convincing than saying that the two groups differed at a single point in time. The presence of a group-by-time interaction refutes arguments aimed at the snapshot comparison where group comparability is always at question.

The new approach used by Whittemore and Korn solves a number of problems inherent in previous analyses of asthmatic response to air pollution which often lumped together heterogeneous groups of subjects and ignored important differences between subjects. Prior analyses also ignored the sequential dependencies of asthma attacks. The most important advantages of the Whittemore/Korn approach is that it gives primary emphasis to the important question: what are the effects of air pollution on sensitive subjects?

CARL M. SHY, MD, DRPH
KEITH E. MULLER, PHD

REFERENCES

1. The Clean Air Act as Amended, August 1977. (42 USC 1857 et seq). Washington, DC: U.S. Govt Printing Office, 1977.
2. Whittemore AS and Korn EL: Asthma and air pollution in the Los Angeles area. Am J Public Health 1980; 70:687-696.

What Do You Want from WHO?

"What do you want from WHO?" Halfdan Mahler, Director-General of the World Health Organization, posed this question recently to the Regional Committees which constitute the operating structure of WHO.[1] He went on to refer to the 1978 Alma-Ata Conference on Primary Health Care,[2] which reiterated the aspirations of WHO's founders, casting them in a slightly different framework and specifying the year 2000 as the target date for the attainment of an acceptable level of health for all the people of the world.

The Alma-Ata Conference Report substitutes the words "primary care" for what was once called "basic health services," but it also emphasizes three other concepts which WHO and bilateral aid programs have often overlooked in the past:

- Developing countries should not import personnel to deliver services or try to copy systems of health care that have originated elsewhere; development must come from within, adapted to national needs and traditions;
- Primary health care is not a prerogative of physicians; for developing countries, especially, community health workers trained to perform specific tasks as a first level of contact are the only realistic solution; the physician's role is that of a team member providing education and clinical backup as needed;
- Total commitment of both the rich and the poor countries at the national and international level is the most important single factor in promoting primary health care; health cannot be attained by the health sector alone so that the commitment must extend into *all* sectors of government.

Will the promises and policies acclaimed with such enthusiasm at Alma-Ata suffer the same fate as previous well-intentioned declarations, Mahler asked? The answer, as the Conference Report emphasizes, depends on the national commitment and action of *all* the world's nations—rich and poor—a commitment extending beyond the health sector into *all* sectors of government. He ended by saying that the wise use of WHO as a symbol, a moral support, a "live framework" in which to define health policies and work out national programs, would place all countries in a far stronger position to achieve individually the goals they have set for the year 2000. The special message he carried to this special group was "to make sure that your individual demands conform to the policies you have adopted collectively in the Regional Committees and the Health Assemblies," adding that, "respect for collective policy should apply equally to those governments providing bilateral support programmes in health."

We may wish to ponder these words after reading the report on Cuban physicians overseas, published in this month's issue of the Journal.[3] At least 1,500 Cuban physicians—about 13 percent of that country's medical manpower—currently serve overseas, not to care for Cubans abroad, nor for a short visit, but dispatched on a one- to two-year assignment by the government of Cuba, primarily to deliver health services to the population of another country. The number of physicians so assigned increases each year. Nicaragua will join the importing countries in 1979. In 1978, six nations had more Cuban physicians than national physicians and, in six other nations, the Cubans formed one-fourth to one-eighth of the country's medical manpower.

The US medical manpower pool is almost 30 times greater than that of Cuba and, although the Cuban physician/population ratio is a relatively favorable one, it does not begin to approach that of the United States. However, there are no American physicians serving overseas in capacities comparable to those of Cubans.* There are 1,000 or so deployed US physicians delivering services for church-based groups. Americans are employed by oil-rich Saudi Arabia to provide direct medical services to its population, and Americans also provide such services on short-term assignment to the refugee camps of South-East Asia. As unknown number of American physicians serve overseas under contracts between the US Agency for International Development and various US medical agencies or institutions, but none deliver routine medical services to the population. With the exception of two or three Peace Corps physicians, no physician employed by the US government does so.

Address reprint requests to Dr. Alfred Yankauer, Editor, American Journal of Public Health, Department of Community and Family Medicine, University of Massachusetts School of Medicine, Worcester, MA 01605.

*Statements to follow are based on personal communication with agencies involved.

Competition to place doctors overseas certainly seems healthier than competition to develop new nuclear warheads. While it may be healthier, it is also ineffective and inefficient. Our own past experience, beginning with fruitless efforts to transpose our models to Latin America during World War II, should have taught us that lesson. Dr. Mahler's words and the declaration of Alma-Ata should strengthen this conviction, and point up the fact that colonialism is not limited to capitalistic countries. In the long run, a backlash to the Cuban export can be anticipated, however well-intentioned and humanitarian the present Cuban effort.

Politics and colonialism aside, the Cuban system of health care may seem more appropriate to the needs of a developing country than our own fragmented and unplanned system. Again, appearances are deceiving. In contrast to Russia and China whose initial spread of health services to the countryside relied heavily on the feldscher and the barefoot doctor, Cuba, adopting from the Czechoslovakian model, accomplished its spread by increasing the output of its medical school (founded in 1728) and establishing new schools. The Castro regime deserves great credit for its success in providing health care to its entire population. Even before Castro, however, the health status of Cubans was more favorable than that of most Latin American countries; and Cuba's stage of development was in no way comparable to that of the primitive communities where its physicians now serve.

One would like to know more about the Cuban overseas health service experience. Its humanitarian aspects cannot be wholly denied. However, its focus on direct service with a heavy medical input and the promotion of its own system of care are strangely reminiscent of our own past attitudes and failures, as well as inconsistent with the declarations of Alma-Ata and the policies which representatives of the nations of the world have agreed to follow.

Yet international cooperation and aid *are* essential to the world's future. "The richer countries are living with illusions if they believe that affluence alone can permit them to isolate themselves economically, socially and politically from the poorer countries," Dr. Mahler said.[1] The words may sound hollow to us in these austere and xenophobic times, but the example of Cuba should open our eyes. Regardless of one's interpretation of its motivation and relevance, the Cuban commitment is impressive.

Our security at home and abroad does not rest on the number of nuclear warheads we produce or the percentage of our gross national product that supports our defense industry. Neither does it rest on emulating the Cuban export of physicians or even on building up our own bilateral system of aid in other ways. We are responding to the appeals of crises in Kampuchea with impressive inputs of supplies and personnel. The question is whether we can respond equally well to the less dramatic but far larger long-term needs of the Third World, channeling our resources through international agencies that are in a much better position than we to allocate and dispose them. They occupy this position because they are the democratic forum which can speak both for us and for the countries we are morally obligated to assist by our privileged position. What we should want from WHO is that it hold fast to the democratic ideals that Dr. Mahler voices so eloquently in spite of all the political forces with which it must contend. And what WHO should want from us is a commitment to action, in concert with WHO, that dwarfs Cuba's commitment to its own parochialism.

ALFRED YANKAUER, MD, MPH

REFERENCES

1. Mahler H. The WHO you want. WHO Chronicle, 1980; 34:3-8.
2. World Health Organization. Primary health care. Report of the International Conferences on primary health care. Alma-Ata, USSR, September 6-12, 1978. Geneva: WHO, 1978.
3. Grundy PH and Budetti PP. The distribution and supply of Cuban medical personnel in Third World countries. Am J Public Health; 1980; 70:717-719.