Editor’s Note: Over the course of time, I have come to see how easy it is to believe that what we believe and what we do medically in the United States must generally be the way medicine is viewed and practiced in most countries. We hope, therefore, that the readers of The Permanente Journal will be interested every so often to hear physicians around the world describe their medical practices, so that we all may better understand the wide range of what physicians do.

This issue’s contribution is from Einer Helander, MD, PhD, a distinguished Swedish physician, trained as a cardiologist and biochemist, who has spent much of his professional life as Chief Physician for the World Health Organization, visiting countries most of us would not consider going to, and spending his time there among the destitute and the disabled. Dr Helander is the author of The World of the Defenseless a soon-to-be-published medical book about disability and abuse around the world, including some eye-opening stories from the United States.

— Vincent J Felitti, MD

At the end of one’s life, one often reviews one’s life decisions. At the age of determination, when I had finished my specialty training, I had three choices: I could remain at the fabulous and well-equipped National Institutes of Health in Bethesda, MD to continue working with one of the most fascinating basic problems of physiology and biochemistry—the molecular mechanisms of muscle contraction; or I could return to Sweden with an academic career in rehabilitation and social medicine, as the government’s consultant. But, I also had an offer to work at the World Health Organization (WHO); I accepted it and I have had no regrets.

I am a Swede and my initial background is totally academic: biochemistry in the laboratory of Arne Tiselius, internal medicine, and medical rehabilitation. My life changed after becoming involved in 1967 with a cardiac rehabilitation program at the WHO regional office in Copenhagen. In 1974, I left for Geneva and became a staff member of WHO at headquarters. I was to work in developing countries where I would focus on persons with disabilities: the poorest among the poor and the most underserved of all. I was totally unprepared for such field work.

WHO was set up in 1948 as a specialized agency of the newly founded United Nations (UN). WHO’s objective, set out in its Constitution, is “… the attainment by all peoples of the highest possible level of health.”¹ Health is defined in WHO’s Constitution as “…a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity.”¹

Prior to the development of WHO, and even the UN, the Pan American Health Organization (PAHO) was developed in 1902 (as the Pan American Sanitary Bureau) to combat disease, lengthen life, and promote physical and mental health in the Americas. With the development of the League of Nations and its Health Programme, incorporating PAHO became important because the United States was not a League member. The advent of World War II and the development of the UN, in 1945, and WHO, in 1948, made the incorporation of PAHO even more significant if WHO was to be truly universal. PAHO’s desire to maintain independence led to the decision to create regional networks for WHO with offices in Washington, DC, Copenhagen, Alexandria/ Cairo, Brazzaville, New Delhi, and Manila. Although this added a layer of bureaucracy, all countries in the world joined WHO. They are able to belong to whichever regional office they choose and the headquarters (HQ) remain in Geneva.

When I arrived at WHO, there was a remarkable and charismatic Director-General, Halldan Mahler, MD, (1973-1988). He initiated a complete change of WHO’s policies, placing emphasis on programs for primary health care: everyone in the world

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was to have access to at least the basic and most-needed health services, near where they lived. In 1978, when the final preparations for change were ready, WHO and UNICEF held a conference in Alma-Ata, (Soviet Union at that time; now Kazakhstan). All countries adopted the “Health for All by the Year 2000” policy. This program had four components, of which one was rehabilitation. I was put in charge of developing the practical program for this; nothing existed before.

My director at WHO was Kenneth Newell, MD, a great innovator and the person behind the primary health care program and the introduction of appropriate technology. The first thing I asked for when I arrived in 1974 was to be sent to a developing country to get some experience: that happened to be Iraq. Saddam Hussein, then Vice President, was the de facto ruler. Following several years of drought, Saddam had twice imported large amounts of grain for Iraqi farmers to use as seeds. The grain had been routinely pre-treated with a pesticide, alkyl mercury. Unfortunately, because of the lack of other food, in 1972, about one million farmers and their families had made bread from the poisoned grain and eaten it. The aftermath was a widespread epidemic of alkyl mercury poisoning that killed thousands. Among the survivors, there were an estimated 100,000-200,000 persons with blindness, tunnel vision, ataxia, or paralysis. Two years later, the Iraqi government requested funds from WHO for two expatriate physiotherapists to deal with this problem. I went to evaluate the situation. Providing two physiotherapists clearly was an ineffective solution in a country where the farmers lived far from each other in places that not even jeeps could access. To get to a small settlement of an extended family with some 40 people, we walked for an hour in 50° C (122° F) temperatures. By the time we were through, however, I had learned three important lessons.

My first lesson was about spontaneous family-based rehabilitation. During the two years following the disaster, many in this extended family had died and about one third of its surviving members had persisting sequelae of mercury poisoning. With no help, family members themselves had trained many of the disabled individuals at home. They trained blind people, mobilizing them so they now walked alone, using canes. They had trained paralyzed children successively to sit up, to move their arms and legs, to stand up, to walk, to dress, to feed themselves, and other activities of daily living.

Mothers and grandmothers, without any schooling, had played key roles in achieving these results; in fact, the results often were identical in quality to those one would have expected had professionals been involved. There was no need to send Western therapists to provide rehabilitation; given the numbers of victims involved, the original request was pure window-dressing. The lesson was that dedicated family members—even when totally uneducated—can find ways of providing effective rehabilitation. This was again confirmed during continued field work in Africa, Asia, and Latin America carried out from 1974 to 1979. These experiences resulted in the new official WHO strategy and program of Community-Based Rehabilitation (CBR). Thirty years later, this program functions in about 90 countries.

The second lesson from my visit to Iraq was equally unexpected. There were no statistics available on the extent of the poisoning, but a Swedish organization later provided statistical analysis. My conclusion from their data is that over a million people were affected. In an effort to discover something about the mortality, I visited the local pathologist in a small town south of Baghdad. Yes, he said, there had been many deaths but, because of “government security rules” he was explicitly forbidden to tell anybody how many. I wondered whether Saddam perhaps was embarrassed by publicity about his “government-organized” poisoning, most likely the largest ever in the world.

An important side observation came as I was waiting for the pathologist to receive me. I saw three women, all in black and with covered faces, leaving his office. I casually asked why they had come to see a pathologist. It appeared that he was also the police doctor and these women were a mother with her two daughters. They had been sent by the police to him because the father had raped the girls when he was drunk on locally brewed alcohol. There was nothing the pathologist could do because the women refused all examinations. He added that incest was not uncommon; any infants resulting from incest disappeared soon after birth. This event—in my early days at WHO—spurred me to continue asking questions for 30 years about family violence, child abuse, and other maltreatment. I discovered that these phenomena have a very high incidence in developing countries but, because the subject is taboo, nobody
speaks spontaneously about them and almost nothing gets published. One of the most abused groups are children with developmental disabilities. The results of this research appear in an upcoming book, *The World of the Defenseless.*

My third lesson came a year later, when I visited Indonesia. I had opportunities to stay there several times while a major disability survey was being set up and an Indonesian organization invited me to study several of their projects in Central Java. We traveled for some weeks to small villages and stayed in tiny guesthouses; tropical rains and an active volcano in the neighborhood somewhat impeded our transportation. I was shown local rural development programs built on community mobilization. In one such village, the community leader had for the last ten years mobilized the entire community in many projects. All men worked every Saturday on these projects without any pay. The rich families, instead of working, provided money for the equipment and building materials. Other funds came from local taxes on land, rice harvests, buildings, weddings, and much more. There were 16 different taxes when I visited; these taxes were raised and spent locally. Decisions were made and accepted in a democratic way.

The first of this village’s projects was to build an irrigation system for their rice fields. When this was ready, there were three rice harvests a year, an important increase from the prior rate of one harvest per year. The increase in rice production gave jobs to everyone; it also increased the local taxes so that more projects could be financed. Building latrines and eliminating the open sewers that cause infectious diseases especially among children followed; also collecting and disposing of garbage. Next, was a primary health care program: three women were chosen to become health workers and were sent to a course in a nearby town. When they returned, they introduced immunizations, a maternal and child health program, and a nutrition program. At that time, malnutrition was widespread in Indonesia. The village leader told me that it took just three months to eradicate malnutrition. All newborn babies were regularly examined and weighed by the health workers and, when there were any signs of impaired growth, the family was visited. The health worker gave lessons at home in nutrition and how to give the baby supplementary foods; she showed how vegetables could be added to the polished rice that was the staple diet. Families started growing vegetables in their own backyards. These preventive health services were paid by a small insurance fee raised from the entire population. It included a weekly visit by a doctor. Essential medications were dispensed at the health center. Because the villagers deemed insufficient the education provided by the government, the community built an additional school and hired their own teachers. The old curriculum was improved by adding new subjects: health, how to cultivate additional foods and set up fish dams, community work, and childcare. There was an active child-to-parent information component that was initiated by the school. When I told my colleagues at WHO HQ, many were very upset and told me that children should not teach the parents; I replied, “But it works and it has reduced mortality and malnutrition!”

I asked the community leader about his contacts with the authorities, and he told me that they were informed about all projects. Although some were illegal or not officially approved, they did not interfere.

In the following year, I went to...
the Republic of Korea (South) and visited a government-initiated, countrywide, rural development project (Saemaul Undong) that was based on community mobilization. Reports showed that, between 1971 and 1975, villagers built 24,645 miles of village roads, 25,761 miles of farm roads, 50,952 small bridges, 83,023 irrigation ponds, 11,301 dykes, 1570 water channels, 27,051 village halls, 13,258 village warehouses, 372 village factories, and 11,235 water-supply systems. They carried out reforestation projects of 3,965,500 acres of land and installed 10,429 village telephones. They accumulated US$456,875,000 in agricultural cooperative savings, US$46,666,000 in fisheries cooperative savings, and US$55,416,000 in village credit union savings. The government invested about US$579 million on these Saemaul projects, but the value of completed projects is estimated at 2.5 times the government spending. I concluded that development programs using community mobilization work well both locally and nationally. They are excellent models and it is surprising that they have not been copied more. One of the main obstacles is the reluctance of governments to allow local populations to raise and keep local taxes for their own projects. One notable exception has been India, where this system was introduced ten years ago.

Work continued at WHO; Dr Mahler went on decentralizing the control and use of funds from HQ to the regional offices and to the field. WHO obtains its income from contributions paid by the Member States, generally in proportion to their national incomes. In addition, some countries supplement WHO’s budget with voluntary contributions. WHO spends annually an average of between US$1 and 2 billion, excluding some special programs that have their own funds. This is not enough to meet more than a small part of the health needs of the developing countries. Therefore, program officers at HQ try to raise funds from outside donors. This was not easy for a new program like the CBR even though its regular annual budget for field programs was just US$20,000. The CBR program mainly developed because of voluntary extra-budgetary funds from the government of Sweden, my home country. In 1979, one year after the Alma-Ata Conference, we had developed with Swedish economic assistance an 800 page technical manual, Training in the Community for People with Disabilities. This was composed of 30 instructional packages for family training; these are simple texts using only 1300 different words but with 2200 drawings to illustrate how to home rehabilitate polio victims, the blind or deaf, children and adults who are mentally disabled, and people with mental illness, epilepsy, and leprosy. All these training packages were based on our direct observations of “spontaneous rehabilitation” of the type first observed in Iraq and then in nine additional countries; the manuals encouraged community mobilization for their implementation. In addition, advice was given about schooling, job training, and economic activities. We had well-developed evaluation and reporting procedures from the start. The manual went through extensive field testing and peer review, is translated into 54 languages and is now widely used. Later, we added several managerial components: surveying, planning, service delivery development, personnel training, and a computerized evaluation system for quality, cost, efficiency, and effectiveness. Special management courses are held for participants from 90 countries.

We had no problems inside WHO to get the new CBR strategy and program fully accepted. Outside, however, there was great resistance for several years in many developing countries where there were small, mostly residential rehabilitation centers that had been set up by overseas nongovernmental organizations (NGOs); they felt criticized and perhaps economically threatened by the new and radical change that was taking place. The professionals felt that, by transferring skills and knowledge to the families, almost all of whom were living in extreme poverty, they would lose their jobs. This was of course totally unfounded, but some 150 highly critical articles were written against the WHO strategy, accusing, among other things, the CBR program of bribing personnel in the test countries to report good results. Finally, after about ten years, resistance came to an end. The CBR program is still the disability and rehabilitation unit’s main input to the WHO’s regular program.

All components of the Primary Health Care program, including rehabilitation, were meant to be set up and managed by national governments, but during the 1980s and 1990s the International Monetary Fund (IMF) and the World Bank (WB) were in full swing introducing “structural adjustment.” These international organizations virtually controlled the political and economic decisions of many poor countries. Health and social programs were cut in a large number of countries. What happened is accurately described by the United Nations...
Research Institute for Social Development (UNRISD) in a publication in 2002: the WB and IMF “… prided themselves in not wasting their time on ‘soft’ things like social policy in designing their ‘structural adjustment’ programs … Diverting resources to social policy, which softens the blow of adjustment on the weaker sections of the society, was regarded as a way to slow down the necessary adjustments … This was pursued to the point of producing a widely spread international counter-reaction in the form of a call for ‘adjustment with human face’ by those who … were deeply concerned by what they saw as unnecessary human suffering caused by such programs in their unadulterated forms."

Although the IMF and WB stated that they were engaged in eradicating poverty, in reality they advised the governments of a very large number of developing countries to cut social personnel, social services, and safety nets aimed at the destitute, thereby causing poverty among the poorest to increase. As a result, governments were constrained from introducing CBR and other social programs; this made the situation very difficult for WHO’s CBR initiative. Joseph Stiglitz, a 2003 Nobel Laureate in Economics and a former WB Senior Vice President and Chief Economist, later wrote they have “… implemented a set of standard economic theories that have sometimes failed, caused havoc, riots, and substantial destruction of economic and institutional assets.” Stiglitz resigned from the WB and is now one of its biggest critics, becoming one of several well-reputed economists speaking openly against the incompetence of the aid industry. Although the WB sounds like a giant, it is small, lending out each year about US$18 billion. By contrast, there are ten banks, mainly in USA and Japan, that have over US$1 trillion in assets. Fortunately, bilateral cooperation organizations, particularly the Nordic countries, Canada, and the Netherlands, along with some large international NGOs actively supported local NGOs to set up CBR.

In 2000, a major publication, The Declaration of the Millennium Development Program, described activities related to the eradication of poverty. It was the outcome of the world’s largest summit, supported by all governments and all large international organizations. Unfortunately, it contains nothing specific about how to solve the problems of the poorest: persons with disabilities, widows (each of these two groups constitutes 5% to 7% of the world’s population), the landless, families without a breadwinner, single parents, and those who must send their children to work instead of school. It provides no information about what to do about alcohol and illegal drug abuse, about family planning, about the pervasive violence in the world, and how to solve the corruption of judicial systems in which few poor people feel that they can trust the police and the courts.

After I left WHO, I stayed another eight years with the UN Development Program. During the last seven years of these years, I have worked with country projects and management. All of these were jobs inside large bureaucracies, WHO being the most complex with rules and procedures that cover several thousand of pages. During my time, there were still some loopholes, if you could find them; but every year more rules were introduced.

Working with international organizations can be rewarding if you are encouraged and allowed to present and carry out innovative strategic ideas. You have to create a free space for yourself, and it helps if you can raise the necessary funds outside the organization. In the area of disability and rehabilitation no strategy existed; the temptation to take on this job was for me the irresistible attraction of the impossible. Other colleagues with less courage preferred to make no waves. WHO is an intergovernmental organization, and all 190 Member Countries have the right to a proportion of the professional posts. Many people in higher posts are political appointments, who have approval power over all projects. As in all bureaucracies, power plays are common.

Once you have endured the initiation time and learned about the constraints, you will go out to the field and discover the real problems. Over the course of 30 years I have traveled to over 100 countries, and worked in 88 of them. When your medical practice is there, you can forget about most laboratory tests, x-ray equipment, medications except a few essential ones, blood transfusions, or surgical equipment beyond the most simple. You will buy a good pair of shoes so you can walk to roadless villages. It is most useful to have good training in physical examination using your own senses, and practical knowledge of diagnoses—although you will quickly find a large number of health conditions you never have heard of. You will need to commu-
nicate with the local village and slum dwellers; you need to stay with them, sleep in their guesthouses, and eat their food. You will soon find a number of very intelligent persons—some illiterate—who are able to contribute to community development and carry out simple components of a health program. A good beginning is often to clean up the dirt and garbage that surrounds everybody. But what finally overwhelms you is the sheer number of people in need of help, literally billions. For that reason, we realized that we would reach more people if we had simple, practical books with instructions. We produced nine such manuals for the CBR program.

The most striking problem in the world is poverty; it took me some time to realize that the poor are sacrificed routinely. The population of the developing countries is now well over five billion; three billion are under the poverty level. The overseas aid they receive, after deduction of administrative and other overhead costs, is a pittance that varies from US$1–5 per poor person per year. The combined income of the 25 million wealthiest people in the USA equals the combined income of the two billion poorest in the developing world, a one hundred to one ratio. Fifty years of international development aid has left few traces.74 Health care quality has developed with WHO’s technical work, but 750 million people still lack primary health care. Anyone doing this work learns there is no place for romantic ideas; the world is run by the citadels of economic power: the IMF, the WB, the WTO, and the finance ministers of those rich countries who operate these organizations. So far, there has been more talk and declaration than impact on poverty levels; sometimes programs have increased poverty, caused havoc, riots, popular uprisings, widespread and costly destruction of assets, and mass killings.

The solution—as I see it—is that the developing countries should start to mobilize their own resources. They must make it a policy that everyone will work for the collective good—their own community—and undertake action programs in the interest of all. I have seen this function well in about a dozen countries. What I saw in Iraq, Indonesia, and South Korea some 30 years ago, and then in many other countries, is effective. Mobilization works much better than any development program directed from afar using international donor money, or from far above directed by the ineffective bureaucracies of national governments. Let the people decide what is important for them, plan for what is needed, and then do the job. Motivate them to do it, which is easy if they know that the benefits are for them. What rich countries can do is to set up national and regional courses for community management training, employing those local leaders who have had success. Further developments needed relate to secondary education, to the availability of uncorrupted local judicial systems, and to government performance. Being a doctor in developing countries has many unfamiliar aspects for a clinician. You try to help with what you know; you try to transfer knowledge and skills to local populations to make them more independent. When I was 15, I heard a visitor asking my mother “What is Einar going to do?” My mother replied, “Einar will do something for the poor.” Never did she or I at that time realize that doing something for the poor is ultimately politics. But even so, there is also room for the individual doctor to contribute and to be the voice of the defenseless.

References