

Chapter 19

Towards a Revolution for Children

The conference at Alma-Ata in the Soviet Union in 1978 engraved on the international development agenda the goal of 'Health for All by the Year 2000'. A revolutionary definition of the purpose, content and organization of health services, elaborated as 'primary health care', had been submitted to ministers of health and senior health officials from 138 countries and had been unanimously approved.

The results of Alma-Ata were an achievement of which WHO and Unicef, its joint sponsors, could be justly proud. Dr Halfdan Mahler, Director-General of WHO, had provided the vision and the driving force, but he had counted heavily upon the support of Henry Labouisse, then Executive Director of Unicef. The long process of critical analysis and careful preparation which had come to fruition in the Declaration of Alma-Ata also owed a great deal to the work of Dr Tejada de Rivero, Assistant Director-General of WHO, and Dick Heyward, Senior Deputy Director of Unicef.

The Declaration was a vindication of the view that health-care services must cease to be a top-down delivery of medical consumables orchestrated by the patriarchs of medical wisdom. The health-care service must respond to the population's real health-care needs: it must function out in the countryside where most of the people were; it must concentrate on low-cost prevention rather than high-cost cure; most important—since it must enlist the people in its own performance—it must be sensitive to their sense of health priorities. Mahler, who twenty-five years earlier had gone to India as a young tuberculosis expert and had been what he called a 'circus director' running great immunization 'shows', had long since reached the conclusion that no 'show' could endure, that no health service could function effectively over time unless it corresponded to people's own sense of their health-care needs. Now those in charge of delivering health-care services in countries around the world had agreed; or at least they said they had agreed. Alma-Ata could be an important trigger for a process of organic change in health-service design, if commitment in principle at the international level could be transformed into national effort.

Like all turning points in the history of ideas, the Alma-Ata conference was symbolically very important but, in the process of transforming the health prospects of the poor throughout the world, it represented but one milestone along a very long route. The first steps along the way had been taken more than fifty years earlier by people such as Dr Ludwik Rajchman, Dr John Grant, and other pioneers in whose steps had followed a whole generation of 'alternative' health practitioners. The challenge was now to realize 'Health for All' in a much less extended time frame: the twenty-odd years left before the end of the century. It was one thing to name the goal, quite another to reach it, particularly as population growth was increasing the pressure on all development efforts.

During the period after the Conference, WHO and Unicef made strenuous efforts to maintain and build upon the momentum that Alma-Ata had inspired. At its 1979 session, their Joint Committee on Health Policy examined the many constraints facing the rapid adoption of PHC, and tried to work out how their collaboration could be further strengthened and put to work on its behalf. Whatever the surface unanimity at Alma-Ata, many national authorities continued to think that high technology was more effective than health services based in the community. Their commitment to the target of 'Health for All' might be real, but their commitment to PHC as the strategy for getting there was no more than skin deep. In some countries, programmes were launched which fell far short of the realization of PHC in its many nonclinical aspects. Links between the health ministries and the water supply and education sectors, or that dealing with the food supply or women's status, were tenuous at best, never mind national commitments to clean water and sanitation for all by 1990, or those targets for the Decade for Women which related to health and the quality of family life. There was a long way to go before the full promise of PHC and its implications for other areas than those conventionally defined as health care were fully understood.

One direction adopted by some of PHC's new adherents was to take up some parts of the strategy and conveniently overlook its more uncomfortable aspects. The Alma-Ata Conference identified a minimum list of activities to be included in PHC: health education; promotion of the family food supply and sound nutrition; safer water and basic sanitation; MCH, including family planning; immunization against the major infectious diseases; control of endemic disease; treatment of common complaints and injuries; and the provision of essential drugs. The simplest way to adopt PHC was to add these activities to the rim of the existing health service, and carry them out with the help of extra unpaid man- and womanpower from villages and shanty towns. According to this model, primary health care was not a revolution within the health-care system, but a low-cost extra attached to its edge. It did not demand any major change of budgetary emphasis away from the sophisticated curative services used by the better-

off members of society towards the more mundane requirements of ordinary—poor—families. This kind of change in the use of resources for health was regarded by some as the litmus test of whether a country's health establishment was merely paying lip service to 'Health for All', or whether it was serious.

Naturally enough, few countries made significant adjustments overnight. Change of the kind demanded by genuine implementation of the PHC strategy could not move faster than that governing the elaboration of national plans and the allocation of national resources. The progress towards PHC's adoption in its revolutionary entirety was bound to be slow. But the fact was that a heartening number of semirevolutionary changes in health care were taking place which did improve the chances of the world's least well-off mothers and children.

True, some programmes carried out in the name of PHC looked like the old disease-control campaigns. The authorities at the centre launched the scheme with loud public fanfare; and health officials set off into the countryside; the village headmen called a meeting; harangues, line-ups and children's weigh-ins ensued. But there was a difference. Officials did not simply get back into their landrovers when their part of the job was done and drive away, leaving behind a bewildered group of mothers only half convinced that anything health-promoting had happened to their squawling toddlers. Now things were done differently; there was some kind of exchange of views between the officials and the people; some of their numbers went for training, and when they returned they had answers to certain problems and, with luck, a metal box with Unicef on it and pills and bandages which they shared around.

Whatever its shortcomings, this was the reality of primary health care in action in many parts of the world. Some of the concept's keenest supporters lamented that it was not being given a proper try; others more pragmatically concentrated on how to make sure that what was being done was better done. This might mean making sure that a national plan for PHC was not applied with dogmatic uniformity; that malaria control was not made the first priority in a place where respiratory infections and intestinal parasites were the commonest complaints. It might also mean avoiding the pitfall of overloading the community health-care worker: the new vogue for the lay volunteer not only in health but also in other basic services meant that every kind of programme, from family planning to water supply maintenance, was depending on her and him. Often, the same villagers turned up for the various training programmes and confusion set in about whether feeding the under-fives or keeping the new handpump clean was the priority.

Then there was the need to improve what was often no more than a nod in the direction of consultation with the community. The success of PHC ultimately depended on the willingness of the community to assume part of the responsibility for their own health care. This required instituting a

genuine dialogue between health-care officials and village people. Where village councils and other traditional mechanisms for running village affairs had already been enlisted in applied nutrition schemes or other community development activities, primary health care constituted a variation on a familiar theme. Elsewhere, old ways died hard. Many rural people, and the officials who had any contact with them, were unused to other than top-down ways of doing things and did not easily shed the behaviour of a lifetime.

Even if attitudes had begun to change, it was difficult to develop a sufficiently flexible health structure to respond imaginatively to communities' different needs. Some authorities were reluctant to decentralize enough power down the line to those at one remove from the village itself; and if they did so, some had insufficient confidence to use it. Designing techniques to bring about community participation became a new branch of development science: 'project support communications' was part of Unicef's version. Jack Ling, then the Director of Information, had managed to institute 'PSC' as a legitimate Unicef activity during the 1970s. Under Tarzie Vittachi, Grant's immediate deputy on the external relations front, the notion that effective communications at all levels of society were an essential ingredient in successful programming began to take firmer root in Unicef. At WHO, Mahler invited Jack Ling to join his senior lieutenants, and help give the content of WHO's programme of education for health a thorough overhaul.

Dissecting the ingredients of two-way communication exposed cultural blockages inhibiting the transmission of even quite simple messages. Visual aids designed in the advertising studios of the television era were incomprehensible to people who were 'visually illiterate'. The conventional kind of illiteracy, or semiliteracy, among community-health trainees caused even more obvious problems. In many parts of the Third World, people use one language—their traditional tongue—in everyday speech, and learn to read and write in another. The language of administration and instruction is alien to the everyday life of home or village. Yet primary health care messages are, by definition, everyday messages: 'filter the water', 'watch the baby's growth', 'clean the kitchen utensils'. Where teaching was not in the local dialect, many took in and promoted little of what they were taught. Yet it was expensive, difficult, and it sometimes went against the grain, to produce teaching materials in a wide variety of tongues officially regarded as a throwback to the past.

Another problem which disturbed the primary health care practitioners was the turnover among those chosen by communities for training. Many signed up enthusiastically for what they thought was a course which would set them on the ladder to employment. When they found that they were to be remunerated not by the health services or the water department, but by their own communities, some became disenchanted. Unless the village

council put its weight firmly behind this idea and set about collecting levies, the village health workers often did not receive their stipends. Some external assistance organizations, impatient to get primary health care underway and see some results, were prepared to underwrite the stipends the community said they could not afford. This established a pattern for the programme which was not sustainable. If at a later stage the funding organization—as was normal—withdrew and the government would not, or could not, pick up the salary bill, the programme was likely to collapse.

In places where traditional systems of mutual support and communal levies were common, the resistance to payment for the community health worker was mostly to do with lack of conviction about the value of the services she or he was offering. Some of those families who said they were too poor to pay were actually sceptical, or simply confused. The community health worker visited their homes and criticized the wives' household management and the husbands' resistance to family planning; but when their children were sick, they were often told to take them to the health centre just as they had in the past. After all the expectations, the community might feel that the service they were getting was not worth paying for. Without an incentive, the village health worker easily gave up. The training he or she had undertaken would be applied in the family compound, and maybe the neighbours would draw conclusions and decide to copy the example. The value was not lost, but neither was it quite what the PHC protagonists had in mind.

For many of these problems, solutions could be found if the people and the experts were able to sit down together and sort them out. Whether it was called community participation or something less ideologically frightening did not matter as long as some kind of two-way communications process took place. It was relatively easy, for example, to redress the anomalies that occurred when male health workers turned up for courses on breast-feeding, and women were taught to do things—mend handpumps, go home visiting on a bicycle, impose fines for littering—that the male-dominated community power structure would not approve. These and many other issues, microscopically important on the grand plan, but make or break in the untidy context of the hypothetically typical slum or village, provided a fertile ground for the continuing health-care debate.

As time went by, new information and experience accumulated about what made the critical difference between one kind of effort and another, what made injections and brightly-coloured antibiotics acceptable where latrines were not, why mothers in some communities loved getting together to give their toddlers a special meal and others found it a waste of time. While more countries put into practice some part of the primary health care philosophy, the doctrine became more diffuse and the programmes carried out in its name more various. Some found in the blurring of its pure lines evidence of genuine community choice and dawning political aware-

ness. Others despaired that its force was slackening: where was the real primary health care programme, they asked? What they meant was: where was the ideal primary health care programme? Like so many ideal versions of human arrangements it did not exist. Some found the reality messy and untidy and were frustrated. Others were encouraged by the variety of activity going on under the PHC rubric and saw this as proof of the strategy's underlying viability.

If nuances of its operational character exercised the minds of primary health care exponents, there were other questions at the national policy level. It was difficult enough to convince ministries of health in developing countries that imitating the evolution of the medical consumer society in the West was not in the best interests of their people. But a ministry of health was by no means the end of the line. According to the conventional view, a ministry of health absorbed revenues for welfare purposes; it did not contribute directly to economic productivity. Therefore, it was not a recipient of a large slice of national resources; and, as recession deepened, it was likely to receive an even slimmer one.

Primary health care offered comparatively cheap techniques for making major gains in people's well-being. But extending the spread even of cheap techniques required funds and personnel. The cost of a shot of measles vaccine or a vitamin A capsule might in itself be trifling. But the vehicle to distribute it from the health centre to a community volunteer in a far-flung village, the driver, the fuel, not to mention the supervisor's salary, did not represent a negligible sum. Primary health care did not posit fewer resources for health care; it posited at least as many, better spent. Where it was an extra layer of the health system tacked onto its existing edge, the need for extra resources was even more acute. Unless political figures with greater clout than mere ministers of health could be persuaded that there were definite gains to be made from investing in social purposes it would be hard to prise the necessary cash from the national till.

Political will—that overworked phrase—was critically needed to put primary health care into place. At one extreme, primary health care needed the political will of the mother in the village or urban slum, standing up for the first time in her life at a meeting of the community elders to demand a clean water supply near her home or a health worker in her neighbourhood; at the other extreme, it required that national leaders heard those voices and recognized that denying them was not only a social and an economic cost, but that a political price might be paid as well.

In the early 1980s, with recession eating into budgets for social improvement the world over, the sense that progress towards the adoption and implementation of basic services would falter without some extra political push inspired James Grant to look for a way to reinvigorate the crusade. Something must be done to give PHC an extra boost, to lift it out of the crossfire of discussion about this part of the approach or that—a

debate confined to the already converted—and move it onto the political agenda.

WHO, in attempting to give countries guidance on strategies for achieving health for all by the year 2000, had established certain indicators as a way of measuring how close to the target they were reaching. The two main yardsticks were life expectancy at birth, and the rate of infant mortality (IMR). A 'healthy' population—or a population in which disease and loss of life were becoming a decreasing burden on family and community—was one in which the minimum life expectancy at birth was sixty years, and the infant mortality rate was no higher than fifty deaths (within the first year of life) per 1000 live births. These indicators of the physical well-being of a population were internationally recognized in a number of fora; they echoed, for example, some of the targets set for the end of the century in the Club of Rome's report on 'Reshaping the International Order'.

The infant mortality rate reflects not only how many babies die; it also reflects the state of health of their mothers, during pregnancy, at the time of delivery, and afterwards; the cleanliness in the home or lack of it; the mothers' knowledge of sound child-rearing or lack of it; the availability of weaning food or lack of it; reasonable family income or lack of it; and a number of other factors that decide whether or not a young baby comes through the first, most dangerous, year of life. The next three to four years—the preschool years—are also a testing time, particularly in the period between one year and thirty months when the process of weaning to an adult diet is normally completed. Unicef had always been preoccupied with these age-groups: it existed to be so. But now, under the influence of Grant's thinking, the preoccupation began to be illuminated more brightly, and somewhat redefined.

In 1982, after three decades in which infant and child mortality rates had been halved worldwide, an average of 40,000 young children still died each day. These deaths were the result not of war or sudden calamity, but because of simple, easily preventable sickness. In the thirty years following the second World War, the child death rates in the poorest countries had declined, both because of general economic and social progress and as a result of the mass-disease campaigns. Since the mid-1970s the momentum of decline had slackened. The same vigour that had fuelled the onslaught on the mosquito and on scourges of tuberculosis, smallpox, syphilis and leprosy had yet to be galvanized against the pernicious combination of childhood infection and undernutrition.

Vigour was not the only essential. Unlike most of the dreaded diseases, there were no shots or pills to cure or protect against poor hygiene and too starchy a diet. The health service and its personnel could lecture, cajole, upbraid and entreat mothers to feed and care for their children differently—

within their existing means. But the actual health-promoting actions would have to be undertaken by them in their homes, not by the health service. Until more parents in villages and shanty towns began to undertake such actions, the 'silent emergency' of disease and death would continue, destroying children's lives and mothers' hopes because poverty and ignorance deprived them of an equal chance alongside children and mothers who just happened to be born into different circumstances.

Grant believed that the continuing death toll among young children was a scandal when, for the want of primary health care, many or most could be saved. He also believed that unless and until most were saved, and their parents convinced that their younger brothers and sisters would likewise survive, the chances that they would bear many fewer children were remote. Not only did better health and better nutrition feed off each other, but they could, and would, fuel a decline in the birth rate. Nowhere in the world has the birth rate dropped before the death rate has dropped; increased child survival could only contribute—eventually—to a decline in the birth rate. This computation of the necessary precondition for a slowing down of population growth fortified the argument for bringing the IMR below fifty per 1000 births in as many countries as possible.

Grant therefore began to focus on the idea of reducing the infant mortality rate as a deliberate target of efforts in which primary health care and basic services would provide the underlying strategy. In some countries, mostly in Africa, the IMR was close to 200 per 1000 births; a rate close to 150 was not uncommon in either Africa or Asia; the average for the developing countries as a whole was 100. Grant also saw a strategic value in establishing the reduction of infant deaths as a target behind which governments and their partners in the international community could rally. He believed that such a target was both politically appealing and politically neutral, and that it was possible to cultivate the idea that those developing countries who ignored the target would be put in the dock and pilloried internationally for failing to meet the ethical standards of the late-twentieth century.

In establishing the reduction of child deaths as a target not just for Unicef but for all the allies it could muster, Grant was shifting the emphasis from where it had been placed by WHO; as an indicator, the IMR was used to measure human progress or development. Grant was talking about survival, about so improving the overall level of child health as to lower the number of infant deaths. He believed that survival was a precondition of healthy development; and that, as a cause, child survival had a more emotive appeal so long as it did not reawaken fears of a population crisis.

To inspire the kind of worldwide movement Grant had in mind, the child survival techniques chosen for its cutting edge had to pass a number of critical tests. Their first and essential attribute was that they must be able to achieve dramatic gains in the survival rate of the children of the poor.

They must, therefore, address common maladies suffered by children virtually everywhere in the Third World, not only diseases confined to special epidemiological circumstances. A second and related criterion was that their impact must be measurable.

The target Grant had in mind was a reduction by at least half of the current death rate among children under five, from fifteen million a year to seven million, or from 40,000 a day to 20,000; this included the target of reducing IMR to fifty or less worldwide. The target was deliberately ambitious; its boldness would help create a political and psychological impetus for the campaign.

In the climate of world recession, with social services budgets and overseas aid programmes under stress, another critical attribute of any health care technique selected for special emphasis must be cost. No drastic re-apportionment of national or international resources into health could be anticipated, and to depend upon one would invite failure. The cost of any technique was not only a practical consideration, but an intrinsic part of its marketability; something whose hardware cost only a few dollars or cents per child was bound to have popular appeal. Unicef's limited budget could not possibly extend very far in helping governments reach all their children even with one health-giving ingredient. To mobilize international forces behind the child survival target, not only governments would have to deploy their personnel and resources, but also other allies—church, voluntary agency, industrial, media, any and every kind of formal and informal organization—would have to take part. As well as being inexpensive in themselves, the techniques must also be attractive, easy to understand and carry no religious or ideological stigma.

To identify the health care components which would meet all these criteria was a tall order. To try to do so at all was daring: the underlying thesis of primary health care was that it was a total concept with many interlocking parts, and that the only preselection of specific ingredients was one that should be made on the ground, in the country and the locality concerned, based on the priorities and problems articulated not just at national or even provincial level, but at subdistrict and community level.

Grant's thesis was predicated on the idea that selecting out some primary health care techniques and pushing those would allow others to piggy-back on them, which would in turn force the pace for the delivery of primary health care in its entirety. The circumstance that he believed made such a strategy practicable where it had not been so in the past was the tremendous spread of communications networks, particularly radio and television, and also the various mechanisms of nonformal education and the social organization that went with them. He believed that the combination of political will and public dissemination could achieve a critical mass; that the necessary information about primary health care techniques could reach mothers and families with enough persuasiveness for them not only

to want to use them, but also even to demand them.

In mid-December 1982, in his third annual *The State of the World's Children* report, Grant gave the first public elaboration of the four techniques Unicef had espoused as the frontline of its campaign for a 'child survival and development revolution'. They had materialized from the meeting held three months before with leading international health and nutrition experts from WHO, FAO, Unicef, the World Bank and a number of academic institutions. Very quickly, the package became known by the mnemonic GOBI.

The first was a technique for monitoring the growth of the small child. To a very large extent, the problem of malnutrition in the Third World is an invisible problem. Except in the case of famine, only a very small proportion of children in the average village or shanty town—less than two per cent—display the tell-tale bleached hair and swollen stomach of kwashiorkor or are short of food to a skin-and-bone degree. Most of the malnourished are underweight; the signs of their depleted health are listlessness, dulled expressions, lack of urge to play and vulnerability to infection. But unless their weight is compared to what it ought to be at their age, it is easy for a mother—and even a health worker—to overlook these signals. In most cases, even in a very modest household, the means exist to adjust a child's nutritional intake. Ignorance, the ally of poverty, is more often the cause of child malnutrition than outright poverty itself.

The way to make sure that a child is growing and developing normally is systematic weighing, month by month; then—as in the schemes introduced in Karamoja, Uganda and Botswana—if a child appears to be dropping behind, extra rations can be given or the mother encouraged to give more nutritious food. The cheapest way of running this nutritional watch-dog system, and the way which makes the child's mother the principal watch dog, is to issue her with a simple chart for each child, and to bring her together with other mothers in the community for regular weighing sessions where she helps plot her child's weight on the chart.

In primary health care services in various parts of the world, this system had been known for many years; WHO and many nongovernmental pioneers—the Aroles at Jamkhed, for example—had helped to develop and refine it. An example of a programme where it had already been extensively used was a national nutrition programme in Indonesia. By 1982, two million mothers in 15,000 Indonesian villages had been given KMS—*Kartu Menuju Sehat*, meaning: 'towards good health cards'. Once a month, they attended a meeting at their local weighing post where their toddlers were put in a simple harness and hung from a market scale. The nutrition cadres—volunteers with some training—plotted a mark on a rainbow coloured chart for the child's weight opposite the child's age. The line joining the marks month by month showed immediately whether the child was on or off the road to health.

The hardware for such programmes—charts and scales—was inexpensive; and supervision were the main costs. The programmes were intended to educate mothers about the relationship between diet, growth and health in the young child, and enable them to bring their children through the vulnerable weaning period in safety. This was 'growth monitoring': the G in GOBI.

The second technique, and the one which offered the most exciting prospects, was oral—as opposed to intravenous—rehydration as a means of preventing childhood death from diarrhoea. Acute diarrhoea was the cause of five million child deaths in the world; it affected many millions of other children, often several times a year, sapping away their strength, halting their growth, and leaving them a steep climb back onto the road to health. Diarrhoeal disease was particularly prevalent in poor and crowded countries where the food and drinking water supply was often contaminated, such as Bangladesh. Unfortunately, many mothers, watching the fluids of their child's body drain away, made what to them was the logical assumption that the only way to stem the flow was to deny the child anything to eat or drink. Scientists had long realized that the loss of fluid, salts and minerals, which dehydrated the body and could send it into a shock from which death was only hours away, was a much more serious problem than the infection itself; the infection was usually washed away in the process. Drinking salty water was not an efficient solution: the liquid suffered the same fate, rushing through the digestive tract without reaching the body tissues, and the salt could even increase the loss of fluid. Rehydration only seemed possible by bypassing the digestive system intravenously.

In the 1960s, it was discovered that adding glucose—in the form of sugar—to salty water in the right proportion changed the metabolic process. However acute the diarrhoea, the body absorbed the sugar normally, and with the sugar as pathfinder, the body raised no objection to absorbing the rest of the minerals too.

During the early 1970s, when Bangladesh was wrestling with cyclones, war, newfound independence, social disruption and a soaring rate of diarrhoeal infection, the then Cholera Research Laboratory in Dhaka began to experiment with an 'oral rehydration solution'—ORS. WHO collaborated closely with the Laboratory's research, as with similar efforts being undertaken in other centres in Calcutta and elsewhere. In 1971, during the cholera outbreaks among the refugees from East Pakistan temporarily camped in West Bengal, WHO and Unicef first made available an ORS. Its formula made it suitable for the treatment of dehydration from diarrhoea of any cause in all age groups. The work of the Cholera Research Laboratory in Dhaka was important not only because it helped to establish the credibility of ORS within the medical world, but also because the lack of health services in Bangladesh meant that the wider 'laboratory'—the countryside—proved how suited the remedy was for administration by

village mothers, aided only by the village health worker. If sachets of ORS and knowledge of how to brew it from ingredients in the home could be made available in Third World villages the ill-effects of diarrhoea would cease to be an overwhelming threat. The Cholera Research Laboratory, later renamed the International Centre for Diarrhoeal Disease Control, Bangladesh, and heavily supported by USAID, helped ORS to earn a place in the primary health care package.

In 1979, the government of Bangladesh launched a national oral rehydration programme. With assistance from Unicef, ORS production centres were set up in four districts. Between them, by 1982, they produced 2.5 million ORS sachets. Over 98,000 village health workers had been given a day's training in how to manage a case of childhood diarrhoea with ORS. The ORS sachets were retailed at five cents (US), but they were given out free of charge to health centres and health personnel. Each village health worker received ten packets at the end of the training course, and if he or she kept a record of their use and reported on cases treated, replacements were provided by the family welfare worker.

In Teknaf, a remote rural area, a study had showed that oral rehydration solution had proved a successful treatment for ninety-five per cent of 3000 cases of diarrhoea. The children who had died had all been in families who lived far away from the health clinic.

Meanwhile the Bangladesh Rural Advancement Committee (BRAC), a nongovernmental organization set up after independence, had begun a community health outreach programme in Sylhet, another remote district. BRAC used Oral Replacement Workers—women between the ages of twenty and fifty who could read and write Bengali—to teach village mothers the recipe for making what they called *lobon-gur*, a home-made drink comprising water, salt and molasses. Home-made ORS began to join the curriculum of many PHC training schemes elsewhere.

The discovery of effective oral rehydration was a significant scientific breakthrough and was so recognized in the medical literature. In 1978, the prestigious British medical journal *The Lancet* described it as 'potentially the most important medical advance this century'. But for several years following its discovery, ORS suffered a classic fate at the hands of what Halfdan Mahler called the medical consumer society: its very cheapness and simplicity led to its widespread neglect.

The level of public health enjoyed in the Western world meant that diarrhoea, that mundane and socially uninteresting complaint, did not threaten the lives of children in North America and Europe. For those who did contract something virulent and become acutely dehydrated, the hospital bed and the drip inspired much more confidence than a remedy which could be administered at home. As a result, ORS was ignored by the Western medical establishment, and by the pharmaceutical industry. Investment in its manufacture initially had to come from governments and

humanitarian organizations. Big business could make and market infant formula to the impoverished woman of the shanty town; but did not show any similar enthusiasm for making and marketing a salt and sugar drink to treat her baby's diarrhoea—diarrhoea which might in fact have been caused by mixing the baby's formula with dirty water. Such are the ironies of infant death around the world.

The third technique, the B in GOBI, was the protection of breast-feeding. Breast-feeding's rapid decline in the developing world and the controversy surrounding the marketing of infant formulas had prompted a closer scientific examination of its properties. Its perfect nutritional mix, individually tailored to the changing requirements of its specific consumer, was already well understood; now scientific investigation had produced more complete information about its immunological properties. The colostrum produced by a mother in the hours immediately after birth contained especially important antibodies, and mature breast-milk imparted protection against respiratory and intestinal infections. These findings strengthened the case against the bottle, in favour of the breast.

The bottle-fed babies of the poor were not only more prone to infection because of malnutrition (over-dilute formula), and because of germs in the formula (unclean water, bottle, and teats), but also had little resistance to their effects because they did not have the immunities imbibed with milk from the breast. Conclusive evidence was beginning to document the very marked difference in prospects of the breast-fed as compared with the bottle-fed baby. A 1980 study in Brazil revealed that bottle-fed babies in poor families were between three and four times as likely to be malnourished; another in Egypt showed that the death rate among breast-fed babies was five times lower. From India came data which showed that bottle-fed babies suffered twice as many respiratory infections and three times as many bouts of diarrhoea.

A number of countries had begun to take steps to stem the decline in breast-feeding, a movement which had picked up noticeable steam since the 1979 WHO/Unicef meeting on infant feeding in Geneva, and the passage by the World Health Assembly of the International Code of Marketing of Breast-milk Substitutes in 1981. In the industrialized world, new appreciation for the virtues of breast-milk had already prompted a comeback for nature's infant food supply. Educated mothers were insisting on breast-feeding, and seeking whatever medical support they needed to overcome any problems they encountered. Many countries had passed helpful laws on maternity benefits and leave.

Now the signs of a similar movement back to the breast were showing up in the developing world. In Papua New Guinea, where legislation banning the advertising and sale of infant formula was passed in 1977, bottle-feeding dropped from thirty-five per cent to twelve per cent within two years, and cases of serious undernutrition in small children dropped by

nearly three-quarters. The challenge now was to repeat this kind of success elsewhere, to try and help other governments provide the support poor mothers needed, not only to understand the importance of breast-feeding and sound weaning, but to be able to put their understanding into effect. Breast-feeding was the cheapest of all primary health techniques: as long as a mother did not lose earning power by being around to do it, breast-feeding was free. Its forceful promotion was an obvious contender for the child survival revolution.

The fourth technique was immunization against six widespread communicable diseases. Measles, diphtheria, tetanus, tuberculosis, whooping cough and polio between them carried away over five million children's lives each year. While these diseases did not represent the entire gamut of non-diarrhoeal diseases to which Third World children were prone, they had an important feature in common: low-cost vaccines were available against them. Some of these vaccines had been improved by recent medical advance, and their potency was less susceptible to warm temperatures. The smallpox eradication drive had proved that it was possible to reach into even the furthest corners of a country and inoculate the potential victims of a killer disease with a heat stable vaccine. Enthused by that success, the international health community set about increasing immunization against the six others.

In 1977, the World Health Assembly had declared a goal of Universal Child Immunization by 1990. Many countries stepped up their immunization drives; Unicef assisted with vaccines, kerosene refrigerators, cold boxes and training for vaccination teams. But because some of the vaccines required three doses to assure a child complete protection—diphtheria, whooping cough, tetanus (injected in a combined vaccine, DPT), and polio—these drives required a considerable degree of organization. At the turn of the decade the typical immunization drive managed to reach no more than twenty per cent of the target with all the shots—three for DPT—needed to protect a child fully. In order to protect an entire population from a communicable disease, the reservoir of those who could catch it and infect others had to be reduced to a very low point. According to Unicef's calculations, this meant reaching an immunization coverage rate of at least eighty per cent; higher in certain cases. At current rates of progress, there was no way that the world's children would all be protected by 1990, or even 2000, from the threat of diseases a simple series of drops or injections could prevent. Something had to be done to drive up the immunization rates. Immunization was the fourth plank of the revolutionary platform, the I in GOBI.

When *The State of the World's Children* report heralding GOBI was published in December 1982, much use was made of marketing words such as 'new' and 'breakthrough'. Novelty and discovery were part of the revolutionary éclat. But none of the techniques was a brand new invention. That

was part of their beauty: all of them had already earned a respectable place in the pharmacopeia of the late twentieth century; WHO, the high priesthood of international public health, had been promoting their use for years. Unicef itself had a great deal of experience with vaccine supply, ORS production and support for training schemes for health-care workers in all PHC techniques. There was plenty of room for more operational and sociological enquiry into their use, and for their further technological refinement. Indeed, part of Grant's purpose was to create the kind of demand which would give a boost to both. What genuinely was new about them was either the full recognition of their scientific properties or their arrival at a state of technological readiness for widescale application.

The State of the World's Children report did not claim that the four techniques offered a complete answer to all the problems of high infant mortality and childhood disease. Three other measures were also singled out for special attention: family planning; the distribution of food supplements to poorly nourished children and nursing mothers; and female literacy. Although these were equally regarded as critical to the overall improvement of child health, they did not pass as easily all Grant's tests of low cost, political acceptability, and potential for popular acclaim; they were not, in his view, as 'do-able'. 'Do-ability' was an all-important consideration. The essential precondition for do-ability was that the word could be made to spread, the demand come forward, and enough of a country's social apparatus would assert itself to achieve the target.

The kind of model Grant cited as an example of the 'child survival and development revolution' was the all-out Polio Control Operation launched in 1980 in Brazil. This operation had been personally backed by the President and supported by all government ministries, and it had succeeded in mobilizing 320,000 volunteers and vaccinating eighteen million children. In the style which had characterized Mexico's onslaught on malaria twenty years before, national vaccination days were publicized heavily in advance and planned with military precision. Every kind of organization, from church to army, schools to neighbourhood associations, took part. The 320,000 volunteers were taught how to drop the vaccine into the children's mouths; 90,000 immunization posts were set up; and in the run-up to each day, television, radio, and newspapers were packed with exhortations to parents.

Brazil's experience proved the final and essential part of Grant's thesis. In the 1980s, particularly in the countries of Latin America and Asia, the degree of social organization and the ubiquitousness of the mass media had transformed the prospects of success for a huge child survival push. Brazil's polio campaign was not the only example to prove the point. If so many women in poor communities around the world had heard of infant formula and found from somewhere the means to buy it, then they were not beyond the reach of information which—if it corresponded to something they felt

a need for—was capable of changing their behaviour towards their children.

The public response to the publication of *The State of the World's Children* report in December 1982 was extremely positive. The report's message was hopeful, up-beat; instead of emphasizing problems, it emphasized solutions. Grant's judgement that the simplicity and cost-effectiveness of the GOBI techniques would have instant public appeal was borne out in media commentaries in the industrialized and in the developing world. Not since the very early days of Unicef, when all eyes were turned on the UN and its mission in the world, had any Unicef 'story' about the needs of children attracted such widespread attention.

Grant launched the report in Paris and London. To Prime Minister Pierre Mauroy, he presented a Haitian growth chart in Créole; later the same day, he presented a sachet of ORS to Prime Minister Margaret Thatcher. Theirs were the first of many endorsements by national and international leaders, an array which eventually included Ronald Reagan, Indira Gandhi, Zia ul Haq, J. R. Jawardene, Olof Palme, Mother Teresa, Robert McNamara and Javier Pérez de Cuéllar. The UN Secretary-General, listing the four GOBI techniques, commented: 'Innovative and cost-effective action along these lines would demonstrate that even in times of acute financial strain for social services and international co-operation, it is possible for the world to take imaginative steps to heal some of the most tragic wounds of underdevelopment and poverty. I appeal to national leaders, to communicators, to health care workers and to concerned institutions and individuals to support this action'.

When the Executive Board met for its annual session in May 1983, the delegates endorsed Grant's 'revolution'. They accepted the premise that the economic climate demanded a redoubling of effort for children without expecting a doubling of resources. They accepted the techniques; they were familiar from many previous discussions of programmes, and to some—the delegate from Bangladesh, for example—the efficacy of one or more was already well-established on home ground. They accepted the strategy that growing communications and organizational networks in developing countries could be harnessed to their promotion. They also acclaimed Grant's personal enthusiasm and commitment to a new drive on children's behalf. At the same session, they agreed that the infant mortality rate would be one of the more important factors taken into account when Unicef considered the level of its programme co-operation in a country.

There was a cloud on the horizon. The WHO/Unicef Joint Committee on Health Policy had met earlier in the spring, and reviewed a WHO study on the progress of primary health care worldwide. While they had applauded the actions of nearly fifty countries in drawing up specific primary health care plans and starting to train auxiliary workers, they had not been so happy to discover how few countries had significantly altered the structure

of their health services and reallocated expenditures to correspond faithfully to the full dimensions of the primary health care model. When Grant first articulated his new campaign in December 1982, his stress on the dynamic potential of the GOBI package heightened the impact of the message on lay audiences; but among some professionals it gave the false impression that Unicef regarded the promotion of the four techniques as somehow separate from the promotion of primary health care. The failure to emphasize the all-important goal of 'health for all' rang alarm bells in WHO.

Dr Halfdan Mahler, WHO Director-General, had definite reservations about globally singling out certain health activities for a special campaign. Of course the ingredients of the GOBI package met WHO's approval, as the 1983 session of the Joint Committee on Health Policy confirmed: the value of growth monitoring, oral rehydration, the protection of breastfeeding and immunization were not at issue. But this was a testing time for PHC. Adoption of the strategy in its entirety was moving ahead, but not speedily and not systematically. Until the concept took better root, any signal that Unicef was deviating from the creed was upsetting.

Mahler viewed GOBI and the campaigning potential of the child survival revolution with caution. The reformed ex-ringmaster of medical circuses looked upon any programme whose ingredients were predetermined for all countries and circumstances as anathema: a throwback to the days of top-down programmes, designed for people instead of with them and by them. Primary health care had been developed as an alternative to the top-down approach, as a reaction to previous efforts to short-cut the systematic development of a health infrastructure.

But Grant had not abandoned primary health care. The quintessential ideas of PHC, which his own father had done so much to pioneer in the early years of international public health, were part of the warp and woof of his thinking. The idea behind the child survival revolution was to speed up both the acceptance of the PHC concept and its implementation by using top-down vigour to hasten an organic process. The systematic development of the health care service could only come about if people demanded that it be there for them to use. Only time would tell if this idea could work.

The child survival and development revolution had been successfully ignited. The next step was to gather the first generation of allies to the cause, and help get governments and supporting organizations poised to step up existing campaigns or launch new ones around the GOBI techniques.

During the course of the next year, Grant used his prodigious energy to become a peripatetic salesman of GOBI to presidents, princes and prime

ministers around the world. Sometimes this meant bypassing ministers of health; but, with all its risks, this was seen as the quickest way to guarantee national commitment to an all-out effort. If the head of government gave the word for mobilization, it could then be addressed to people and organizations in all walks of life and not just to the officials in one or two ministries. It also guaranteed any campaign the support of the State-sponsored media: no international humanitarian organization or government ministry could afford to deluge a population with radio jingles or newspaper advertisements at prime time commercial rates.

From the beginning of 1983 through 1985 Grant personally visited thirty-nine heads of state or national government in countries as far apart geographically and ideologically as Colombia and South Yemen, Haiti and Sri Lanka, India and Burkina Faso, Nigeria and Cuba, Dominican Republic and China, Nicaragua and El Salvador. He pointed out to these national leaders that saving children's lives was one of the few completely apolitical actions which commanded the unqualified support of parents everywhere. He was trying to turn the nonpolitical nature of the children's issue to its own political advantage. He and senior Unicef colleagues also sought the active collaboration of international nongovernmental bodies. The International Paediatrics Association and the League of Red Cross Societies were among the first worldwide networks to give 'child survival' their ringing endorsement.

At the beginning of the campaign, Grant believed that among the four GOBI techniques it was the spread of oral rehydration, both in manufactured sachet form and as a recipe concocted at home, which held out the most immediate promise. Diarrhoeal disease was the leading cause of infant deaths in most developing countries, and the availability of a remedy costing no more than a few cents struck the loudest public chord.

When the GOBI campaign was launched, forty-nine countries had already embarked on WHO-assisted programmes for the national control of diarrhoeal disease, of which thirty-five were already operational. Unicef's most important contribution was to provide sachets of ORS mix, manufactured according to the WHO-approved formula, of which it was the largest worldwide supplier; and to give support to local ORS production. In 1982, the total ORS production from these two sources was forty-five million sachets, and the world total was close to sixty million. By the end of 1985, the world total was 250 million sachets, of which Unicef had bought or helped produce slightly less than a third, and slightly less than half of which had been manufactured in the developing countries. This was a clear sign that oral rehydration had taken off. The effect of putting ORS sachets, and the knowledge of how to make up a home-made version, into the hands of community health volunteers and mothers had saved half a million children's lives during the course of the previous twelve months, Unicef calculated.

What had happened, and where, in order to multiply four-fold the global demand for ORS? One critical event took place in Washington. USAID, previously lukewarm in its interest in diarrhoea, became enthused. The long-range prospect for reducing diarrhoeal infection was the improvement in public health which water supplies and sanitation could effect. USAID, along with UNDP, WHO, Unicef and the World Bank, were heavily committed to the goals of the International Water and Sanitation Decade, 1981–1990. The widespread use of ORS offered a stop-gap solution to a major public health problem.

Coupling the promotion of ORS with the health education campaigns now regarded by Unicef and others as *de rigueur* components of water supplies programmes appealed strongly to Peter McPherson, Director of USAID. In June 1983, USAID, WHO, Unicef and the International Centre for Diarrhoeal Disease, Bangladesh, co-sponsored the first International Conference on Oral Rehydration Therapy in Washington. UNDP and the World Bank also began to support oral rehydration therapy. In the course of the next two years, USAID virtually took over the torch for ORS, backing national campaigns against diarrhoeal infection around the world and receiving extra resources for doing so from the US Congress.

Two of the new national ORS campaigns started since the child survival revolution was launched were in Egypt and Haiti. In both cases, the heads of state put their weight behind them.

With support from USAID, the Egyptian ministry of health began extending its onslaught against diarrhoeal disease nationwide in 1983. Lectures and workshops were arranged in teaching hospitals, medical colleges and nursing schools, and pharmacists all over the country began to stock ORS sachets. One of the problems with the promotion of the commercial variety of ORS is that the product is so cheap that pharmacists do not make much of a profit on its sale. Unless mothers insist on buying it because they are sure that it is really what their ailing child needs, an ignorant—or unscrupulous—drug merchant may sell her instead a highly-coloured capsule which may look more exotic, is certainly more expensive, but is almost guaranteed to be an inferior treatment for diarrhoeal dehydration. In Egypt, the pharmacists were offered a thirty per cent profit margin on each sachet they sold, and free measuring cups which they could also sell to customers. By the end of the five-year programme, it is hoped that mothers will insist on ORS and that these subsidies will no longer be necessary.

In Haiti, where a national programme to promote *serum oral* also began in mid-1983, stall and shopkeepers were given their initial supplies. Its price—nationally set—was advertised along with its properties on the radio and television to dissuade salesmen from extravagant mark-ups. By mid-1985, eighty per cent of mothers in Port au Prince and thirty per cent of those in the countryside had heard of *serum oral* and begun to use it.

In spite of these and other encouraging results, at the end of 1985, the latest *The State of the World's Children* report estimated that 'only about 20 per cent of the world's families knew enough about oral rehydration to be able to use it'. However perfect the technique, it had not proved a swift and easy task to mobilize whole countries and communities behind its use. Part of the problem was that existing attitudes about treating diarrhoea, both among health professionals and among mothers, had to be worn down before behaviour could be changed. ORS did not arrive to fill a vacuum, except in the minds of the already convinced. Mothers, healers and doctors had long had their ways of treating something so commonplace, and no-one easily deserts the familiar, specially for something which seems almost too crude and simple to be true.

Another inhibition was the subject itself, as the promoters of latrines had long experienced. Mothers might happily discuss their children's ailments with other mothers; but as a topic for general discussion, or a subject for mass entertainment on radio and television, diarrhoea must rank very close to the bottom of the list. Presidents and princes do not happily speak to their peoples on such a subject; rare is the regime—like the then regime in Haiti—which chooses to give over the presidential palace to a song and dance extravaganza on the national bowel movements of the under-fives.

It is not possible to decree a national 'diarrhoea day': unlike vaccination days; it makes no sense to summon parents to bring all their children for a dose of ORS at an appointed hour. Whatever their enthusiasm for 'support communications', governments and humanitarian organizations cannot over more than a short period invest the kind of resources in commercial advertising that a major pharmaceutical, food products or soft drinks company can invest in promoting their products. The widespread use of ORS will take time to achieve. It is one thing to make ORS sachets available, or give out the recipe for making an oral rehydration mix with household ingredients, but there is no power in the world which will make the mother of a sick child use it unless she knows about it and is convinced of its efficacy.

That does not mean that Unicef has in any way lessened its support for ORS, as Grant reassured the second international conference on oral rehydration in December 1985. Of the four GOBI techniques, the O was expected to be the champion. But in terms of mobilizing national leaders, organizations and people, immunization turned out to lead the field. Where oral rehydration had taken a sudden leap forward, immunization had bounded ahead.

By the early 1970s, widespread immunization meant that diphtheria, whooping cough, tetanus, measles and polio no longer presented serious public-health problems in the industrialized world. By contrast, the first four

of these diseases remained uncontrolled in most of the developing world, and polio was reaching the epidemic scale seen in Europe and North America in the prevaccination era. The cost of fully immunizing a child against these diseases and tuberculosis and smallpox, a cost which included the organization required to reach the child as well as that of the antigens, was estimated at only a few dollars. In 1973, WHO decided that routine protection should be made available to children worldwide, and initiated an Expanded Programme on Immunization (EPI).

At the World Health Assembly the following year, twenty-five countries expressed keen interest. Work began on helping their ministries of health put together national immunization plans, and Unicef offered to pay for vaccines, cold boxes and health worker training. Over the course of the next few years, UNDP also became involved. Successful efforts were made to improve the vaccines and the cold-chain technology, as well as the management of campaigns. When primary health care was adopted as the alternative order in health, immunization was high on the list of functions to be carried out as part of meeting basic health needs. By this time, smallpox had been eradicated so the list of candidates for expanded immunization programmes was reduced to six. In 1977, the World Health Assembly adopted a target of universal immunization by 1990 as part of the overall goal of health for all by the year 2000.

In 1979, reporting to the World Health Assembly on the progress of the Expanded Programme on Immunization, WHO lamented that in spite of the low cost of vaccinating children, less than ten per cent of the developing countries' newborns were receiving their shots. 'The diseases are so commonplace', the report observed, 'that parents and, sad to say, health workers and political leaders are still for the most part numbed into accepting this continuing tragedy'. By the early 1980s, some countries had made noticeable EPI gains: in 1982, the best results reported were in Malawi and Lesotho, where respectively, coverage had reached fifty-five and forty per cent. This was still a far cry from the coverage needed for universal immunization. But it was distinctly more encouraging than the picture in large countries with spread out populations such as Sudan and Zaire. In such countries, the logistical problems of keeping vaccines cool along all the links in the cold chain meant that any kind of regular immunization service did not extend beyond urban areas.

One of the familiar EPI problems reported by Unicef staff in the field lay with the way immunization was being organized. Some countries were running their programmes like the old disease-control campaigns, with an administration separate from the health services, special fleets of vehicles and inoculation staff. This divorced immunization from primary health care; but then in many countries health care services themselves, whether primary or other, were not yet widespread. Here was a familiar example of the chicken and egg health conundrum: which came first—disease control

or the onward march of the entire health system? Everyone knew that attack—in the language of malaria control—must be followed by consolidation. But without a health service already in place—as was the case particularly in Africa—how could consolidation be achieved?

In some countries—Sudan and Zaire were just two classic examples—health-service coverage for the majority of the population was at least a generation away. On the other hand, to create a health-service infrastructure which depended heavily on the active participation of semitrained volunteers did require a starting place, and the kind of tasks associated with vaccination campaigns were eminently suitable. The lay vaccinator was by no means a new type of health personnel; he and she dated back to the smallpox and even the BCG campaigns. In countries which did not permit injections to be given except by fully-fledged health professionals, laymen could be assigned to other duties: gathering the candidates for vaccination together by house-to-house visiting, filling in health cards, checking registers of names. The school of thought that supported the child survival and development revolution believed that an immunization campaign, specially when accompanied by a thorough public education campaign on the merits of full immunization for every child, could act as a cutting edge or an entry point, paving the way for a primary health care service in its entirety.

Soon after the launch of the GOBI prescription for a revolution in children's health, Teresa Albañez, Unicef's Regional Director for the Americas, previously a senior official in the Venezuelan Government, arranged for Jim Grant to meet President Belisario Betancur of Colombia. Betancur swiftly became a national and international field marshal of the child survival revolution. Betancur was solidly committed to the political idea of community action for development, and Colombia's Ministry of Health had long been committed to the promotion of preventive as well as curative health services. One-quarter of its staff were auxiliaries, and 4500 health *promotores*—volunteers—worked alongside the auxiliaries to generate an idea of health in the community which had less to do with the magic of medicine than with the mundane business of disease prevention and self-care.

In 1979, the Colombian health ministry had launched an expanded programme of immunization. The following year, the Pan-American Health Organization (PAHO), WHO's American arm, had helped Colombian health officials to evaluate the progress of the EPI. They discovered that only twenty per cent of children had been reached with full immunization coverage. In order to improve the coverage rate, the ministry of health adopted a new strategy being used elsewhere in Latin America—*canalización* or 'channelling'. Health workers resident in the community prepared a map of the local area, and with the help of community and administrative leaders, undertook a house-to-house census of children in the target age-

group. They recorded which children had been vaccinated, for which diseases, how many times, and which had not. The purpose of immunization was explained to parents and they were told when and to which house in the district to bring their children for the requisite shots.

Between 1981 and 1983, *canalizacion* raised the percentage of children under one year old fully protected against DPT, polio and measles from around twenty-seven per cent to around forty-three per cent. In March 1983, President Betancur threw down a new challenge to the health ministry: to raise the numbers immunized against DPT, measles and polio by half in a series of national vaccination days.

Some of the health officials were alarmed that an attack of this nature would harm the steady expansion of *canalizacion*. But political might had its way, and the plan drawn up for a National Vaccination Crusade was worked out in such a way that it dovetailed with an increase in house-to-house visits and personal encounters with parents. The days were set: three days, one month apart in June, July and August of 1984. On each day, each child would receive three doses of vaccine: measles, polio and DPT. The Crusade was intended not only to catch in its net the new candidates for vaccination, but also to see that there was no drop in attendance from 'day' to 'day': no Colombian mother must rest in the delusion which frequently affects the outcome of immunization campaigns: that one shot is enough.

President Betancur adopted the strategy used in the Brazilian campaign against polio of 1980—a strategy whose success Grant had underlined. A mass mobilization of volunteer helpers was needed to make the campaign truly take on the character of a Crusade. For the first time in Colombia, new allies outside the normal health service staff were recruited to help the Ministry of Health prepare, launch and carry out a health effort. The concept of health had already been broadened intellectually in Colombia; now the concept of who could be the bringer of health was to be similarly broadened to match the intellectual idea. The Church, the Red Cross, the National Police, industrial associations, labour unions, the boy scouts and the entire school network were involved. From their multiple and various ranks 120,000 volunteers were lined up to help the health officials and health *promotores* handle the expected turnout. If every child in the target group was to be reached, the turnout would top the 900,000 mark. To make sure it reached close to that, a veritable media blitz was planned: more than 10,000 television and radio spots were broadcast.

The symbolic child of the campaign was 'Pitin'. A cheerful impish looking little fellow, he received his name as a result of a media campaign run by Caracol, the country's leading radio network, and *El Tiempo*, the leading morning—and opposition—newspaper. Pitin appeared in colour on children's health cards, where weight was plotted and immunization shots recorded, and on ORS sachets which were also widely promoted. He also appeared on the television, in posters sitting on a policeman's knee

advertising *seguridad infantil*, and in campaign literature for the volunteers. Pitin became a national celebrity. The media blitz reached saturation points in the days before the 'days', and shut down afterwards to give people a rest.

On the first and subsequent national days, President Betancur appeared on national television firing the first shot by giving a child the first vaccination. Jim Grant and Teresa Albaladejo of Unicef and Dr Carlyle Guerra de Macedo, the Director-General of PAHO/WHO, were at his side. Betancur maintained a close interest in the progress of each day, telephoning his regional governors as immunization returns came in. The atmosphere was one of national carnival. In coverage terms, the results of the three days exceeded the target. Over sixty per cent of the under-ones received a complete vaccination series for polio and DPT. The coverage for measles, for which one shot only was needed, and which constituted the major threat, was fifty-three per cent. *Canalizacion* helped to raise the count, and when this became noticeable, it was introduced in some areas which had previously been unconvinced of the need for house-to-house visiting.

In Colombia, a combination of political will, media blitz and social action had put health techniques at the disposal of thousands of families that had not previously taken advantage of them. A genuine revolution for child survival and development had become something tangible. Not only the nation's children, but the entire health apparatus had received a shot in the arm. As a result, the phase of attack was transformable into consolidation. Thousands of new recruits were ready to join the ranks of the health *promotores*; these, in turn, were 'channelling' into many more households; priests were giving premarital counselling on child health care and asking mothers who brought their children for baptism whether they had yet been vaccinated; boy scouts were sporting child-survival buttons and gaining points for health promotion; the primary school curriculum had been revised to emphasize health education and 200,000 teachers were talking about child survival to their students; Pitin was poised to conquer new pastures. This was the social mobilization behind child health that Grant and his deputy Tarzie Vittachi had envisioned, the push that would help to make the full parameters of the primary health care concept universally understood, bringing into the alliance for better health new partners from all sectors of government and society.

In December 1984, President Betancur launched a National Child Survival and Development Plan to bring about by 1989 an overall reduction in infant and child mortality from the national average of fifty-seven per 1000 births to forty. Not only was the onslaught against measles, polio, diphtheria, whooping cough and tetanus to be stepped up 'until there are no more cases of vaccine-preventable disease in our country', but other, even more important, child health priorities would now be similarly attacked.

Immunization, in fact, ranked fourth on the list of the Ministry of Health's mother and child priorities. Now, coat-tailing on its success, more could be done for the others: diarrhoea, acute respiratory infections, low birth weight and other birth complications, malnutrition, and early stimulation for the young child. Moves on all these fronts now began on a scheduled basis, region by region, with the goal of covering the entire country by the end of 1986.

On the national vaccination days in 1984, and on their repeat days in 1985, health officials from many countries around the world visited Colombia to observe the Crusade in action and learn from its experience. These were the people who Grant and many of the Unicef country representatives around the world hoped would become the next generation of crusaders for the revolution worldwide. They included representatives from the Dominican Republic, Ecuador, El Salvador, Burkina Faso and Turkey. In all of these countries, crash national vaccination campaigns were also well into their planning stages.

The most striking immunization campaign was that in El Salvador, which on three 'days of tranquillity' in spring 1985 stopped the civil war so that shots of a different kind could be fired. Unicef and the Roman Catholic hierarchy managed to gain the agreement of guerilla leaders that a *de facto* cease-fire would hold. Children from all over the country were able to go in peace to vaccination posts, manned in some sectors by health workers of the El Salvador Red Cross and the ICRC. Mainly because the publicity for the campaign was more difficult to stage manage, the coverage did not reach the levels achieved in Colombia, but the effort was revolutionary in another sense. Children had been made 'a zone of peace'. For three sweet days, the health of the children of El Salvador became a reason for national reconciliation amid a long and bitter armed confrontation.

Among the four GOBI techniques, immunization had most caught the national and popular imagination. By mid-1965, a number of countries—Nigeria, Turkey, Pakistan, Bolivia, Nicaragua, Lesotho, Sri Lanka, Saudi Arabia and Zimbabwe—had begun to orchestrate the stepping up of their immunization programmes to reach eighty per cent of their children. Demand for vaccines worldwide was running at three times the 1983 rate. Unicef estimated that a million children's lives were being saved as a result. Always alert to the tide of political will and constantly on the look-out for the breakthrough which would turn a slogan into a movement, Grant began to zero in more strongly on the goal of 'Universal Child Immunization by 1990', one of the targets set by WHO as a stepping stone to 'health for all'.

Among the various PHC strands which must be woven to place a safety net under children, immunization had passed the test of do-ability with higher marks than the others. Immunization appealed to national leaders; it offered opportunities to mobilize many other parts of society than

merely the health services; it had readily quantifiable targets; national immunization crusades could be run with the military precision of the old disease-control campaigns, with which they had a lot in common. Like the campaign against malaria, it might be easier to mount the initial attack than it was to achieve consolidation, but the example of Colombia and other similar campaigns was showing that the orchestrated use of communications networks of every kind could break the barrier between the first phase and the second. The gains achieved by social mobilization could offset some of the reservations about GOBI and the child survival revolution which still persisted in certain quarters.

With their Pitins, presidents, television spectacles, magic shots, 'days of tranquillity', races and chases to arrive at targets, the immunization campaigns were surely shows in the same way that the old disease campaigns had been shows. A bad odour had clung tenaciously to 'shows' and the top-down approach ever since disease campaigns went out of fashion and the alternative order in health had been declared. Not only Mahler at WHO, but certain Unicef Board delegates and members of the international health community were not yet fully convinced that this use of immunization shows as a galvanizing process could speed up the rate at which Mankind reached the all-important target of health for all. The alternative order assumed that the people, the community, the district and the nation established its own priorities within the gamut of basic services they wished eventually to put in place. The child survival and development revolution, it was alleged, offered a premixed package of solutions to the problems of disease and death among infants and small children. Such an approach begged the question of whether the immunization or ORS campaign truly responded to the people's or the country's felt needs, or had been thrust upon them.

The response of certain countries to the challenge of universal immunization provided a partial answer. If they did not feel that immunizing children against diseases which could kill them or permanently affect their health was a need, they would not have responded so enthusiastically to the idea of a campaign. If the people at large had not been interested, they would not have rallied in their turn. If Colombia could manage to boost *canalizacion*—a primary health care strategy of an ideologically pristine variety—by launching an attack and following it up so successfully that better child health had become a part of national self-esteem, then there was hope that other countries could do the same.

In Colombia's case, much had depended on the existing health-care service, how it was oriented, how fully it was manned, and its ability to take advantage of the services of thousands of religious and lay volunteers brought to its doors by social mobilization. There are many countries, particularly in Asia and Latin America, where some of the same pre-conditions prevail. In Africa, the existing degree of organization within the

health care system is rarely as sophisticated. The rule of development, that a higher level of development begets more development, makes it inevitable that the route to universal immunization will be travelled faster in some places than in others. Only time can tell how many countries, in which continents, can follow Colombia's example, not just in running a successful immunization 'show', but in reflecting the results of that show in the organic growth of the primary health care delivery system.

The target of universal child immunization by 1990 can only be reached if every country is prepared to take a priority which may not be at the top of its list of causes of infant mortality, and nonetheless make it a national priority over the immediate term. The argument for allocating a larger slice of the health budget to immunization than a country otherwise might have done is that other priorities—the reduction of diarrhoea, respiratory infection, malaria—will gain ground as a result.

The more optimistic health experts believe that universal child immunization by 1990 is not an impossible dream. Nothing creates success like success. Targets—ambitious but not hopelessly unrealistic targets—help to create the feeling that something can happen. If it can, it may. The effort to bring more countries to the point of commitment to the target continues.

Grant has achieved an extraordinary feat in creating a bandwagon that leaders of nations small and great have chosen to step on board on behalf of their children. The child survival revolution represents another landmark in the elevation of children's well-being to the high table of international statesmanship. In early 1985, Prime Minister Rajiv Gandhi of India announced that as a 'living memorial' to his mother, India would try to reach full immunization by 1990. Later in the same year, the Chinese Government announced a target of reaching, province by province, eighty-five per cent immunization by 1988. The two most populous countries in the world had joined the crusade.

The year 1985 was the fortieth anniversary year of the UN. In June 1985, Javier Pérez de Cuéllar, the Secretary-General, wrote to the presidents or prime ministers of all 159 UN member States suggesting that commitment to universal immunization by 1990 'would be a most fitting manifestation of world dedication to the United Nations'.

At a ceremony held at the UN in New York on 25 October 1985, at the conclusion of the two-week celebrations of the UN's fortieth anniversary, national leaders, ambassadors, UN officials and representatives of key international nongovernmental organizations met to sign a declaration. The declaration was read out to a packed conference room. Its essence was as follows: 'We the people of the United Nations, determined to save succeeding generations from the scourge of preventable disease and to promote social progress and better standards of life in larger freedom, unite our strength for the protection of our children and are resolved to achieve the United Nations goal of Universal Child Immunization by 1990'.

This goal, the declaration continued, was '... an essential step in the establishment of sustainable Primary Health Care services and structures for the continuing protection of the world's children and families, leading to achievement of the United Nations goal of Health for All by the year 2000'. This was the ultimate goal to which the governments represented at the Alma-Ata conference, and their partners in the international community, especially Unicef and WHO, had been committed since 1978. There was just fifteen years left in which to reach it.

The postwar, post-colonial span of forty years in which Unicef has existed has seen more progress for children than any previous period in history. Improvements in the lives and prospects for children are mainly due to the social and economic progress there has been for people; for families, for communities, for nations. But Unicef, the first arrangement between the nations to do something specially for children, has played a part. In the heat of many an emergency—silent, quiet, loud, or deafening—it has been there to remind the world that many of the victims are children; and that the children are more innocent, more vulnerable and more dependent than any other victims. By concentrating its own efforts on the children, it has in its way been able to redress the balance a little in their favour. That, at least is what it has tried to do.

No-one could have envisaged when they first sat down to compute rations of milk and fat for hungry children in postwar Europe that, forty years on, Unicef would be an organization fully engaged in the business of national and international development. Conceptually, philosophically, geographically, everything has changed. In the process, by fits and starts, the children's cause has gradually climbed higher on the international agenda. Today, even while the pace of economic and social progress is faltering and the poor are bearing the brunt of dark times, initiatives around the world—initiatives in which Unicef is active—are helping to place a safety net under children. A *magna carta* for children—a Convention on Children's Rights—is being drawn up for possible passage into international law; and efforts are being stepped up to declare children 'a zone of peace' in countries where warfare or civil strife is hampering their survival and development.

With all that has been achieved and all that is promising, there is no cause for self-satisfaction. All the declines in infant and child disease and death over the past generation have not relegated the image of the hungry child to the pages of history. The peaky-faced, underweight, listless child, whose smile is so perishable, is still with us in countries all over the world.

The attack on poverty, and the attacks on the symptoms of poverty—ill-health, undernutrition, ignorance, powerlessness—has launched a thousand crusades, a thousand fleets of ships and airplanes, a thousand campaigns, a

thousand theories, a thousand careers in development planning; and yet the hungry child—the impetus and symbol for so many of these efforts—has often turned out to be a heartbreakingly difficult customer to reach. Too many such children are still sitting in a dusty compound or a muddy puddle, not able to enjoy the most basic of rights: enough to eat, today and every day; clean water to drink and wash in; a house with a rainproof roof and walls; knowledgeable care and medicine at times of pain and sickness; some simple toys to play with; a chance to go to school and learn; a chance, in short, to become a fully-developed human being with all a human being's full potential.

Sometimes it seems in the buzz and excitement of new discoveries, new humanitarian adventures, new ways of unlocking puzzles which have been there since the world began that development co-operation is a mysterious world of wonders and illusions; that the closer the paraphernalia of development gets to the child, the more elusive the child becomes. Why else, in the light of all the distance we have travelled, did many millions of children have to die this year and last year quite unnecessarily?

The answer is that we do not control the fate of that child, however much we would like to do so. In forty years, we have learned that the final step needed to reach the child cannot be taken by us or by any of our governmental or nongovernmental partners; it can only be taken by the child's mother or some other family member. That step will not be taken unless she has the financial means, the knowledge and the confidence to use them. Once the family's resistance to new ideas is penetrated, and the protective shield which keeps the child's life and health in bondage is broken down, change may be desired. That first step on the road to changing the child's and the family's fortunes may be taken. At that point we can do our best through, and with, our partners at national, subnational and community level to ensure that the road taken leads to a place where the family can solve at least some of their problems. For many of the world's children, that process has begun to occur; for others, it may not occur within this generation.

Forty years on, forging the link which makes it possible for people to change the way they see and do things in ways that they control remains the continuing riddle of development. The child of poverty, in the dusty compound or the muddy puddle, is still waiting for us to solve it.

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