to be distributed evenly among all persons so diagnosed. Investigations might show that the risk is inversely related to baseline pulmonary function or directly related to the prior frequency of acute exacerbations of respiratory distress. If some persons with chronic obstructive lung disease were found to be at much higher risk than others, could special immunization efforts be targeted to those at very high risk? Do we know enough about persons over age 65 who are free of chronic disease to target subgroups of this large segment of the high-risk population?

In Fedson and Kessler's study, 34 of 39 (89 per cent) patients hospitalized with laboratory confirmed influenza during an influenza A epidemic in 1977-78 were in the broadly defined high-risk group. More importantly, a sizable percentage of these patients had had recent medical care either in the hospital or in its ambulatory clinics. Yet, not one of these patients under active treatment (either in the hospital or on an ambulatory basis) had received influenza

vaccine that fall! Fedson and Kessler's approach to control of influenza is based on defining a particularly high-risk group consisting of persons with chronic conditions who have recently been hospitalized or who are making frequent ambulatory visits and then focusing immunization efforts on this group.

That brings us to the problem of immunizing whatever group is targeted for immunization efforts. Relatively little work has been done to elucidate how much of our failure to immunize might be due to a failure of our medical care system to offer the vaccine and how much is due to active refusal by the population. In Fedson and Kessler's article, the percentage of patients offered vaccine by nurses on three general medicine inpatient units ranged from a high 72 per cent down to 13 per cent; and only 50 per cent of those offered vaccine accepted it. In the ambulatory setting, 74 per cent were offered vaccine by unit secretaries, and vaccine acceptance was less than 40 per cent. Thus, it appears we need both more effective ways of offering vaccine to targeted groups and more effective ways of gaining its acceptance.

In hospital and ambulatory settings, clinicians are used to ordering tests, procedures, and medications. Most clinicians would probably be upset if patients accepted their recommendations only 60 per cent of the time. What distinguishes influenza immunization in the minds of clinicians and in the minds of patients? Answers might be that influenza vaccine is not effective or that it is very toxic, but such answers betray ignorance. Many studies have shown the vaccine to be both effective and safe. Possibly the risks of influenza seem remote to the patient and the clinician. If so, then Fedson and Kessler's article demonstrates that the risks are not so remote for certain people. Do clinicians and patients routinely distinguish preventive from therapeutic measures in some way? Hardly a clear distinction, since some preventive measures are ordered routinely by clinicians, e.g., elastic stockings. In short, I do not have a satisfactory answer to the question. Perhaps if recommendations for control of influenza were more focused, the vaccine would simply be ordered by clinicians after explanation to and consent of patients, much as we order iron for patients who have sustained blood loss so that a small percentage will avoid developing symptomatic anemia.

Finally, it might be noted that much of the administration of influenza vaccine in Fedson and Kessler's hospital-based program occurred during the period of influenza activity in the community. Although, under ideal circumstances, influenza vaccine should be given before influenza occurs in the community, we also need to consider strategies for giving protection when the threat of an epidemic is upon us, recognizing that even an effective program in a medical care setting is unlikely to have reached all people at high risk in time. One strategy would be to give vaccine accompanied by a two-week course of amantadine to cover the period of time during which an antibody response is developing. This may sound expensive, but the knowledge that influenza is actually active in the community increases the probability that a person will get the disease compared to the average expectation of disease upon which vaccination in the preceding fall is based. Accordingly, the expected benefits of preventing the disease are higher than in the average year (since there will be no significant influenza activity during some years) and the additional expenditure for prevention may be justified.

Fedson and Kessler's article is a welcome reminder that

the traditional approach to prevention of influenza does not appear to be working well. I hope it will awaken interest in defining the risks of influenza in greater detail and in developing new approaches to protection and more effective programs for delivery.

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World Health Day, April 7, Focuses on 'Better Lifestyle, Better Health'

"Better Lifestyle, Better Health" is the theme of World Health Day—April 7, 1983—focusing on the choices and personal decisions that individuals can make to enjoy the highest possible state of health. Activities will draw attention to the concept of wellness as, throughout the nation, state and local departments of health, schools of public health, health associations, health providers, churches, schools, labor, and private voluntary organizations will sponsor World Health Day activities. The American Association for World Health (AAWH), a nonprofit, nongovernmental, educational organization supporting the World Health Organization, the Pan American Health Organization, and other international health agencies, will assist and advise in the planning and coordination of World Health Day observances.

World Health Day originates with the World Health Organization (WHO) and is observed worldwide every April 7, marking the date on which the constitution of WHO came into force in 1948. It is a day to reflect on health and health issues. Traditionally, World Health Day annual themes, covering various aspects of health, were the same in all countries. "Better Lifestyle, Better Health," the first World Health Day theme to feature wellness, will be used in the United States only; other countries will focus on the role of communications in health promotion. The US will continue to emphasize wellness in future World Health Day observances.

The push for wellness is part of WHO's commitment to its worldwide goal of "Health for All by the Year 2000." In the US and other industrialized countries chronic diseases related to lifestyle—such as certain types of cancer, stroke, and heart disease—are as much a threat to the realization of "Health 2000" as malaria, cholera, typhoid, and poor sanitary conditions are in developing countries. World Health Day observances will examine how diet, exercise, stress, smoking, and alcohol and drug use affect the balance between health and disease, and will emphasize that each individual can and should accept a certain responsibility for his or her own health.

Planned activities include conferences, marathon races, group exercises, evaluation of health services in local communities, study groups, TV and radio features, cooking demonstrations, lifestyle fairs, and conferences on wellness in the workplace and on the role of health in world peace and security. Many state and local health departments will sponsor computerized health risk appraisals. Thus April 7, 1983, World Health Day, will be a day of involvement—in one's own health, and the health of the family, the community, the nation, and the world. For further information, contact Burl R. Wagenheim, World Health Day National Coordinator, American Association for World Health, Inc., 2121 Virginia Avenue, NW, Washington, DC 20037. Telephone: 202/861-4321.