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Report from the Cities

*Cases in
Urban
Child Survival
Management*



PVO Child Survival Program 1985-1992

*“We used to play the role of silent observer.
So many infants died, and
we couldn’t do anything about it.
Now we know how to teach and advise
the mothers, and our babies are living.”*

Dedication: This publication is dedicated to the 11 pioneer urban projects within the PVO Child Survival Program:

East Africa

African Medical and Research Foundation in Kenya,
funded 1986, expansion grant 1990.

Minnesota International Health Volunteers in Kenya,
funded 1988, expansion grant 1991.

South Asia

World Vision Relief & Development in Bangladesh, *funded 1988, expansion grant 1991.*

Rotary PolioPlus in India, *funded 1987, expansion grant 1992.*

Save the Children Federation in Indonesia, *funded 1985, expansion grant 1989.*

Central America

LaLeche League International in Guatemala, *funded 1988, expansion grant 1991.*

Project Concern International in Guatemala, *funded 1986, expansion grant 1991.*

LaLeche League International in Honduras, *funded 1988, expansion grant 1991.*

Project HOPE in Honduras, *funded 1988, expansion grant 1991.*

Caribbean

PLAN International in Dominican Republic, *funded 1989 to present.*

Adventist Development and Relief Agency in Haiti,
funded 1985, expansion grant 1988.

In the first five years of the Child Survival Program (1985-90) the Agency for International Development committed over \$848 million to Child Survival in more than 60 developing countries. Over \$70 million of that total was used to support efforts of private voluntary organizations (PVOs) through the Bureau for Food and Humanitarian Assistance, Office of Private and Voluntary Cooperation. In turn, about 13 percent of the \$70 million was used to fund Child Survival projects among urban populations. Now, in 1992, the FHA/PVC PVO Child Survival Program supports 23 U.S. PVOs in carrying out 93 Child Survival projects in 28 countries; 17 of these projects are urban focused.

Congress in 1988 requested A.I.D. to undertake a study to determine the potentially adverse effects of urbanization and the ability of A.I.D.'s programs—and those of other donors—to address these problems. Fifteen years earlier, Congress had legislated for A.I.D. a focus on poverty in rural areas, in the belief that those areas were most in need of outside resources. Thus, public and private funding, coupled with congressional support, reflect increasing recognition of demographic and epidemiologic realities in developing countries: accelerated urbanization and rising rates of childhood disease in high-density populations.

A.I.D. has placed special emphasis on partnerships with the private sector in its child survival strategy. In particular, we recognize the tremendous potential of PVOs to leverage human and financial resources, to reach out and provide needed services to specific populations—including urban ones—that the Ministries of Health in many developing countries are unable to reach. Additionally, PVOs have demonstrated a unique capability to establish supportive relations with Ministries of Health, thereby increasing the PVOs' effectiveness in reaching the underserved populations.

Since PVOs have been in the forefront of child survival, it is appropriate that they were the first participants in the first urban Child Survival conference to be supported by A.I.D. The conference included 11 PVOs that have made significant inroads in child survival interventions among the "invisible" urban poor. Their lessons shared will benefit the whole child survival effort. But there is much to be done. Urban health problems are immense, and solutions to them demand rigorously honest attention and significantly more human and financial resources. As we look toward the PVOs to continue their leadership in these endeavors, A.I.D. stands committed to continuing its contribution to the vital program for child survival.



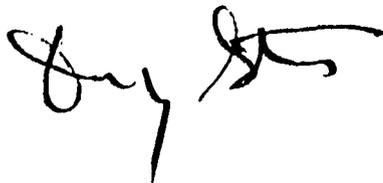
Sally H. Montgomery
Deputy Assistant Administrator
Office of Private and Voluntary Cooperation
Bureau for Food and Humanitarian Assistance
United States Agency for International Development

The children of the urban poor are in special need of protection. Problems associated with the poverty, poor education, and family disintegration characteristic of populations served by urban Child Survival projects threaten the practice of child protective behaviors. Indeed, all too often the urban child is homeless, displaced by civil strife or drought, orphaned by AIDS, or pushed out to beg, hawk goods, steal—whatever it takes to bring in money. The problems spill over into the clinics, hospitals, and religious and social centers of the cities in the developing world.

Private voluntary organizations need to expand and intensify their involvement in the alleviation of urban poverty. At the Urban Lessons Learned Conference, PVOs who work in markedly different cities found they had more in common with each other than with rural Child Survival project staff. This publication tells the unique story of urban Child Survival projects; examines constraints and strengths of community health projects in crowded city slums; and clarifies the similarities and differences between rural and urban programs.

The cases reported here are not models of faultless success. They are stories of commitment, innovation, and trial and error. Urban remedies sometimes require a different mix of services, unique delivery methods, and specialized materials.

Give careful attention to lessons learned by these urban Child Survival projects; PVOs starting urban health programs would be wise to adapt promising approaches and avoid known pitfalls. Most of all, remember that urban Child Survival programs are still in the experimental stages. Be open to change. The children need you.



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The staff of the PVO Child Survival Support Program cheerfully contributed time whenever needed. Penny Altman, Cynthia Carter, and Samilya Howard were key to the development of the PVO case studies—reviewing data, compiling and typing drafts. Their efforts were aided by Billie Walker, editor, and Lisa Calvert, typist. Sharon Winfield of Johns Hopkins University Design and Publications worked carefully on the layout, while April Eve Storms enhanced the publication by line drawings. Minnesota International Health Volunteers, ADRA, AMREF, and World Vision/Bangladesh kindly shared photos of their project sites.

A special thanks goes to all who participate in the urban projects for their dedication to child survival and their willingness to share information and experiences so openly. The collaboration with the U.S. private voluntary organizations makes it possible to give case reports that are truly informative and useful to urban health project managers.

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Introduction

Urban Growth and the Urban Poor

By the end of this decade more than half the world's population will live in cities, and 45 of the 60 largest cities in the world will be situated in the less developed countries of the world. If current trends continue, more than a billion people will be living in the slums and squatter settlements of overcrowded cities in Africa, Latin America, and Asia.

The source of this urban growth is a massive migration from rural areas to the city, fueled by rural poverty and the expectation of the increased economic opportunity and services that industrialized, developed areas can offer. But only a small number can realize their dreams. Economic depression, influenced by unregulated development and unpredictable markets, and the growth and concentration of populations (which of themselves create an additional economic burden and increased demand for services) make the realization of the dreams of rural immigrants of a better life difficult or impossible to reach in this generation.

Urban poverty presents special and difficult challenges to those working in child survival. The health problems of those living in slums and squatter settlements are linked to causes outside the scope of traditional health care. In their transitions from rural to urban life, many of the urban poor have lost their connections to the land, to food production, and to a stable, homogeneous community. Their communities are crowded, with poor sanitation; they lack access to social services and employment opportunities. They are subject to the health risks common in both rural and urban settings: infectious and diarrheal diseases, malnutrition, environmentally related illnesses, sexually transmitted diseases, violence, and alcohol and drug addiction.

Private Voluntary Organizations and Child Survival

Through the Child Survival Action Program, private voluntary organizations (PVOs) collaborate with international donor agencies and assist governments worldwide to promote the health of mothers and children, focusing primarily on the poor. Increasingly, PVOs are to be found working with urban neighborhoods to alleviate the worst aspects of poverty and promote greater community decision making in urban health and development assistance.

The Child Survival Action Program was initiated by the U.S. Agency for International Development (A.I.D.) in 1985 to address the causes of child mortality in developing countries by extending the use of available but underused technologies.

Over the succeeding eight years, a diverse number of PVOs have been awarded funding from the Agency for International Development, Bureau for Food and Humanitarian Assistance, Office of Private and Voluntary Cooperation (AID/FHA/PVC) through a competitive Child Survival grants program. For some PVOs, the child survival interventions are logical expansions of previous efforts; for others, the newly found capacity to address

community problems through public health measures broadens the scope of their historic mission.

PVO Child Survival projects most frequently include immunization against common childhood diseases; oral rehydration therapy to prevent death from dehydrating diarrhea; better nutritional status through optimal breastfeeding and weaning practices, growth monitoring, and prevention or treatment of vitamin A deficiency; control of pneumonia and malaria; prevention and care of high-risk pregnancies; child spacing promotion; and improvement of water supply and sanitation. In a few areas, PVOs have found it necessary to add components to address HIV/AIDS education and goiter control.

Some PVOs have large-scale projects in a dozen countries where service delivery is the main focus, while others have relatively small projects in one country focusing on community mobilization. In both large and modest projects, the PVO personnel are committed to the dual goal of improving health conditions for the most vulnerable of the communities in a manner that strengthens self-reliance and respect.



DORRY STORMS

The children of the urban poor are in special need of protection.

Urban Lessons Learned Conference

This report originated in an international conference held to gather lessons learned from the PVO urban projects. The question was whether the existing child survival strategies and management techniques that PVOs had developed in their rural Child Survival programs were appropriate to prevent childhood morbidity and mortality in high-density populations. A forum for sharing urban perspectives in child survival was thought essential to suggest some possible answers.

The conference would bring PVO project managers working in 11 urban Child Survival projects together with PVO headquarters staff; health specialists from academic, private, and government communities; A.I.D. representatives; and colleagues from collaborating agencies, PAHO, UNICEF, and WHO. The conference was held September 1990, at the facilities of the Centro Interamericano de Estudios de Seguridad Social, and of El Colegio de México in Mexico City, Mexico.

During the course of the conference, project personnel reviewed, discussed, and evaluated lessons learned in the field. They listened to technical presentations, made site visits to urban health projects in Mexico City, and worked on recommendations, sharing accounts of accomplishments and strategies

that they believed would best shape the future activities of urban and peri-urban programs in the developing world.

Early on it became apparent that the urban programs were broader than the traditional child survival focus on childhood infectious disease, seen in many rural programs. Delegates were confronting problems common to the urban environment: contaminated bottle feeding, substance abuse, HIV/AIDS, adolescent pregnancies, domestic violence, polluted water, piles of refuse, and smoke-laden air.

Strategic management was becoming a growing priority as new urban program areas had developed, crowding basic child survival interventions, making the projects "broader," both in scope and in the number of potential beneficiaries to be reached in the densely populated communities. In terms of management, PVOs identified more problems than solutions: volunteer turnover, high migration, overlapping agency responsibilities, and weak community participation where the sense of "community" was almost non-existent. While the new urban projects were struggling with these issues, they were also trying to keep sustainability a high priority in what are undeniably some of the most disadvantaged settlements anywhere.



Inadequate dietary intake and low purchasing power contribute to vitamin A deficiency in children of the urban poor.

Publication of Urban Case Reports

For many projects it was premature to describe full-fledged activities. The decision was made to await publication of a full report on PVO urban activities until most projects had completed three years of operation and been reviewed by an external evaluator. Then, case studies could be developed, citing innovations or obstacles, and the work remaining.

During the time following the conference, the PVO community continued to investigate several basic concerns:

Sustainability—How can effective urban child survival efforts be sustained and the scale of impact broadened after Child Survival funding ends?

Institutional growth—How can the institutional framework for community health programs of indigenous country or local non-governmental organizations best be fostered?

Urban programming—Which approaches are the urban project managers finding to be effective?

This year the conditions were met; external evaluations were completed and more became known about what PVOs consider effective in urban health and development. The projects, too, had moved to expand their scale of impact, in terms of number of interventions offered and size of beneficiary population. Of the 11 projects, 10 have received an expansion grant, and one is completing its final evaluation. Six projects have been operating for four years, three projects for two years, and the remaining

three projects have been in place for five to seven years.

The following pages summarize lessons learned by the 11 PVO urban projects, and the presentations and recommendations made at the 1990 Lessons Learned Conference, "Child Survival: The Challenges of Growth in an Urban Environment." The case study section was derived from the reports given at the conference, and updated with information from field visit annual reports, and 1991-92 midterm and final evaluations.



Conditions are difficult in this poor community; a stray dog scrounges for food.

DORY STURMS



*I. The Situation:
Cases from Cities in East Africa*

*AMREF Child Survival Project in Nairobi, Kenya
MIHV Child Survival Project in Nairobi, Kenya*

African Medical & Research Foundation/Kenya

AMREF's impact area is located in two slum areas within two Nairobi divisions, where live approximately 65,000 immigrants with little or no income. The population of Nairobi is growing at a rate of 10 percent per year. Acute shortage of housing has led to large, unplanned, and densely populated squatter settlements that lack sanitary facilities. In addition to poor shelter, there is high unemployment and low levels of education.

Infant mortality is estimated to be 125 per 1,000 live births in this urban area. The main health problems faced by the communities are diarrheal disease, respiratory tract infections, malaria, measles, and scabies. An estimated 35 percent of children under five are below two standard deviations of mean weight for age. Thirteen percent of infants ages 7-12 months and 46 percent of children ages 13-24 months fall into the category of mild to moderate malnutrition. Non-exclusive breastfeeding and early cessation of breastfeeding are problems; 34 percent of children are introduced to foods by three months of age. This may be a partial explanation of the high prevalence of diarrhea among infants age two months.

Service delivery points for immunization are within walking distance, but the facilities are congested and inefficient. This discourages mothers who want to spend minimum time on health care, as they have other things to do, including working for money.

In 1986, AMREF received a Child Survival grant to strengthen the maternal and child health interventions provided by the city of Nairobi. AMREF's strategy is based on three essential processes: community participation, community health volunteers, and appropriate technology.

Human Resource Management

Almost 360 AMREF-trained community health volunteers are responsible for the day-to-day implementation of the project. Volunteers are trained by project staff with the assistance of volunteers who have experience from a previous project. Initially, AMREF staff give volunteers three weeks of pre-service training, then continue with in-service training. Volunteer trainers also serve as supervisors.

AMREF gives non-monetary incentives to maintain the motivation and enthusiasm of the health volunteers who volunteer a minimum of 20 hours per month. Incentives include skills training, volunteer T-shirts, a calendar of activities, diaries, picnics, and priority clinical service at the Nairobi City Commission health centers upon presentation of a volunteer identification card.

The project has stressed training of health workers and has sponsored training for some very active Nairobi City Commis-



The older sister takes care of the babies while mother works.

sion nurses and intensified supervision and refresher training for project volunteers. The project has also trained traditional birth attendants in antenatal care, identification of high-risk pregnancies, safe delivery, and referral of obstetrical emergencies.

Primary school children take part in the project too. Using the strategy of the "Child-to-Child" program, students motivate their fellow children and parents about good hygiene. They also encourage their mothers to bring their younger siblings to the clinic for services.

Local community residents are active in planning, organizing, implementing, and evaluating the project's health initiatives. Community meetings are held monthly and, for the most part, are well attended. The success of the project very much depends on the participation of the community, but the economic, social, and cultural diversity makes community organization slow and very difficult.

The project has responded to the spread of the HIV/AIDS infection by holding two "AIDS Awareness" community meetings, which attracted 30,000 people. The purpose of the meetings was to raise awareness on AIDS and high teenage pregnancy in the neighborhoods. Central government officials, representatives of NCC, and other NGOs working in the area attended the meeting, which was facilitated by three AIDS patients who are trained counselors. One person who attended said, "This was a day when life came to a standstill. The meeting that was planned to last two hours, started on time, but went on for three more hours into the night."

Health Information System

The project's health information system is based on household registration with each community volunteer following 200-400 families. Families are eligible for enrollment if they have resided in the service area for at least three months.

Volunteers collect necessary data during household visits; the data are then tabulated by team leaders. The forms differ from those used in AMREF's rural health projects. (For example, AMREF has designed its protocol for identifying defaulters and for follow-up in light of the fact that families in urban Nairobi have access to a variety of health providers, including private doctors.) Health staff aggregate the tabulated data, analyze it, and present the findings to the community and the health center on a monthly basis. AMREF health staff also carry out baseline surveys and conduct operational research to supplement the quantitative data collected by the volunteers.

The Work Ahead

Urban slum dwellers seldom participate in making policies that affect their destiny. They live with a fear of eviction, which hinders their free participation in the development of the communities in which they live. Their insecurity results in a reluctance on the part of both landlords and residents to improve the housing and other amenities. There are many agencies involved in these urban slum settlements, but their efforts and resources are not coordinated to make an impact.

AMREF, in collaboration with the Nairobi City Commission, has played a major role in strengthening intersectoral coordination and collaboration. For the collaboration to be effective, it must operate at different levels—project, division, and province. But, the high turnover rate of City Commission staff and local leaders slows down the collaboration, since the new staff need time for adequate orientation before they can be effective in joint activities.

Another problem AMREF must overcome is the frequent migration found in these urban communities. Migration is related to an extremely high turnover rate among the community volunteers. Project staff must train new volunteers every two months. Frequent migration also is a major constraint to keeping an accurate up-to-date population register. AMREF will tackle the problem by developing a "to and from" transfer card.

The low income and weak purchasing power of the population present a challenge to improving community nutritional status. Although common weaning foods are available, the majority of the people earn such little amounts of money that they are seldom able to buy sufficient food.

Sustainability

The level of poverty in the community hinders any local financial support for project activities. Also, the urban poor have no political support for gaining access to resources with which to address their many problems. Development assistance professionals have suggested that family income generation activity is a possible means of achieving cost recovery and project sustainability. A recent study of community health in Kenya finds that income generation activities are not necessarily the answer to financial sustainability of projects. The study finds no direct relationship between successful income generation activities and increased community financial contribution to community health projects.

For an in-depth look at this issue, AMREF organized a "think tank" workshop in July 1991 for representatives of government and other non-governmental organizations. The participants recommended that project staff include persons who have skills in assisting communities initiate and manage income generation activities. The participants cautioned that strong income generation activities probably take more than two years to establish.



AMREF is strengthening the maternal and child health interventions provided by the city of Nairobi.

AMREF PHOTO

Minnesota International Health Volunteers/Kenya

The MIHV Child Survival project is located in Dagoretti, the western district of Nairobi, Kenya. The project concentrates on three locations of Dagoretti which surround the Chandaria/MIHV Health Center. The people of Dagoretti are settled in relatively stable villages that have informal boundaries known by the village chiefs and chairmen. A recent decision of the Government of Kenya to open certain areas in Dagoretti for squatters to establish residence is resulting in very rapid growth of the population to be served by the project health center.

Although the population is predominantly one ethnic group, Kikuyu, the area is extremely heterogeneous economically. It is a mix of a few relatively affluent landowners; a large body of laborers, artisans, and service workers who supplement cash employment with subsistence farming activities; and a growing population of landless, mostly unemployed squatters who frequently lack any substantial resources or family ties.

Although immunization coverage is very high (96 percent), childhood diarrhea and respiratory infections are problems. The project baseline survey showed that 17 percent of the children under two had experienced diarrhea in the last two weeks; 40 percent of the under twos had a cough and difficult breathing in the last two weeks. Home management of diarrhea is poorly understood by mothers living in the area. The baseline survey showed that when treating childhood diarrhea, nearly one-

fourth of the mothers reduce or stop breastfeeding entirely; 22 percent of mothers give less milk or other fluids, 71 percent reduce or stop feeding; and only 17 percent use ORS packets.

The MIHV project supports a primary health care program consisting of staff, community health workers, a network of community health committees, and an operations center in the Chandaria/MIHV Health Center. MIHV selected the project site in consultation with Dagoretti government officials, village leaders, the Nairobi City Commissions' Departments of Public Health and City Planning, the Department of Pediatrics of the University of Nairobi Faculty of Medicine, and other non-governmental organizations. Community members cite poor access to water, limited accessibility, and low quality of primary health care, unemployment, and poor sanitation as major problems. They also express a desire for better nutrition and health education.

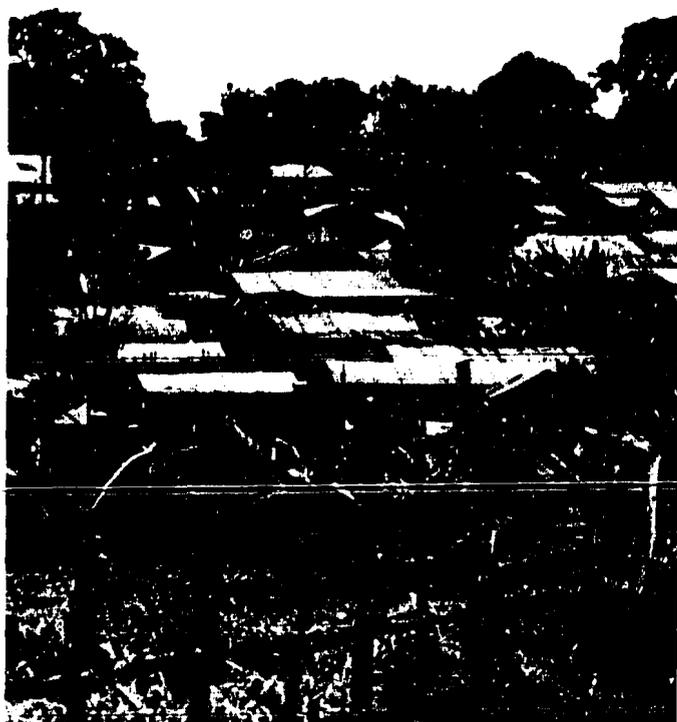
Human Resources

The community health volunteer is the foundation of the MIHV Child Survival project. Community health workers review children's health cards and refer defaulters to the health clinic. They educate mothers about proper feeding practices for the child who has diarrhea and how to prepare and administer ORS. Through home visits, community health workers refer infants to the health center for growth monitoring and conduct follow-up home visits. They educate the community about preventing AIDS and STDs. In addition, community health workers promote environmental action. The project assists its workers to serve as model households by assuring that every health worker has a safe, clean, well-ventilated latrine; a well-kept garbage pit or common garbage collection point; a safe, fuel-efficient means of cooking; adequate household ventilation, and safe water supply or a means of purifying water.

In the first two years MIHV trained 120 health workers and expects to train 300 by the end of year three. They are experiencing a 20 percent dropout of health workers. The project minimizes dropout by stressing group interaction. MIHV has come to accept that not all health volunteers are able to devote the same amount of time each week, and that the time each volunteer has to give can vary from week to week.

To assist the supervision and reporting of the volunteer's work, a new category of volunteer, called community health worker representative, has been created. (The word supervisor has negative connotations in the project area and therefore the project management wishes to avoid the use of the term.) Each worker representative is responsible for 10 volunteer workers.

Before the project began, MIHV held over 60 meetings with women's groups, church groups, and chiefs' barazas (town



MIHV PHOTO

Housing in Dagoretti, Kenya



MIHV PHOTO

This woman is proud of the health center which community committees planned and the MIHV project supports.

meetings) to discuss the objectives of MIHV and the rationale for community health care. They sought the community's input on health problems and related community development concerns. Now, three established area health committees and a joint health committee work alongside the Child Survival program. For example, the joint health committee identified specific environmental concerns and recommended action to deal with polluted water in the streets and improperly constructed pit latrines. A subcommittee was established, and a ventilated pit latrine was built in the market area as a demonstration project. Other volunteer efforts were coordinated for burying garbage, draining ditches, and burying water-containing vessels for malaria mosquito control. These committees also participated in the planning of the new health center.

Health Information System

Representatives meet monthly with their assigned health workers and collect information regarding number of home visits, ORS training sessions, and follow-up visits made by the health worker; number of reported cases of diarrhea, measles, tetanus, and accidents; number of referrals made to the health center; and number of vital events (births, deaths). The project officer at the Health Center then reviews and summarizes these data.

The Work Ahead

Collection of data from community volunteers has been difficult. The initial forms adopted by the project for volunteer reporting were designed for recording by staff at a supervisory level. New forms are being developed to facilitate the collection of data by volunteers. These forms will include referrals made and referrals actually seen at the Health Center, as well as sustainability indicators, and indicators for the child survival interventions.

The issue of incentives continues to spark intense discussion. At present, it is expected that assistance provided to volunteers to enable them to serve as model households will provide a sub-

stantial incentive for volunteers to remain with the project. Such assistance includes a regular allotment of detergent and bleach; assistance in organizing groups to construct pit latrines, rubbish pits, and water storage tanks; and perhaps the provision of building materials for volunteers, if donors can be found. Volunteers also receive the proceeds of a kiosk on the grounds near the Health Center, which sells soda and food to people working in or attending the Health Center.

Sustainability

MIHV plans to maintain the community expertise and infrastructure which have developed during three years of the project. They have identified seven primary strategies they will follow to further sustainability:

- (1) Integrate the primary health care program into the health center by sharing staff, office space, supplies, and transportation to reduce financial burdens;
- (2) Continue development of a cooperative relationship with the Ministry of Health;
- (3) Develop income-generating projects;
- (4) Develop relationships with other health centers, organizations, and governmental agencies;
- (5) Develop an organizational structure to continue the ownership and management of the Health Center;
- (6) Team Kenyan counterparts with American volunteers to continue to transfer skills and knowledge;
- (7) Continue to emphasize community involvement and volunteerism.

The PVO believes that the Child Survival program cannot be sustained without the involvement of paid staff.



MIHV PHOTO

Children play around the gate of the fence surrounding the Chandaria-MIHV health center.



Cases from Cities in South Asia

WV Child Survival Project in Dhaka, Bangladesh

Rotary PolioPlus in 10 Cities of India

SCF Child Survival Project in Jakarta, Indonesia

World Vision/Bangladesh

Urban Dhaka is a rapidly growing city and is now believed to contain more than 6 million people, many of them recent immigrants from rural areas. Living in shacks and small, crowded, often mud-floor dwellings, they inhabit land built over silt deposits and garbage heaps, often near factories where some hope to find work.

The city is divided into wards, each containing 50,000-100,000 people who depend on the Dhaka Municipal Corporation for municipal services, including primary health care. In 1988, under the supervision of the Dhaka City Corporation, World Vision took on the challenge of working in Kamalapur ward, with an estimated population of 77,000. This was a timely start as the people of Kamalapur suffered a disastrous flood soon after the project began. This forced World Vision into a relief mode at the beginning of the project, but they were eventually able to begin child survival activities, motivating families to adopt and sustain positive health behaviors.

A key step was the geographic subdivision of the ward population to the neighborhood service level. The ward is subdivided into two zones, and the zones into 12 compartments. One com-



DR. FARUQ

A community health volunteer demonstrates preparation of ORS for mothers.

munity health worker and 8-12 community volunteers are responsible for services to a compartment of 900-1200 families. Compartments are further subdivided into 8-12 neighborhood clusters each to accomplish door-to-door coverage. There, local leadership can participate in training neighborhood families in health-related behaviors.

Human Resources

The project depends on three types of community resources: neighborhood health committees, community volunteers called resident home visitors, and mothers' groups. When the project began, however, there was no local infrastructure to help project staff identify neighborhood leaders and establish local committees, and scant information available—no maps, household identification system, no demographic or socioeconomic data. Community health workers reported that in the early stages of the project it was difficult to interest anyone to join the neighborhood health committee. Committees were formed primarily on the basis of who showed up and who was willing to help.

At first, local leaders, slightly better off economically than others in the ward, were reluctant to be involved in this new initiative. It took most of the year after the flood to sensitize them. Eventually, the old attitude of "someone else should do something about the poor people encroaching on the land" changed, and now, people from different socioeconomic groups take part in the project.

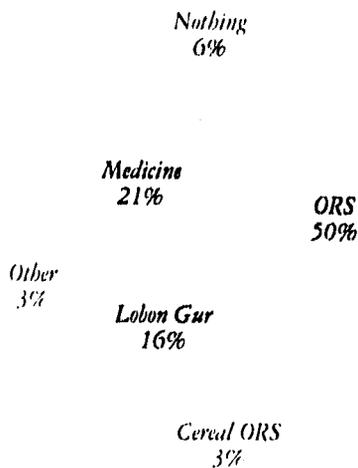
Community volunteers are literate local residents. Many are young students who are eager for more training in almost any area of their lives. During home visits, the volunteer educates families on oral rehydration therapy, optimum breastfeeding and weaning practices, and family planning. The volunteers also give personal invitations to parents of eligible children under two years to attend immunization clinic and vitamin A capsule distribution sites. The volunteer is trained and supervised by a project-trained community health worker. A supervision checklist is used by each supervisor to ensure the quality of work done by the volunteer during home visits.

The mothers' groups are comprised of mothers who are mostly illiterate, but eager to learn and train other mothers in health behaviors. The mothers' groups appear capable of reporting health statistics for their neighborhoods and could form the nucleus of a rally post.

Health Information System

The project health information system is based on population registration. Because a number of highly transient people reside in this urban slum, the health information system classifies the project beneficiaries as "registered" (residing in the area for six months or more) or "unregistered" (transient). The unregistered

Treatment Given to Children under 24 Months with Diarrhea in Last 2 Weeks, 1991
World Vision/Bangladesh Child Survival Project



Source: Final Evaluation Child Survival K&P Survey

population poses problems as it is difficult to reach with health messages.

The volunteers carry rosters of children under age six and women 15-45, and keep a diary to report vital events and migration. The volunteer reports monthly to the neighborhood health coordinator using a one-page reporting format. The health information system takes approximately 10-15 percent of the project worker's time.

In the first two years, the project conducted six sample surveys. Heeding the suggestion of the midterm evaluation, the project reduced the frequency of surveys. Also following a midterm evaluation recommendation, the project eliminated several forms, including birth and death registers.

The Work Ahead

World Vision's challenge in the next program phase will be to respond to the ideas of neighborhood health committees in ways that are both helpful and, at the same time, encourage self-reliance. Some neighborhood committees are making effective links with local government resources. For example, one health committee approached the Dhaka City Corporation's accountability section to ask for assistance in mosquito control; another worked on the removal of garbage that was collected by the community; another identified a government food-for-work program that could benefit the community.

The communities are also introducing new social roles—for example, there is significant female leadership in neighborhood committees. Although, the whole concept of a neighborhood

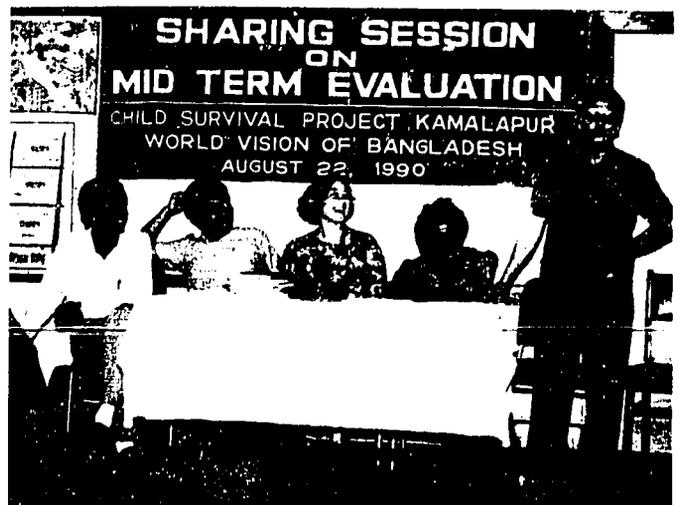
health committee is new to urban Bangladesh, government leaders and local residents express interest and excitement about the concept. One satisfied committee member said, "There has never been such an assembly, and we are very interested to see that even in the slum of Kamalapur we can organize to help ourselves."

Another challenge for the project is to make progress in improving the nutritional status of infants and children. Bottlefeeding, mixed feeding, and early weaning of infants are problems found in the Kamalapur wards. Home visits reveal cases of severe malnutrition.

Sustainability

Over the past three years, the community has increasingly participated in the implementation of the project. If, however, project activities are to continue once Child Survival funding ceases, the community will need to increase its participation in program planning and its contribution of local resources.

Part of World Vision's sustainability plan includes increasing community demand for health services and willingness of families to seek services from elsewhere. Services will hopefully be maintained by counterpart institutions. World Vision has tried to keep the costs low; they calculate that the cost per potential beneficiary is \$4.25 (US dollars). The Ministry of Health and Family Planning already provides all vaccines, vitamin A capsules, and other logistical support, while the Dhaka City Corporation works with the Ministry of Health and Family Planning to provide training and supervision to community health workers, volunteers, and neighborhood health committees. The potential for sustainability would improve if Dhaka City Corporation were to establish a fixed health facility in



DR. FARUQ

One of the evaluation team members, the director of Primary Health Care at the Ministry of Health & Family Planning, speaks at the sharing session.



A trained community volunteer conducts a health education session for mothers.

Kamalapur ward, and if there were an urban immunization policy, neither of which exist now.

This urban project identified four difficulties that hamper sustainability: (1) uncertain institutionalization by the City Corporation or the Ministry of Health; (2) lack of government infrastructure; (3) political instability and (4) the slow pace of change in the social services sector. World Vision will investigate local institutional development in the schools as a long-term strategy for health and other development interventions.

"It came about when local leaders began to see that everyone, including themselves, could benefit from better health and sanitation practices and that no one should be left out... then they began to get involved."

—Staff member, WV/Bangladesh

Rotary PolioPlus/India

This Child Survival project is unique in that its efforts are concentrated on a single intervention. The PolioPlus Program in India is part of the global effort by Rotary International in support of the Expanded Program on Immunization of developing nations. The India program started in 1987 with a Child Survival grant from USAID of approximately \$4.9 million. The purpose of this project is to strengthen India's Universal Immunization Program in urban areas.

When the grant started, the objectives of India's Universal Immunization Program were to reduce morbidity and mortality due to six vaccine-preventable diseases by fully immunizing at least 85 percent of the children before their first birthday with three doses each of DPT and OPV, and one dose each of BCG and measles vaccine, and to provide two doses of tetanus toxoid to 100 percent of pregnant women. The Rotary PolioPlus project in India specifically pledged itself to the eradication of polio in India by the year 2000, though it promotes all vaccine antigens.

Considerable progress has occurred. Polio immunization coverage has increased from 41 percent in 1985 to 85 percent in 1991, with a concurrent decrease in the incidence of the disease (9,000 cases reported in 1990 versus 40,000 cases in 1989). This has been accomplished through the planning, with the government, of widely publicized national immunization days, the development of training and program materials that support volunteers in the education of the population, and the purchase for distribution of 20 million doses of polio vaccine.

The project supports two major aspects of the government's immunization program: (1) provision of enough vaccine to immunize approximately 72 million children; and (2) generation of widespread domestic private sector support for the Universal Immunization Program by motivating 50,000 PolioPlus Task Force volunteers consisting of Rotarians and other social-minded non-Rotarian citizens of the country. The motto REACT (Rotarians REACT to the Immunization Challenge) spells out the work of the volunteers:

Raise awareness levels about the need for immunization

Enumeration, help with registration and follow-up

Assist at immunization sessions

Cold chain support

Track progress in immunization coverage and disease reduction

The volunteers work in close cooperation with the government at all levels.

National Immunization days are produced by the Government of India with support from Rotary, the Indian Medical

Association and other service groups. The events take place at standard government health posts. All vaccine antigens are given. "Pulse" immunization days supplement routine vaccine services by providing extra protection during non-epidemic months, when sero-conversion to vaccine is higher, and before the rainy season when disease transmission presents a greater risk. Prior to immunization days, Rotarians organize awareness marches in cities to prime the public throughout India for the events.

In addition, PolioPlus has completed three videos and distributed them to clubs throughout the country. The latest uses celebrities, graphics, and local footage to demonstrate what it means to be a "Model Club" for PolioPlus, and to get involved in local and ongoing immunization activities. Good collaboration with local health officials, a detailed action plan, and a monitoring committee that meets monthly are among the main points of instruction. Project contributions from the corporate sector have ranged from printing immunization campaign announcements to the replication of 1,000 copies of a PolioPlus video free of charge.

Human Resources

India's Rotary clubs have trained community-based volunteers who focus on increasing the people's participation in being immunized. The clubs have recruited and mobilized volunteers from its 1,642 clubs and 58,000 members and a corps of nearly 50,000 volunteers who work in urban high-risk areas. The volunteers pledge to donate 1,000 hours of their time to the PolioPlus Program. They focus their efforts on poor, crowded urban and peri-urban communities, identified by health officials because of low immunization coverage.

Volunteers are trained at community workshops organized all over the country. Workshops for government EPI and Rotary participants are produced by PolioPlus during the spring. The community workshops are held in states where immunization programs require the greatest support.



DOBY STOKAS

Dr. Dinesh Mohil is an epidemiologist who has committed his efforts to the Rotary PolioPlus urban program to fully immunize children before their first birthday.



EVERY STORY

Volunteers help raise awareness about India's Universal Immunization Program.

The Rotary PolioPlus Committee is organized at the national level and replicated through the club structure of India; training workshops are held at each level, and for the community at large. Indian clubs are encouraged to "adopt" underserved districts. A Rotary Club in Delhi, for example, exemplified local activity when it got together with the EPI director and PolioPlus staff to conduct the following: 1) enumeration of an area in Delhi with very low coverage; 2) a "Walk for Immunization" with posters, banners, and loudspeaker announcements; 3) three immunization mobilization camps, one day each in January, February, and March.

The Work Ahead

The project is involved in refining strategies to use its human resource potential more efficiently and effectively. Teachers and students serve as educators/communicators for special activities. Volunteers' training includes surveillance, and the Rotary Club network is strengthened by published communications.

The next stage of the project will move the project ahead to coverage and surveillance strategies, through routine and specialized activities. Future strategies include linking Rotary

clubs with specific PHC/Health centers, implementation of new projects at local levels, as well as continued exploration of corporate sector support.

Sustainability

This project has been notable in making use of large numbers of volunteers. Progress toward the achievement of its goal is attributed, in part, to interpersonal contact between Rotarians and other members of the community, and Rotary's collaboration with the government. Mass media campaigns alone are not enough to generate or sustain increased demand for, and acceptance of, immunization.

An issue is the maintenance of the high level of volunteer enthusiasm on such a widespread basis. The intensity of mobilization days can be followed by a letdown in interest. It is necessary to identify means of keeping volunteers involved on an ongoing basis. Continued effort to mobilize all levels of people and organizations necessary will be needed to sustain this program until the eradication of polio.



A child is being vaccinated by a public health nurse at a static center.

Save the Children Federation/Indonesia

The poor areas of Jakarta are crowded, unsanitary, and lack basic infrastructure. In 1986, Save the Children started an integrated urban development program in Kelurahan Duri Utara, Jakarta, with child survival as the entry point. After the completion of the first three years, SCF obtained additional funds to expand the program in two additional sections of the city and increase the beneficiary population fourfold.

The major causes of death in the area are related to immunizable disease (especially neonatal tetanus and measles), diarrhea, malnutrition (often with complications from tuberculosis), low birth weights, too frequent births, maternal under-nourishment, and dengue fever. The overall goal of the Jakarta project is to increase infant, child, and maternal survival.

SCF facilitates the training of community health volunteers, called kaders, so that they can organize community health education, assist with volunteer health posts called posyandus, and make home visits when appropriate. The Ministry of Health's Posyandu Action Program is an integrated community health outreach service, held monthly, for children under five years of age and pregnant women.

Human Resources

A system of regular home visits by kaders takes place every three months to all households that have children under five, pregnant women, and couples eligible for family planning. Kaders conduct health education, distribute ORS packets and dengue fever larvacide, and collect health data during the home visits.

The child survival activities revolve around the kader and her motivation to conduct home visits, report activities, attend the posyandu and coordination meetings, and prioritize visits to the homes of the most "at risk" women and children. Necessary qualities in a kader are a sincere concern about the community, eagerness to learn, literacy, and most important, internal motivation to do a good job. The fact that kaders are not financially compensated for their services makes it difficult for the poorest women to volunteer.

Focus group discussions confirm that the inactive kaders perceive monetary incentives to be a prerequisite, while those who are active and highly motivated value the monetary incentives as merely a surprise, not a driving force. Non-financial incentives that the active kaders appreciate include moral support and recognition.

Supervision is sometimes too narrowly defined by government systems. SCF considers supervision an opportunity to identify and solve problems, and tie performance monitoring to skills development. SCF has persistently nurtured the kaders, and this has helped in retaining volunteers. Compared to the

national rate of kader attrition (more than half), the project-associated kaders show more job tenure. SCF found that only 38 percent of the kaders they train in home visits and health data collection leave after two years of service.

Health Information System

Kaders collect health data from the households during their regular home visits. An evaluation found that 72 percent of residents had recently been visited by a kader. One can assume that the manual system is working well to enroll residents. Kaders are paid to do the family enrollment, but they are not similarly compensated for updating health records. Data collected during home visits are entered into the computerized health information system, but the bases of the system are manual records and rosters kept by the kaders.

The Work Ahead

SCF is debating whether their present health information system is too cumbersome to apply in this urban area. SCF has found that as the project expands beyond its original geographic area to include a much larger population, it is increasingly difficult to maintain adequate supervision for carrying out project interventions and overseeing the health information system. Recent in-migrants, who would benefit most from receipt of health messages, fall outside the enrollment system. SCF is attempting to modify the approach they developed during the initial, much smaller Child Survival project.

SCF will also expand the cultural diversity of kaders. Evaluation showed that Chinese residents are not as likely as other Indonesian residents to use the posyandu. The reason for this may lie in barriers related to ethnicity. SCF will attempt to address this by recruiting more Chinese kaders.

Sustainability

In reviewing which activities are most key to the project's success, SCF/Indonesia staff identify kader training and supervision as those which have the greatest chance of continuation. Thus, it is concentrating its efforts on institutionalizing a health coordinator position within the Ministry of Health structure. This position is a function previously performed by SCF staff, and provides the community with someone who can continue with training of trainers, and coordinate kader in-service and continuing education after Child Survival funding ends.



Cases from Cities in Central America

LLI Child Survival Project in Guatemala City, Guatemala

PCI Child Survival Project in Santiago Atitlan, Guatemala

LLI Child Survival Project in San Pedro Sula, Honduras

HOPE Child Survival Project in Tegucigalpa, Honduras

LaLeche League International/Guatemala

The LaLeche League Child Survival project operates in 17 low-income peri-urban communities of Guatemala City. Like its counterpart in Honduras, LaLeche/Guatemala directs its efforts toward the promotion and support of optimal breastfeeding practices, specifically exclusive breastfeeding for the first six months. The impetus of the project is preventive in character—to support the lactating mother so that her infant will continue to get only breast milk for the first six months, and thus will not be as likely to get ill with diarrhea or respiratory infections and need medical intervention.

LaLeche League information, education, and communication campaigns educate and motivate mothers, health care providers, community leaders, and national policy-makers by presenting the benefits of breastfeeding and discouraging the early introduction of unnecessary supplements. Although a breastfeeding booklet, poster, slide presentation, or radio series stimulates interest in breastfeeding, experience has shown the need for continuous promotion of breastfeeding. This requires direct person-to-person contact and support of mothers in order to sustain and greatly increase the duration of breastfeeding. LaLeche has documented that breastfeeding promotion support groups, on the average, increase the duration of exclusive breastfeeding to 143 days.

The project works at the community level to support and supervise breastfeeding-mother support groups, trains community volunteers called breastfeeding advocates, conducts adolescent development and physiology sessions for adolescent females, supports the formation of community health teams, and trains staff of non-governmental and private voluntary organizations in breastfeeding management and support. After nearly three years, the project had reached more than 31,000 mothers through support groups, informal contacts with advocates, and training health promoters and community members.

Municipal health services can, unfortunately, be a constraint to increasing the prevalence of breastfeeding. To remedy the situation LaLeche has found it necessary to provide breastfeeding promotion and support training to staff from the Ministry of Health clinics, public hospitals, and private hospitals, and include midwives in the training program. This makes for consistency of breastfeeding messages and facilitates appropriate help for a mother who experiences problems with breastfeeding her child. For example, during the cholera epidemic, League project staff collaborated with government health teams in the organization of rehydration centers for cholera patients and gave training sessions to nurses at the local hospital on cholera and breastfeeding. LaLeche League/Guatemala also holds regular breastfeeding training sessions for medical students, teachers, community midwives, physicians, and nurses.

One unusual feature is the special attention the League gives to adolescent mothers and mothers of premature babies enrolled in two local general hospitals. Mothers are trained in the "kangaroo method." This innovation (which originated in a hospital in Bogota, Columbia) consists of the mother carrying, skin-to-skin, an infant between or against her breasts rather than the infant being placed in an incubator.

LaLeche League/Guatemala has seen growth in the numbers of people it involves, and in the breadth of its approach. It is better linked to other Child Survival interventions and has been quite innovative. For example, project staff determined that working mothers in peri-urban communities have a problem storing expressed milk in the heat of their homes without refrigeration. A project staff member invented a breast milk cooler made from materials available in the communities at little or no cost. A guide demonstrating the assembly and use of the *lactogelador* was written and distributed in the community.

Human Resources

In three years, project staff trained a total of 136 female volunteers from marginal urban communities as breastfeeding advocates, 99 of whom are still actively involved—a retention rate of 73 percent. It took some time to introduce the concept of breastfeeding advocacy and gain the trust of the women in the community. Of the total number, more than 50 percent of the advocates were trained in the third year of the project. LaLeche has found that volunteer incentives and recognition are important motivators and so are continued educational opportunities. The project offers inservice education to advocates through regularly scheduled workshops and meetings.

Although the emphasis is on breastfeeding support and management, the LaLeche project has made a special effort to promote other important child survival interventions. For example, the advocates are oriented to all of the child survival resources in their communities. Advocates refer mothers and infants to health centers for prenatal care, family planning, vaccinations, and treatment of chronic diarrhea.

LaLeche's strategy is to train women volunteers as breastfeeding advocates, and the advocates, in turn, start mother support groups. Sharing experiences contributes to learning by each group participant. LaLeche/Guatemala volunteers initiated 40 breastfeeding-mother support groups of which 25 were still active by the third year of the project. Groups meet at least once a month; 277 meetings were held over a period of two years and three months, with the number of meetings per month increasing each year.

A.I.D.'s Child Survival funds have also helped this PVO create a stronger institutional base. LaLeche International increased staff interactions with other agencies, including technical assis-

tance. The League collaborates with CONAPLAN and the Instituto de Nutrición de Centro America y Panama. An A.I.D. contract to promote child spacing has developed alongside the Child Survival project. With assistance from CONAPLAN, the League tested training materials on a simplified lactational amenorrhea method of child spacing and trained advocates in the method.

Health Information System

The advocate records information about the mother support group meetings on a special sheet and records informal contacts and referrals on a recently developed Child Survival Intervention Calendar. The project staff then compile the numerous advocate report forms. The project manager receives monthly activity reports from advocates, monthly reports on individual support group meetings, and quarterly reports on active/inactive advocates and groups. Data from reports are shared with advocates at trimester workshops, and the results of project data collection are shared with community health workers at bi-monthly technical health team meetings.

The project carried out a Child Survival Knowledge and Practice baseline survey to get a better understanding of community-wide beliefs and practices of mothers of young children. A repeat survey is scheduled for the summer of 1992. Pictorial summaries of the results of the latest K&P survey will be shared with a pilot community.

The Work Ahead

This PVO has attempted to obtain quality data within the limits of the breastfeeding advocates who collect basic project data. The system still is being refined. At present the number of forms is considerable: individual mother and group sheets, coordination reports, technical assistance reports, continuing education reports. According to the recommendation of DataPro consultants and community requests, an evaluation form will be developed for use before and after mother support meetings.

Initially LaLeche League did not take seriously the need to assess realistically the volunteers' understanding of the task ahead. Many volunteers dropped out as they encountered the realities of their work. Now LaLeche League has developed new interview procedures to help the potential advocates understand more about the expected responsibilities and commitments.

Sustainability

Project staff have learned that LaLeche must have a clear strategy for keeping in regular contact with trained advocates. They must estimate volunteers' abilities realistically, and continue to motivate volunteers by reinforcing an understanding and commitment to their work. Without the work of volunteer advocates, the breastfeeding support activities will cease to exist.

Communities must be motivated as well. The League is seeking to increase the involvement of community organizations in Guatemala in the identification and support of advocates so that community organizations will assume more "ownership" of the program and facilitate the continuation of the breastfeeding-mother support groups.



Project Concern International/Guatemala

PCI/Guatemala carries out a Child Survival project in the municipality of Santiago Atitlan, which has a population of 28,984 members of the Tzutuhil linguistic group. Although the location is a rapidly expanding market town, almost all heads of households in Santiago sustain their families through small scale farming, migrant labor on the coastal plantation, or as laborers on the surrounding farms.

The PCI project supports the Ministry of Health program called "channeling," a family registration system which seeks to bring selected health services to each home as well as to improve use of health facilities. Maternal and child health volunteers provide community outreach services. Each volunteer forms a mother's committee or father's committee within her assigned service area. Through monthly home visits and group educational meetings, the volunteers promote changes in family health behavior and increased use of available health services.

The program functions on a fee-for-service basis. To increase

participation, PCI arranges that families enrolled in the program receive a "price break" at the Clinica Santiaguito Hospital.

Human Resources Management

The project works with approximately 125 volunteers, the majority of whom are illiterate. In addition, this community project has trained 19 traditional birth attendants to promote tetanus toxoid vaccine for eligible women.

Both rural and urban child survival projects stress the importance of having government health workers support the volunteers and provide referral services for the more serious health problems. The support is essential to raise volunteer morale and assure quality of job performance, and encourage job tenure. But in one service area, the government health post personnel do not wish to work with the trained volunteers. In a second area, the Ministry of Health has great difficulty maintaining governmental health staff.

Health Information System

The volunteers use a system of *croquis*, or map sketches, to track home coverage. During the monthly home visit, the volunteer records, on a very simple pictorial form, the significant events that have occurred since the last visit. This includes recording births and deaths of children under five years, cases of diarrhea, cases of malnutrition, completed immunizations, and packets of oral salts distributed to the home.

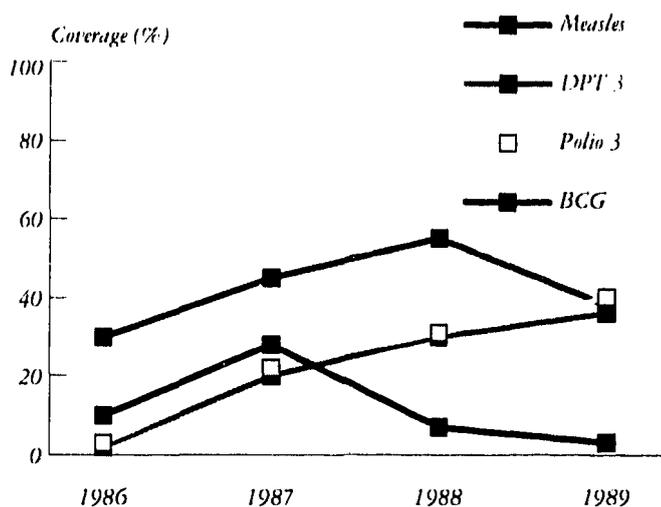
At the clinic, the PCI project director aggregates the data from each volunteer to create overall statistics on illness and coverage for the entire service area. Volunteers and traditional birth attendants receive feedback during monthly meetings.

Sustainability

Continued guerilla activity makes it difficult to keep to the planned schedule of activities. For example, PCI/Guatemala postponed a training course, as well as a planned survey, for three months due to periods of political difficulties. The unrest also affects the participation of volunteers. An average of 81 percent of volunteers report weekly. The figure fluctuates with the level of violence in the community. In such circumstances, the project may be unable to develop a sustainable program.

Antigen-Specific Coverage of Infants in Service Area by Year, 1986-89

PCI/Guatemala Child Survival Project



Source: Final Evaluation, 1989

LaLeche League International/Honduras

Numerous studies show that non-breastfed babies under six months of age are at a higher risk of dying than breastfed babies of the same age. In Honduras, LaLeche League is attempting to adapt the model of mother-to-mother support of breastfeeding to fit the needs of urban poor women. This innovative project is promoting optimal breastfeeding practices in San Pedro Sula, and in the departments of Cortes, Santa Barbara, and Copan, for 83,335 pregnant women and mothers of children under two years of age, with special emphasis on adolescent mothers.

LaLeche League considers any baby born and raised in a low-income environment who is bottlefed (or mixed bottle and breastfed) to be "at risk." The 1990 baseline survey in San Pedro Sula showed that the prevalence of exclusive breastfeeding was quite low. More than three-quarters of mothers of children under age two introduce water, along with milk, in the first two months following birth.

The project is preventive in character. Breastfeeding is an intervention that has an impact on many different aspects of health, such as control of diarrheal diseases and acute respiratory infections and prevention of vitamin A deficiency. LaLeche League tries to reach the pregnant and lactating mother before any medical intervention is necessary for the child. But, when curative services are necessary, proper breastfeeding practices continue to be of paramount importance. (A good example of this is the advice to mothers to continue breastfeeding when the child is ill with diarrhea.)

LaLeche's chief message is "exclusive breastfeeding for the first six months of life." LaLeche League uses a variety of channels to communicate their breastfeeding message—person to person, the media, and group sessions. Mothers learn about the value of exclusive breastfeeding and techniques to maintain successful breastfeeding through mother support groups, informal contacts with volunteers, and through the help given to mothers who call or visit the LaLeche League office for breastfeeding counseling. The project staff also produce a weekly newspaper and a weekly television program about breastfeeding, and give talks to local groups.

Human Resources

The project recruits women for training as breastfeeding advocates, called *consejeras*, through formal contact with non-governmental organizations working in health activities and through health institutions operated by the Ministry of Health and the Social Security Institute. Volunteers promote child survival through breastfeeding-mother support groups and informal community contacts. The project gives them a small monetary incentive. This incentive is usually a stipend for expenses incurred at refresher training and coordinator meetings held by the project, or for expenses involved in the advocate's conduct-

ing groups outside her assigned community.

LaLeche League is experimenting with placing breastfeeding advocates in two health centers and one government hospital. The advocate working in the hospital helps the mothers of premature newborns and other newborns who are hospitalized. She began in September 1991 and in one month spoke to 780 mothers. Her work in the milk bank has helped the hospital nurses to accept the ideas of exclusive breastfeeding and lactation management.

The advocate gives practical help to the hospital staff. For example, she recruits the mothers of babies with problems to be the subject of a "case study" for the doctors and nurses. During the case presentation, the group discusses feeding procedures and ways the mother could be involved in caring for her hospitalized baby. In November 1991, the mother of a baby with septicemia participated in the case study. The mother's breast milk was being discarded, and the baby had not been recuperating. After discussing the case, the nurses agreed to try the baby on mother's milk alone. The baby improved so much in three days that the hospital staff allowed the mother and baby to return home. With such encouraging results, the Ministry of Health is considering forming similar programs in other areas of Honduras.

LaLeche League also teaches health workers from other non-governmental organizations how to integrate promotion of exclusive breastfeeding with other child survival interventions, such as immunizations, nutrition education, and maternal health. This addition has proved to be an important modification of the LaLeche League model. Both advocates and the mother support groups played an important role in educating mothers about preventing dehydration due to diarrhea when cholera cases were confirmed in Honduras at the end of October 1991.

Project management estimates that each trained health professional reaches five women, and each trained community member reaches one additional woman. By expanding their breastfeeding promotion beyond the formation of mother support groups, this project has achieved greater impact in the peri-urban areas of Honduras. Important affiliations include members of the community health care center, other community-based groups, non-governmental organizations, selected midwives, and existing health providers.

Another innovative strategy developed by this urban project is the use of referral coupons to encourage a mother's attendance at health clinics for family planning, as well as for other child survival support activities.

The Work Ahead with Mother Support Groups

It is a challenge to organize breastfeeding-mother support groups among urban poor, sometimes illiterate women. Issues of mistrust, reluctance to share concerns, and unease at speaking in a group face every new breastfeeding support group. But, the evaluations of the mother support groups show that members are exclusively breastfeeding for longer periods of time. These findings suggest that although group meetings are more difficult to organize, support groups are more effective than individual contacts in promoting exclusive breastfeeding. The group seems to represent the urban version of the extended family that is common in rural areas.

LaLeche League has experienced several problems in working with groups. The first problem was the PVO's inexperience in the formation of mother support groups in a poor urban population. They also had difficulty in identifying appropriate and reliable female community leaders to conduct groups.

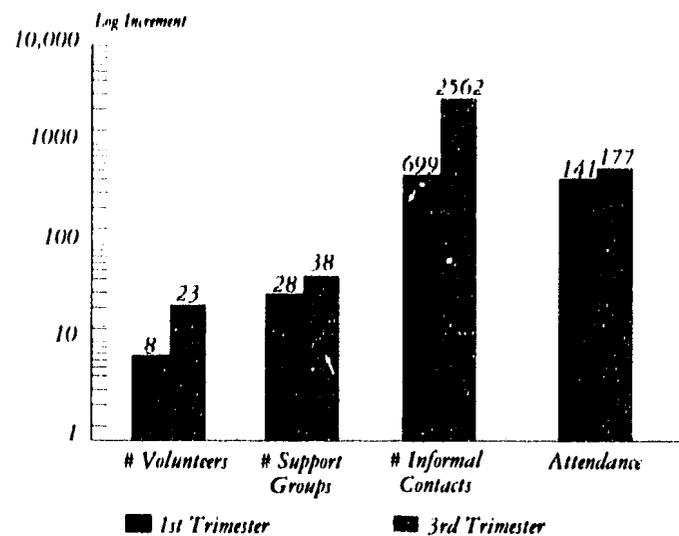
Another problem LaLeche League experiences is that breastfeeding advocates are able to get neighbors to attend only a particular group. Project staff have witnessed evidence of rivalry among neighbors who won't go to a certain person's house. Thus, LaLeche League looks for community sites or locations that will be acceptable to all mothers.

It is necessary, however, to attract more mothers to the support group meetings, since the number attending any one group is small in comparison to the number of pregnant and lactating women in the community. It is also necessary to keep promoting the formation of new groups since the urban mother support groups tend to dissolve when the babies of the original members grow older.

The Work Ahead with Volunteers

LaLeche League has found it difficult to keep urban volunteers working over a long period of time. Breastfeeding advocates leave the project mainly because they find raid employment. Breastfeeding advocates, in general, express satisfaction in their work, but are discouraged when only a small number of mothers attend the breastfeeding support group meetings. Another problem for advocates is the difficulty of counseling mothers about good breastfeeding practices when the volunteer's information is not "shared" by the health professional attending the mother. So, LaLeche League has developed a "pool" of trained volunteers and from this pool now selects those who are the

Impact of Number of Volunteers, Support Groups, and Informal Contacts on Group Attendance, LaLeche League/Honduras Child Survival Project



Source: Annual Report, 1991

most enthusiastic, dedicated, and knowledgeable to be breastfeeding advocates.

LaLeche League has not found a reporting system that allows the breastfeeding advocates to collect the basic data needed, while at the same time maintaining a high quality of data integrity. The project notes, "Creating a simple reporting system is extremely difficult."

Sustainability

Although the breastfeeding advocates are volunteers, they still need to be supported by a structure that can give the volunteer regular in-service education in breastfeeding counseling, answer their questions, and provide moral support. LaLeche League attempts to institutionalize the breastfeeding advocates of mother support groups through collaboration with local non-governmental organizations, which are part of an umbrella organization called FOPRIDEH. LaLeche League is currently training non-governmental organizations working in low-income communities so they can maintain support for advocates after the project ends.

Project HOPE/Honduras

The largest marginal barrio of Tegucigalpa is Las Crucitas. There the HOPE Child Survival project serves 20 neighborhoods of the 79 comprising the sector, which is located in the hills on the western outskirts of the city.

The Ministry of Health encouraged Project HOPE to select these particular neighborhoods because they lacked health volunteers. A primary problem among the children of the barrio is the generalized low level of nutrition, related to the level of poverty.

One of the most well-realized of the urban Child Survival projects, HOPE has been working in this area since 1983. Before the child survival activity officially began in 1988, HOPE personnel made house-to-house visits to introduce and explain the project's objectives, survey community needs, and solicit opinions. Existing community organizations, mothers clubs, and *patronates* cooperated with HOPE in developing plans to deal with local health problems.

The goals of the project are very ambitious. HOPE works to reduce mortality from diarrheal disease of children under two;

"She told me about how to feed him and gave me a referral to the health center, where the physician told me exactly the same.... When I got home...she began to teach me about my child's diet. She continued to weigh my son almost every month, and now he is three years old and his weight is normal."

—A mother credits her son's normal growth to growth monitoring and health education from a community health worker in Tegucigalpa, Honduras. At seven months, her son had the weight of a two-month-old.



Friends sit at a roadside stand on the outskirts of Tegucigalpa.

MARCELO CASTRILLO

reduce the incidence of neonatal tetanus by increasing tetanus toxoid immunization coverage for women of childbearing age; reduce the incidence of vaccine preventable disease in children and infants; and increase mother's knowledge and practice of exclusive breastfeeding, optimal weaning, safe child spacing, prompt oral rehydration, timely immunizations, and medical referral for acute respiratory infections.

The project works with and supports structures within the community which address endemic problems through community action. Mother's clubs are responsible for the administration of all aspects of *lactarios* (feeding centers), constructing or renting the centers, arranging for security, and providing supplies. Each neighborhood has a functioning health committee coordinated by trained volunteers. The committees have been able, as hoped, to address local health problems, choosing topics like dengue fever for discussion, and have formulated activities to combat problems.

There are six health centers in Las Crucitas, one CESAMO (a health center with a physician) and five CESARS (health center with auxiliary nurses only). The Ministry of Health provides supplies and health workers; HOPE provides training manuals and trains government health workers and community health volunteers.

HOPE/Honduras follows Ministry of Health guidelines, and HOPE-trained volunteers work in concert with government auxiliary nurses in the project area. Other non-government organizations cooperate with HOPE in the child survival effort, including the U.S. PVOs: International Eye Foundation, World Relief, World Neighbors, and Save the Children. The national family planning association, ASHONPLAFA, trains community volunteers in family planning; Junta Nacional de Bienestar Social and CARE provide foodstuffs to the Las Crucitas barrio.

The project coordinates with the Mayor's office and keeps community needs visible to city government. Communities can request and receive basic training from the Mayor's office in group education, environmental hygiene, and home gardening. In addition, Project HOPE is assisting FINCA/Honduras in the establishment of eight community banks. HOPE's involvement with FINCA has begun to offer financial options to women's groups. The banks are located in the same building as the feeding centers, each strengthening the other.

Human Resources

Approximately 175 health volunteers take part in the project. They receive training and attend scheduled meetings on weekends. Similarly, volunteers visit families at night and weekends. This schedule accommodates the needs of the community and allows the volunteer to work for money during the day.

HOPE has incorporated a number of incentives to motivate good job performance: basic skills courses, certificates, community recognition, food for work, and donation of hygienic mate-



This youngster attends a feeding center in Honduras.

rials and seeds. It is estimated that 30 volunteers leave a year (17 percent of all trained volunteers)—an indication of successful retention.

Health Information System

Health volunteers record child survival activities in family registration notebooks. Auxiliary nurses supervise and verify data collection and present information monthly to the project technical team, which is responsible for analyses, interpretation, and feedback. An effort has been made to refine the system by defining which is the most useful data for decision making, thus concentrating on the collection and feedback of information that has direct applications to project needs.

HOPE/Honduras has made good use of survey and evaluation findings. The baseline survey showed HOPE the need to re-orient the priorities of the project and to work more closely with the Ministry of Health. HOPE has corrected initial parallel efforts by greater collaboration with the Ministry of Health. Midway in the project, an evaluation suggested that the project again adapt its activities by integrating the Las Crucitas CESAMO and Project HOPE teams, and strengthening the technical and administrative capabilities of Las Crucitas staff in-

volved in child survival interventions. Subsequent revisions in project duration and resources were made jointly by the project coordinator, the director of the CESAMO, key project staff, and their Las Crucitas counterparts.

In addition to periodic surveys, HOPE conducts focus groups to gain local input and ascertain the level of understanding of educational messages promoted by project volunteers. Interviews by the project social worker investigate the acceptability of the project to the community. Recent interviews established that mothers' groups perceive the project to be effective in meeting community needs, particularly in the areas of nutrition, diarrheal disease control, and immunization.

Change in Mothers' Health Knowledge and Behavior

The results of a survey carried out after three years of operation indicate that mothers now know more about the proper dietary management of childhood diarrhea.

The use of ORS (Litrosol) increased from 23 to 32 percent. Project staff consider this still very low, taking into account the intensive education of the public and the easy access to ORS at the community level. (Each volunteer keeps a small store of packets of Litrosol at her house.)

Survey data also indicate that mothers are initiating breastfeeding earlier; 74 percent of mothers now report breastfeeding their child within the first hour after birth (at baseline, 51 percent of mothers had indicated that they had started breastfeeding in the first hour).

The Work Ahead

This project faces the problem of community instability, similar to that encountered by other urban projects. Survey data indicates, for example, that immunization coverage of children 12-23 months of age has declined from a high of 93 percent at baseline to 79. This reduction in coverage is thought to be due to the increased migration into the area following winter flooding and the increase in unemployment. The project is now using the project information system to compile listings of children with incomplete immunization coverage, so the volunteers can more easily identify children who lack total coverage.

Sustainability

The project's focus on collaboration is the key to sustaining community demand for child survival services. The situation is less optimistic in terms of sustaining the supply of child survival services. HOPE/Honduras has given careful consideration to future costs and how they can be met. The original plan was that the Ministry of Health would have the resources to carry the major continuing costs of the program.

The Ministry of Health had agreed in principle to absorb project personnel at the end of the Child Survival funds. It appears, presently, that the government will not have the necessary funding to do so. Because of the economic recession, neither the community itself nor any individual PVO has the financial potential to carry the program forward on its own.

HOPE intends to cover expenses in the future through resource sharing and efficient use of personnel and equipment. And they will continue to work with women's groups to develop large income generation projects that could enhance the impact of present child survival activities.

"When the volunteer visited me and told me to go to the health center for prenatal care, I lied to her and told her that I had already gone. But the volunteers continued to visit me and talk to me about the importance of continuing to go... and many other things and so I decided one day to go to the health center."

—A Honduran mother of seven children who credited her last son's uncomplicated birth (when she was 41) to the persistence of Project HOPE volunteers.



Cases from Cities in the Caribbean

PLAN Child Survival Project in Santo Domingo, Dominican Republic
ADRA Child Survival Project in Port-au-Prince, Haiti

PLAN International Dominican Republic

The PLAN/Dominican Republic Child Survival project covers six sections of Herrera district in the city of Santo Domingo. There are 111,434 inhabitants in this area of dense population and frequent migration. The average monthly income for this population is less than US\$50. The most common employment in the area is *chiripero* or unskilled temporary work. There is a low level of maternal education. Still, 98 percent of all births are attended by a health professional, reflecting the greater use of hospitals in urban areas.

Working with a local non-profit institution, the Dominican Institute for Integral Development, PLAN provides design, assessment, financing, and supervision support to immunization, nutrition, water, and sanitation activities, and to the control of diarrheal diseases, acute respiratory infections, and high-risk pregnancies. The goal of the PLAN project is to protect children's health, and increase family and community self-sufficiency. Their strategy is to improve basic service delivery (especially for children in the poorest and most disadvantaged regions), and alleviate or eliminate risk factors to infant and child health.



LUIS TAM

PLAN offers counseling and nutritional supplementation on an outpatient basis to malnourished children less than two years.

Human Resources

Most urban projects have a "wish list" of desired resources: more money, materials, time, transport, etc. One resource in abundance in urban areas, however, is human resources—from community volunteers, to teachers and students, to mothers and fathers.

Volunteers are the heart of the PLAN Child Survival urban project. There are 115 volunteer health promoters who are responsible for direct contact with families through home visits, and administrative duties. Volunteer health promoters and project workers periodically visit the homes of beneficiary families and offer services and education.

This urban project works with many other community resources in addition to volunteers. For example, PLAN utilizes the many schoolteachers in the area who carry out family planning promotion. Another example is the recruitment of mothers whose children were saved, thanks to the timely use of oral rehydration therapy, to visit homes with the volunteer and share their experiences with other mothers.

Health Information System

PLAN also maintains a computerized health information system to monitor project services to the population. The PLAN health information system has four characteristics: (1) it helps in managerial decisions; (2) the main forms are the family profile and the promoter's monthly report; (3) volunteers collect data and supervisors do quality control, and (4) it uses a computer for data processing and analysis.

Change in Knowledge and Practice

The 1991 midterm evaluation reports that the project's organizational and administrative structure has made the execution of child survival activities possible in this challenging environment. Specifically, the evaluators found measurable improvement in the diarrheal disease control and immunization programs; evaluators documented increased use of oral rehydration salts and increased DPT3 coverage. With continued effort, improved nutritional status of the population is expected.

The Work Ahead

As with many new community-based projects, the constraints faced by PLAN are related to human resource management, health information systems, and sustainability strategies. The category of difficulties is common to both urban and rural child survival projects and the "needed actions" to address these difficulties are also similar in both urban and rural locations.

The project works with two volunteer groups, 1) young

women with no children, about to finish high school or other studies, and 2) mothers with children. Each of these volunteer groups has different needs and availability of time, and can easily become overloaded with technical and administrative tasks.

The midterm evaluators found that more investment in volunteers is needed. Selection criteria for the volunteers are very broad, their jobs need redefinition, and incentives are not at par with the quantity and quality of work expected. In addition, the project has still to initiate in-service continuing education and training. Monthly supervision spends too much time on administrative goals (such as concentration on how to prepare the monthly volunteer report) vs. spending more time in stimulating the volunteer's motivation through skill development. The consequence is an annual volunteer dropout rate of 50 percent.

More attention will be given to increasing the quality and effectiveness of the volunteer's work. The project plans to redefine the precise technical and administrative tasks that are expected of a volunteer health promoter, and to provide the volunteer with strengthened supervision. The project will begin using supervisory checklists; there are many excellent examples of checklists that have been developed by Child Survival projects and have shown good results.

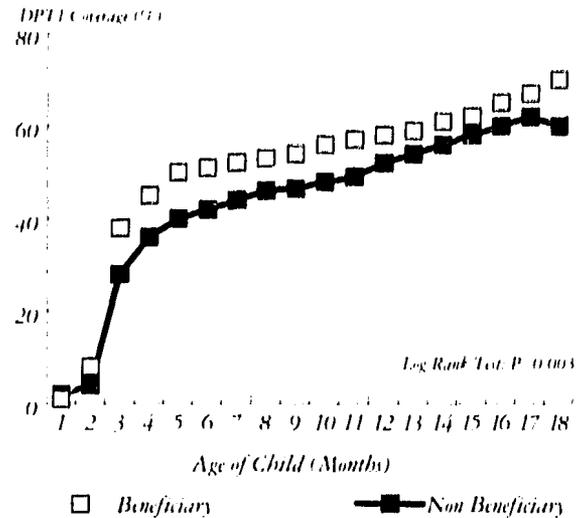
Incentives will be tried to address waning motivation. Among the incentives the project feels may be appropriate are greater formal recognition of the volunteer's work and training (certificates of merit, seniority, and training); greater participation in activity planning; non-monetary incentives (books, scholarships, loans, clothing); a small monetary incentive (justified by inflation); basic medical kit (rotating fund type); and the assurance that in case of a work-related accident, the volunteer will receive medical aid from the project.

PLAN hopes to expand the one-time, five-day seminar for the volunteer to a basic course that is offered at different periods of the year, and complemented with intermediate and advanced training courses. These courses will offer practical knowledge and skills needed to educate mothers on the value of child survival interventions. The project also plans to study the attitude of mothers toward the volunteers and measure the mothers' level of health knowledge. In that way, the project staff will learn which aspects of the volunteer's interaction with mothers have been more effective.

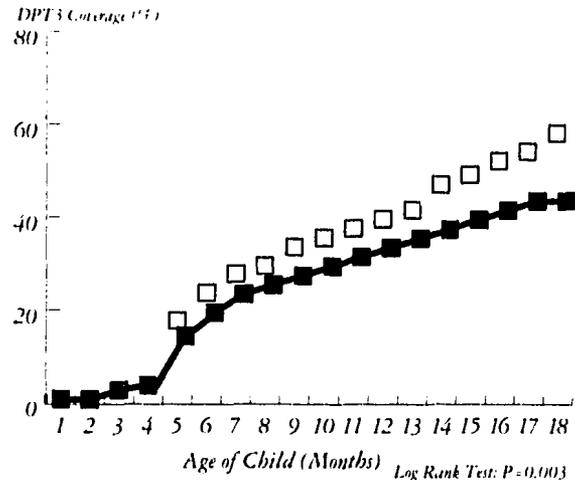
The project has identified several restrictions on a mother's acceptance of exclusive breastfeeding practice. Bottle-feeding of young infants and too early introduction of foods other than breast milk are common practices. In the PLAN impact area, 84 percent of all children were receiving supplemental food and drink by four months. Focus groups showed the mother's lack of knowledge of the risks involved in using the bottle. Such problems are also being reported by other urban projects.

The project needs to strengthen its educational program. The strategy of learning from successfully breastfeeding moth-

*Coverage of DPT1, by Age and Beneficiary Status
PLAN/Dominican Republic Child Survival Project*



*Coverage of DPT3, by Age and Beneficiary Status
PLAN/Dominican Republic Child Survival Project*



Santo Domingo, 1989-1991

ers may be more appropriate in this situation than the use of volunteers who are young high school seniors and who have not had children. Mothers may not relate as well to the young volunteer on the topic of breastfeeding as they do to another breastfeeding mother.

Also, because the vast majority of births occurs in the hospital, there is need for PLAN to work with hospital staff to increase the quantity and quality of breastfeeding advice given to women in the antenatal clinics, maternity wards, and postpar-

tum clinics. The project will explore use of appropriate educational materials produced by other institutions and mass media programs that have achieved success.

Due to the difficult environment in which the project works, it is not surprising that some difficulties are faced in implementing the computerized family registration and health information system. PLAN has found that more information is collected than is needed to make periodic management decisions. In consequence, the volunteers and supervisors spend approximately 30 percent of their time performing the administrative tasks necessary to maintain the system. Plus, it seems not all the volunteers are fully equipped to carry out the task well. The subsequent data entry and analysis onto the computer database delays feedback to project staff, volunteers, and the community—a common problem but a critical issue. Under-registration of infants under 12 months seems to be due to the migration into the city; a solution for this problem is still to be found.

Reorganization of the health information system will be done with the participation of its main users, that is the volunteers and supervisors. PLAN will do this by asking key questions, "How often do I need to collect this information item for managerial purposes?" "What will be the cost in time and effort for collecting and processing the information?" The new design will probably not require more than 5 to 10 percent of the field worker's time to implement.

Sustainability

There are no community organizations the project has found that could serve as alternate deliverers of services now supplied by the project. And because of the multicultural nature of the population, and migration, there is no organized majority "voice" of the inhabitants to call for creation of such an alternate service provider. In the project's experience, the high cost of living and low income available for unskilled workers in this urban area also exclude the possibility for successful income generating programs. Sustainability is limited, in this case, to

looking at the increase of demand for services.

To maintain and increase demand for services, more frequent contact is needed with mothers to inform families of the importance and correct use of services. Considering the high dropout rate of volunteers and the need for more in-service training and supervision, planned modifications of the training and supervision components are important for increased coverage.

In the future, PLAN will be seeking ways to coordinate project activities with local health service providers (both public and private) who can offer institutional endorsement of the child survival interventions carried out by the project. Examples of this coordination are joint workshops, and project visits by high officials.

"Supervision does not mean visiting the volunteer's home and filling the monthly report. Supervision is visiting the promoter, personally training and/or finding out her training needs, visiting the homes under her responsibility, endorsing her work in these homes, correcting the volunteer and her mistakes. In other words, making the volunteer feel she is supported and at the same time monitoring the quality of her work."

—Midterm Evaluation Report,
PLAN/Dominican Republic

Adventist Development & Relief Agency/Haiti

ADRA/Haiti received its first Child Survival grant in 1986 to work in Port-au-Prince. The project is closely associated with the Adventist Hospital located in the same Bergamothe district. Adventist medical work began in this area in 1968, and there has been an ongoing relationship with the people of the surrounding neighborhoods since that time.

The service community, which is located six kilometers from downtown Port-au-Prince, has a population of more than 20,000, most of whom are rural migrants with hopes of greater opportunity in the city. Unemployment is high, literacy low. The area is overcrowded with insufficient sanitation facilities. Diarrhea in children is common; many children are incompletely immunized.

When community leaders and ADRA project staff assessed local neighborhood needs, residents expressed their desire for a health promotion program. The project created a rally post system which gives mothers a place to gather for child survival outreach services. Each community provides a building for its rally post, and is responsible for maintenance of the post. The

initiation of the Child Survival project encouraged the hospital to diversify its activities and to become more oriented toward the primary health care needs of the mothers and children living in the area.

Human Resources

The project employs trained health agents to provide services at the rally post and to supervise volunteers. The community chooses the persons to be trained. In order to become a health agent or volunteer, the applicant must be literate and have a demonstrated commitment to the community. All volunteers receive the same basic training, with the most capable volunteers receiving additional training in health interventions and the health information system. Trained health agents are used to train the new volunteers. Supplemental training is provided once a week for the health agents and once a month for the volunteers.

The project has also developed strategies that are not dependent on the presence of a health facility. For example, each vol-



ADRA PHOTO

Volunteers are provided with a scale to use for growth monitoring activities in the Port-au-Prince neighborhoods.

unteer is provided with a scale to use for growth monitoring activities in her/his own neighborhoods. Local mothers' clubs serve as health and family planning centers. ADRA has added a program in prenatal care to its interventions, training health agents and traditional birth attendants in the community.

Health Information System

ADRA/Haiti has evolved a data collection system which consists of the use of home kept records, including a Road to Health Chart (in Creole), a separate immunization card, and a prenatal record. Separate tally records are maintained at rally posts on which are recorded data related to participants in growth monitoring, immunization, oral rehydration therapy, and family planning programs. Records are summarized on master lists at monthly rally posts. These are, in turn, summarized on a supermaster list by project staff. The project has recently received technical assistance in computerizing its data system.

Change in Health Knowledge and Behavior

There are many accomplishments after four years of the project, despite the political changes that have rocked Haiti in the past years. Access to immunization has increased. ADRA has found home visits by volunteers to be effective in motivating mothers to seek out immunizations. A reward system, for those children and women who have completed immunization, works to increase attendance at the rally post and decrease "dropout" rates.

Mothers are enthusiastic and knowledgeable about oral rehydration therapy, and there has been dramatic improvement in home management of diarrhea. Nutrition education and growth monitoring seem to be contributing to a reduction in the number of cases of marasmas and kwashiorkor seen in the hospital. Sanitation has improved in the Bergamothe area; less trash is seen in the community covered by the rally posts. The number of infant deaths has reportedly dropped.

The Work Ahead

ADRA/Haiti shares the successes and constraints of many urban projects. The project is well known and accepted by the community, and the staff is competent and committed. Nevertheless, the turnover among volunteer staff and the dropout rate among participants is high. The project struggles with the problem of tracking a transient population, and developing effective incentives to encourage volunteer and resident participation.

The appointment of a new Child Survival coordinator in 1990 allowed the project to consider ways in which personnel could be more effective. The coordinator developed a workplan delineating activities, regularized staff meetings, and strengthened interoffice communication. The ADRA project created a volunteer field supervisor post to interact with and supervise



When community leaders and ADRA staff assessed local needs, residents expressed their desire for a health promotion program.

volunteers, and gave project personnel opportunities for outside training. Community health committees have become more involved in monitoring the program. The committees have also taken a greater role in selecting volunteers and have started to oversee their activities.

There is a dynamic network of non-governmental organizations in Haiti willing to provide complementary services and supplies to PVO programs. As administrative organization improves, PVOs will be able to take advantage of technical assistance available from other agencies to multiply the effect of their own considerable effort.

Sustainability

Meetings with community members, community leaders, health agents, health volunteers, and other community workers have resulted in a consensus that new initiatives must be sought and encouraged to recover the cost of health services. ADRA is investigating several approaches to revenue generation. Some communities have expressed willingness to pay for additional care and help maintain program activities. The community is extremely poor, and cost recovery is difficult, but the project is experimenting with a few activities for which there is a market, such as the manufacture of tissue roses. This activity receives technical assistance from non-Child Survival funds.

Political problems in the country add to the challenge of providing ongoing health support. Unrest affects the schedule of activities; official administrative changes make it difficult to depend on relationships with the Ministry of Health; supplies are disrupted. Within this framework, ADRA continues to adjust its program and maintain its connection with the community.

II. Implications

*Priorities for PVOs in Initiating Urban Health Programs
Sustainability of Child Survival Programs Under Financial Constraint*

Priorities for PVOs in Initiating Urban Health Programs

The most important trend in the developing world at present is the rapidly growing number of people living in cities. The growth rate for urban populations is far higher than for populations outside the cities. Moreover, at least half are living in conditions of deprivation.

The Root Cause of the Urban Crisis—Poverty

The root cause of today's urban crisis in developing countries is poverty. Poverty in rural areas drives people to cities. Urban poverty, driven by unemployment and underemployment, keeps the poor enclosed in slums and squatter settlements. Their health problems are enormous and are linked to problems outside the scope of health care as conventionally defined, such as lack of land tenure, poor sanitation, inadequate food production, lack of access to social services, and lack of employment opportunities. Although these facts may be too familiar to everyone active in the field of urban health, not enough is known by the public at large, and too little is reflected in health and social policies.

The massive burden urban poverty places on government overwhelms health service delivery systems. Primary health care, which has been quite successful in reaching the rural poor, has been tried only on a limited scale in cities, but the time has come to focus on schemes that aim for universal coverage of hard-to-reach segments of society, both urban and rural. Pilot projects and other small-scale interventions have great value, but the more important and elusive question is how to develop effective health care for the whole population, particularly the urban poor.

Challenges to Urban Health Programs

Urban communities, especially those who live in the slums, usually have more economic and cultural diversity than those in rural areas, making community organization difficult. Without effective organization, long-term improvement in the health of the community is unlikely. A high rate of in- and out-migration of city dwellers in developing countries also hinders the provision of continuous and consistent health care.

Another set of challenges to urban health programs involves sustaining benefits over the long term—nurturing local demand for health services, mobilizing the community to request permanent government health facilities, and creating incentives for participation and long-term involvement of community volunteers. Volunteerism without any tangible material benefit is unrealistic in a country struggling with widespread poverty and unemployment.

Through the implementation of innovative primary health care programs, health can become a key factor in mobilizing

and educating urban slum communities. The challenge is to go beyond targeting only health and to develop an integrated strategy responsive to diverse needs (sanitation, literacy, employment, income generation, etc.) through development schemes owned and supported by the community.

Some special challenges need to be addressed in implementing urban health programs. Beyond the lack of homogeneity and organization, individualism is high in urban areas and a sense of collective responsibility correspondingly low. In general, the poorest of the poor are often the most difficult to reach, although their need for health care is greatest.

Most urban health programs, like more conventional approaches, reach affluent groups more easily than they do the landless, the homeless, the jobless, the slum dwellers, and "street children." The difficulty of access is not a physical one, as is often the case in rural areas. Rather it is sociocultural, involving ignorance, lack of self-confidence, and a sense of alienation.

There will likely be a multiplicity of agencies involved in urban health programs. As a result, coordination will be more necessary but harder to achieve. Issues of territory and responsibility overlaps will be common, and problems resulting from them will take time and resources to resolve.



A tubewell, provided by the World Vision project, is being used by the community.

Resistance to fundamental change in health care is greatest in urban settings where medical resources are often concentrated. It has been noted that opposition to primary health care is likely to be from health care professionals, private health care providers, clinics, and hospitals. It may also come from the general public and the politicians. Strategies to defuse opposition and to turn it into collaboration must be pursued with vigor and innovation.

The Positive Side

Compared to rural areas, the future of primary health care in urban areas is not by any means totally discouraging. Indeed, some characteristics of urban settings present an unusual opportunity to reach more people in less time at less cost.

High population densities facilitate health care delivery and lessen the problem of logistic support. Surveys in the Kamalapur Child Survival project involve a fraction of the time necessary to do similar ones in rural Senegal or Mauritania. By carefully planning immunization campaigns, World Vision has been able to completely immunize 85 percent of children under one in less than 15 months without heavy investments in vehicles and maintenance. The high rate of unemployment in Dhaka assures a pool of highly qualified candidates for all positions required by the project. By being in the capital city, the project's relationships with MOH, other agencies, and PVOs were easily nurtured, and a high degree of collaboration was possible as a result of easier communication and exchange of ideas and plans. The Kamalapur urban project has spent significantly fewer dollars per beneficiary per year than World Vision's rural-based projects.

Lastly, the sheer number of urban poor and their proximity to government, at least in the capital cities, ensure that their health problems can be kept on the political agenda.

Strengthening Intersectoral Action in the '90s

PVOs in developing countries know that intersectoral coordination and collaboration are key to any sustained progress in improving health. To be effective, this coordination must operate at different levels: locally, regionally, and nationally. There is a need to establish a coordinating mechanism which should be dependent on local and national contexts. No single approach is likely to have universal application, since communities are different and have needs that vary in location and timing. Intersectoral collaboration and action must be based on needs identified at the local level, with community involvement.

The following are some roles PVOs may play in urban CS activities:

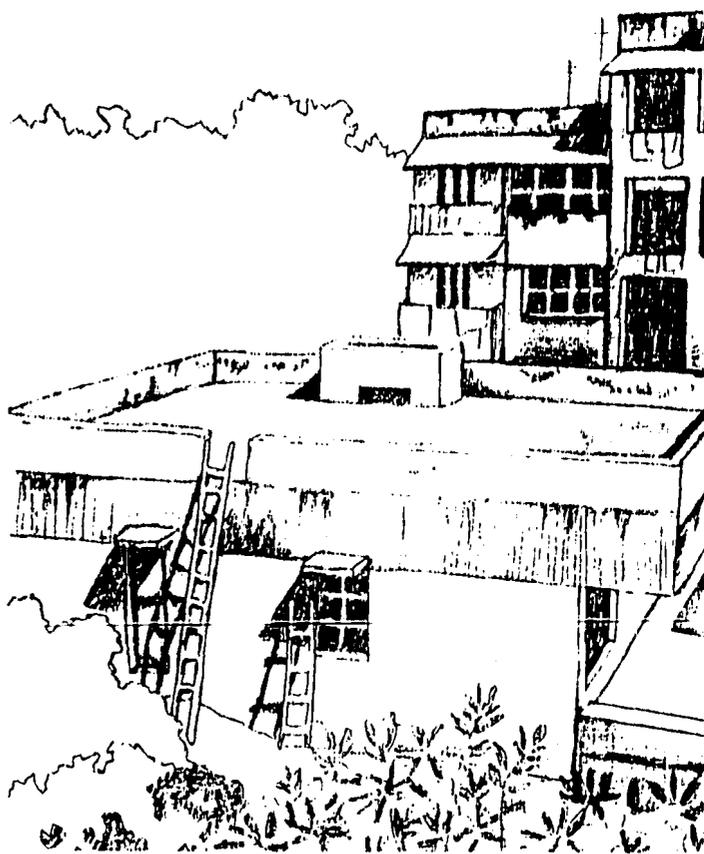
■ *Employment and Income Generation*

Unemployment, underemployment, low income, and poor health march hand in hand, and attempts to improve the health of the urban poor are not likely to have any lasting effect unless they form part of an overall attack on poverty.

Family income is directly linked to food and nutrition. Thus, income-generation is an important non-health component as well as a challenge for PVOs implementing urban health programs in the '90s. The types of income-generating activities will vary according to local market conditions, available raw materials, and manpower skills. Income-generating activities should be labor intensive and maximize the use of human resources if income is to be generated in a sustained way.

■ *Low-Income Housing*

While initiating urban health programs, PVOs should carefully consider issues related to housing problems, especially low-income groups. But at the same time this type of initiative should not result in the displacement of the urban poor and their replacement by relatively well-off families who can afford better housing, thus making the poor remain badly housed and even poorer. PVOs should consider investing,



Research indicates that levels of health and housing are related primarily to sanitation conditions and not to quality of house structure.

along with other health interventions, in low-cost housing for the urban poor. Research indicates that the relationship between levels of health and the quality of housing is related primarily to sanitation facilities and conditions and not to quality of house structure. It is also essential to provide tenure to the land to legitimize low standard but affordable housing units which can be gradually improved.

■ *Water Supply and Sanitation*

An important role PVOs can play in the '90s is to emphasize the major problem of water and sanitation in urban slums. Because of the influence of water supply and sanitation on health, many health problems will diminish just by focusing on these two major needs. Water supply and sanitation, along with nutrition, have a greater impact on public health than any medical treatment provided.

■ *Literacy and Education*

There is conclusive evidence to show links between basic educational attainments and health status. The most obvious example is the relationship between differentials in child survival and mothers' level of education. There is also a close correlation between educational levels in women and their acceptance of family planning. Poor countries which have given priority to education, particularly for women, have lowered mortality rates more dramatically than those with higher per capita income but less educated populations. Realizing these facts, PVOs should integrate this vital component while promoting urban health.

Conclusion

The availability of health services is better in urban areas, though there are likely to be economic and social barriers despite the physical proximity of services. Settlements of the urban poor often lack traditional community organizations, and those that exist may have to take new form before community involvement in health programs can be effective. Also, lack of land tenure security is a fundamental problem underlying other problems and making them peculiarly hard to combat. Most of the major causes of high child mortality have clear and direct links to poverty, which is manifested as poor housing and unhealthy neighborhoods without access to potable water, sanitation, and garbage collection.

PVOs, both local and foreign, have generally focused their attention toward alleviation of rural poverty in most countries. Their contribution to the improvement of the condition of the urban poor has been extremely limited. There is a great need to expand and intensify this involvement. May we take this as a major challenge as we approach the coming of the next century.

From a presentation by Dr. Kabir Ahmed, M.D., M.P.H., World Vision of Bangladesh

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Sustainability of Child Survival Programs Under Financial Constraint

A consensus exists among most PVOs that a project is a success when:

- The project achieves its objectives.
- Beneficiary populations use existing health services, and they ask for increased service.
- The Ministry of Health or other local agency makes real provision of logistical, technical, and resource materials.
- The community continues to support and participate in health committees and community development activities.
- Volunteers remain committed to regularly giving some time to home visits and community education.

This definition of project success is also the way most PVOs define sustainability. Less clear is the proper strategy for achieving sustainable health programs for the urban poor.

As you plan for sustainability, ask yourself these basic questions: When will the Child Survival funding end? What key activities should continue for at least three years after the end of PVO aid? Who (what group) will manage and carry out those activities? The project can outline a clear management strategy for sustainability based on the answers to these questions.

Macro-level Factors Affecting Project Impact

The term "sustainability" refers to no specific duration. You, as project manager, should consider "sustainability" to mean for three to five years after the Child Survival funding ends, rather than think of sustaining the interventions indefinitely. Decide which type of services you must sustain depending on the strengths and weaknesses of the project area in question. You should weigh the factors that influence child survival: the condition of the national economy, maternal education levels, nutrition levels, sanitation and transportation infrastructure, and the organization of health services.

Political changes and violence are common in countries suffering economic stress. The combined instabilities often make progress difficult. Political change complicates the introduction of innovative programs needed to meet contemporary problems. Such areas are ripe for political violence, which further decreases social cohesion.

Increasing poverty complicates the development of sustainable implementation strategies because it decreases the project's ability to recover its costs. Persistent economic stress engenders a sense of futility and low self-regard. People grow increasingly isolated from each other and from an awareness and belief that something can be done about community problems.

Furthermore, worsening economic conditions decrease the



WV PHOTO

A health volunteer reads her activity report at an in-service training session.

institutional measures available to combat community problems. (For example, financing of public health services depends on the economy. If a country is in economic distress, it will reallocate funds away from government health services to other needy sectors.) Unfortunately, donor countries are not going to make a major short-term difference in the overall economic development of a country. A donor country can, however, aid in the sustainability process by financing targeted Child Survival programs, directed to correcting the very problems that result from economic slow-downs.

Strategy Development

PVO field experiences show that certain parts of project design and management enhance sustainability more than others. A PVO project manager would be wise to:

- *Get Consensus on Goals and Strategies*—Involve, from the beginning, the group who will eventually take over the management of project activities. Keep well informed and ask for ideas from the district health office or a local organization.

- *Base Plans on Community Ideas*—Negotiate issues concerning sustainability from the start of the project. Solicit ideas from the community, through a process of mutual respect and give and take.
- *Increase Technical Knowledge and Skills*—Hire qualified technical health staff and get outside technical experts when needed. Carry out in-service education to strengthen technical capabilities of community health volunteers. Strengthen links to public health professionals and educational institutions in country.
- *Integrate Interventions*—Integrate key interventions into established administrative structures in the Ministry of Health or other government agency, or local PVO. An integrated intervention is more likely to continue when donors withdraw Child Survival funds.
- *Evaluate Technical Effectiveness*—Find out what institutional objectives the project is actually achieving; refine what is not working. Mothers, government, donors, and health professionals alike, want effective programs. A project proves it is effective if the community uses strengthened health services, and if mothers improve their health knowledge and practices, making children's infections or illness less likely.
- *Nurture Strong Leadership*—Phase project management over to well-informed, competent country nationals at least a year before Child Survival funds end so there is time to address any in-service needs.
- *Diversify Sources of Support*—Seek funding for child survival activities from national or local government sources and from the private sector.

Capacity Building

Certain activities build capacity within the community and local institutions to carry out interventions in effective ways.



- *Stress Training of Health Workers*—Include considerable pre-service and in-service training in the project to enable the health staff and volunteers to apply the technology and interpret findings correctly. Try to understand better the health workers' beliefs about illness and disease, and correct misconceptions. Reinforce those cultural attitudes about nutrition and health that are helpful to mothers and children.
- *Train Staff to Monitor Performance*—Build capacity of the health team to assess achievements through simple evaluation techniques; projects that can document their successes have a better chance of maintaining financial and political support.
- *Build Staff Training Skills*—Teach health workers how to motivate and educate mothers. Role play informal, interactive learning techniques; use locally available teaching materials for demonstrations that make sense in the local culture. Spend time on training of trainers.
- *Build Mothers' Skills*—Transfer essential information and health care skills to mothers and other child caretakers in the family, and help them to decide wisely about their family's health.
- *Offer Group Support*—Develop community level support groups that can reinforce positive health behaviors and give social support to the mother.
- *Strengthen Both Supply and Demand*—PVOs have found that they must have a stated plan for provision of service if they intend to create community demand for service. If, for example, a PVO urges increased condom use to prevent HIV infection, then they must also give attention to procurement and adequate supply. Similarly, if a project raises mothers' awareness of childhood pneumonia, it must be able to refer the sick child to a hospital or clinic, where antibiotics are available.
- *Assure Congruent Health Messages*—Check that efforts of government health workers, private physicians, and traditional healers are consistent with the health behaviors promoted by the project volunteers. Conflicting health messages confuse mothers.
- *Strengthen Financial Base*—Increase the efficiency of existing child survival services by operating in a low-cost manner. Another possibility is to introduce more appropriate technology to decrease costs. Explore alternative ways to improve revenue generation, such as financial support through health insurance schemes and user fees.

From a presentation by Dr. M. Harvey Brenner, Professor of Health Policy and Management, The Johns Hopkins University, U.S.A.

III. PVO Lessons Learned and Recommendations

Child Survival Strategies Specific to Urban Areas
Child Survival Strategies Common to All Community-Based Programs

Child Survival Strategies Specific to Urban Areas

The case studies document the individual histories of 11 urban Child Survival projects in the developing world. This section summarizes what the PVO project managers have learned and presents their recommendations.

PVO staff say that working with disadvantaged urban communities reaffirms certain basic principles of good project development. Those principles are described in the next section, but include:

- careful planning;
- early attention to sustainability;
- community ownership;
- collaboration with the MOH;
- low-cost, effective interventions;
- prevention of common causes of child death;
- focus on sub-groups most "at risk";
- measurable objectives for health behavior outcomes;
- only necessary data collection;
- regular monitoring and supportive supervision;
- in-service and refresher training;
- technical assistance;
- scheduled evaluations;
- community and staff feedback;
- adjustment of project strategies.

PVOs also speak of the unique opportunities and constraints present in urban community-based programs. Such urban-specific factors impact on the way PVOs organize and deliver child survival services, and support the community. The following is a summary of "how to" facts and recommendations for building sustainable child survival activities for the urban poor.

Project Planning Phase

Background Study Recommendations

First, know your urban communities. Review available health statistics and studies. Walk around the communities, and talk with people about their issues and health status. Learn whether there are minorities or especially disadvantaged groups living apart from the majority of the residents in the different city districts. Don't make assumptions about the entire community based on the perceptions of only a few groups. Urban environments are extremely varied and culturally diverse.

Inter-Agency Planning Recommendations

Adapt to existing programs and systems of health delivery and capitalize on urban-specific opportunities.

Fragmentation and overlap can offset the advantage of having more health services available. The number and diversity of health care providers in the city range from government departments to private providers and traditional healers. The relationships among municipal, federal, and state systems is often

complex. A PVO must spend more time in networking among health providers to achieve the coordination of services that is essential in urban areas.

Expect that an urban Child Survival project will take longer to develop than a rural project. Medical resources concentrate in urban settings, which complicates the introduction of innovative programs needed to meet contemporary problems. Issues of authority and territory are frequently the basis for resistance to change. PVOs should allow time to resolve these issues with the numerous health care providers and structures in urban areas. Most urban PVO projects have taken an extra year to secure the necessary agreements for new child survival efforts.

Group Formation Recommendations

Group formation is critical to the long-term improvement of the health of community members. Groups can speak for themselves and their interests long after a particular project ends. PVOs will find community organization difficult in impoverished urban communities. Limiting factors are the cultural diversity and mobility of the residents, and the low level of experience in collective problem solving.

Faced with non-cohesive neighborhoods, some PVOs form local health committees to serve as project advisors. Such attempts are seldom successful. Health committees must evolve within the community if the groups are to speak for the residents. Make the extra effort and time to identify local leaders and encourage their participation in the planning of project activities. Most communities will rally to improve the survival and quality of children's lives.

Despite the lack of organization, the visibility of the urban poor does assure them some political attention. If even a few groups in the community learn to articulate community needs and speak for solutions, a response from city officials is possible.

Project Implementation Phase

Human Resources Recommendations

Urban community health volunteers work for shorter periods than their rural counterparts. The urgent need to make a living competes with the desire to volunteer in service to the community. Financial need leads poor residents to take advantage of competing opportunities to make money.

Because there is a high rate of volunteer attrition in urban projects, PVOs should recruit and train more volunteers than they need initially. That way, trained volunteers will be available to replace those who stop working. Otherwise, recruitment and training sessions must be frequent.

Selection of volunteers and block monitors should be done by a representative community committee. Community health vol-

unteers should be accountable to the community, with the PVO facilitating the process of selection. Check that volunteers adequately represent the various population sub-groups (ethnicity, duration of residence, etc.)

Financial realities call into question the potential for sustaining a core of trained volunteers. Many project managers recommend paying urban health volunteers a small stipend for community work, or allowing some form of community reimbursement.

PVOs recommend that urban projects try forms of community involvement in addition to volunteers. For example, mothers' support groups, child-to-child approaches, and women's savings groups can spread the health message and provide support to more formal health worker services.

Management of Services Recommendations

The scope and size of urban health problems will be greater than in rural areas. Concentrate on those child health problems where project efforts can make a difference in survival and prevention of serious illness. Develop and use referral networks for other problems.

Community-centered child survival strategies need not be limiting; they empower the community to address other needs. PVOs have seen urban health committees expand to address sanitation, education, employment, household income generation, and the environment. The key is that if a group is effective in addressing child health needs, it will be likely to push for other schemes that have strong community support.

The density of the urban population facilitates health care delivery. The urban poor, however, often live on the periphery of cities, or in rapidly growing squatter settlements where there are few fixed-site health facilities. PVOs can help develop outreach systems. Coordinate community health activities with services from the fixed health center or clinic.

Health center services are often not available at convenient hours for urban families. Arrange the health clinic's hours to better meet the needs of working mothers. PVO staff have found it best to make services available in the evenings and on weekends to accommodate mothers who are away from home during the day.

Since regular night and weekend work is frequent in urban settings, contract with health staff and volunteers who can work those hours.

Susceptible pockets of un-immunized children can exist in crowded urban areas. Special strategies must be employed to control the incidence of measles and other vaccine preventable diseases. Consider implementing rapid coverage assessments, and regularly review EPI performance indicators. Obtain technical help to initiate disease surveillance.

Maximize face-to-face contact between the urban communities and project staff, volunteers, and supervisors. Health begins in the home, not in the office. Crowded conditions make it possible to reach more people at home in less time and at less cost.

Information/Education/Communication Recommendations

Develop a health education strategy to lessen the gap between knowledge and behavior. Urban populations are more likely to have heard health messages, and have a higher level of knowledge of interventions. They do not however necessarily use ORT, space births, protect themselves from HIV infection, etc.

Urban populations are ethnically diverse. Differing beliefs and customs require the use of a variety of education strategies.

Use alternative monitoring techniques (such as sentinel sites, focus groups, cluster samples), to test periodically whether the different urban subgroups are translating the educational messages into correct health behaviors or practices.

Working mothers often find it necessary to leave their children with alternative care givers. PVOs recommend that health workers identify these alternative care givers and include them in health education activities.

Established communication networks do make it easier for agencies to coordinate efforts and avoid unnecessary duplication. The time a PVO spends in interagency sharing will decrease possible conflict in health messages to families.

Health Information and Evaluation Recommendations

Start by mapping the community. Update the map periodically to see how much change is occurring in the community.

Set coverage objectives, realizing that a significant proportion of the population moves every year.

Population migration makes it difficult to monitor project achievement. Projects that use a family registration system must update it frequently to keep track of migration into and out of the project service area. In addition, PVOs will find it useful to carry out rapid assessment surveys to supplement information from the registration system.

Anticipate that the monitoring and evaluation scheme will need revision. Projects need technical advice in the design stage, and should refine their health information system as they accumulate experience. To date, there is no model for the most desirable urban data system. The best advice is to keep it simple and practical for the people who collect and use the data.

Periodically, PVOs should use available local and international technical assistance to evaluate progress and adjust project strategies. Learn from others.

Child Survival Strategies Common to All Community-Based Programs

PVOs have found that there are basic similarities between community-based Child Survival programs for the rural and urban poor. For that reason, certain recommendations from PVO staff cross geographic boundaries and stand as guides to all community-based child survival work. Those recommendations follow.

Project Planning Phase

NGO-Government-Community Partners Recommendations

It's a mistake to try and do everything by oneself. Instead, plan and implement projects together with government, other NGOs, private providers, and community leaders. Sometimes the most helpful PVO action is to strengthen collaborative health efforts among existing community groups.

PVOs and partners, together, must face issues of sustainability and replication before a Child Survival project even begins. It does not provide a service to anybody when health models cannot be sustained or are too expensive to be replicated.

The implementation strategies of every PVO should complement national strategies and be consistent with Ministry of Health norms and standards. If national policies are lacking in some areas (this is especially true in new interventions), PVOs can educate and influence policy change.

Government has to have responsibility to provide support, including funds for expansion, if this is part of the basis of collaboration. From the outset, there needs to be a clear agreement between government and the PVO, preferably in writing, which clarifies the basis of cooperation between the government and the PVO concerned.

Projects must recognize the community's informal organization—not just its formal structure—and, whenever possible, work within the natural community structure. The community's participation is essential at all stages of the process.

Develop a working relationship between international PVOs and local non-governmental organizations.

Encourage networking among all PVOs with Child Survival projects in country, and share experiences and lessons. Promote a national NGO organization.

Baseline Data Recommendations

Collect and interpret baseline data before developing the project's detailed implementation plan. Baseline data are necessary to the formation of realistic objectives and appropriate strategies.

Surveys should be quick, scientifically sound, and simple. Don't increase survey time and costs by collecting unnecessary data.

The project must discuss the purposes of the survey with the community as early in the process as possible. (This might be the community worker's first task.) Make data relevant to community needs and useful for project management.

Provide proper training of surveyors and supervisors. Pre-test survey questionnaire as part of training.

Project and government staff, community workers, and outside technical assistance should combine to do the baseline survey. A project should not rely exclusively on outside agencies to get data.

Share results, as soon as available, with the community, the staff, other PVOs, the Ministry of Health, and donors. Agree upon a small number of precise, achievable, and measurable objectives, based on survey results.

There should be objectives for each intervention (immunization, control of diarrheal diseases, nutrition, etc.). The stated objectives should include a working definition. For example, define "proper use of ORT," or, define what is meant by "reduce malnutrition."

Health Information Systems Recommendations

The health information system should be part of the initial project design. Consult with the Ministry of Health and the community, to make certain the system does not duplicate existing efforts or is needlessly complex.

The health information system should be as simple as possible. Limit the number of data collection forms to those that are pre-tested and found to be useful in project management.

Staff should be trained in simple qualitative and quantitative data collection and analysis methods.

Properly trained staff and counterparts maintain and make better use of a health information system. Data collectors need to know the purpose of the data collected. Schedule pre-service and in-service training on the health information system; develop manuals. Also, PVOs might approach USAID missions to see if PVO staff can take part in health information training opportunities.

Create a health information system that has sufficient flexibility that management can test, adapt, and modify the system according to the project's experience.

Process indicators are important for PVOs to monitor, also. Include process indicators as part of the project design, the detailed implementation plan, and scheduled evaluations.

Project Implementation Phase

Quality of Services Recommendations

Managers and supervisors must be positive role models for the rest of the project staff. They need to be in the field frequently to assure quality of performance.

Workers need clear job descriptions that specify their contribution to project goals. Quality is enhanced if those involved in the project, at all levels, internalize the project goals.

Volunteers must have adequate supervision.

Supervisors should be supportive and reward good performance. Commendation and recognition of health workers, when a job is well done, builds morale and team spirit.

Introduce a formal system to regularly monitor and improve the quality of overall service performance. Use data for decision making, motivation, and encouragement. Timely, regular feedback of information motivates project counterparts, national/local planning groups, data collectors, and communities.

Employ short-term technical assistance to spot check quality of key interventions, and make recommendations for performance improvement. More established projects can team with local universities to do operations research on alternative means of improving quality.

Use qualitative techniques (such as focus groups or key informant interviews) to assess community perceptions of the effectiveness and acceptability of project services.

Sustainability Recommendations

Present the full facts to the community about the length of the project's Child Survival funding. As the project progresses, identify those activities that will require continued community resources. Negotiate a schedule when community members will assume more management responsibility.

Involve the Ministry of Health from the start if the PVO plans eventually to phase activities into the MOH program. Set interim bench marks when MOH units will assume greater responsibility. A plan increases the likelihood the transfer will occur.

Community members usually hold strong opinions about whether to reimburse community health workers. Resolve the question of reimbursement before recruiting community workers. Make certain there are non-monetary incentives for community workers such as refresher training, supportive supervision, and recognition of good performance.

Recognize that most PVO projects experience a tension between achieving sustainability in a project's three-year duration and ensuring the quality of its services. Do what is possible within the local context. Set realistic financial goals; experiment with alternative financing possibilities. Get university or local NGO help in designing operations research to test out financing modes and sustainable delivery methods.

There is no general agreement on what constitutes recurrent costs. PVOs need better definitions from donors, but they also must invest time in calculating and tracking recurrent costs of key activities.

Child Survival workers should transfer child-protective skills and knowledge to families. That way, mothers and other caretakers can sustain positive health behaviors.

Assess sustainability of key activities at midterm. Team members should include community leaders, MOH staff, and others important to sustainability.

PVOs cannot expect household income generation to support project costs of key child survival interventions. Family income generating activities may take longer than three years to show any profit, and even then, families may wish to spend the cash on private providers, or perhaps something other than health and nutrition.

IV. Strategies of Other Agencies for Special Urban Problems

Support to Breastfeeding Mothers
Family Planning Promotion
HIV/AIDS Education
Environmental Protection
Prevention of Alcohol and Substance Abuse
Health Begins in the Home

Support to Breastfeeding Mothers

Breastfeeding is a natural resource that can make a major contribution to health and family planning goals. It provides the best possible nutrition for both physical and mental development, supplying all the nutrients and fluids most infants need for the first six months of life. In addition, breastfeeding does not expose babies to the risks of contaminated bottles, artificial nipples, and breast milk substitutes.

Breastfeeding, especially exclusive breastfeeding, provides protection against diarrhea and common life-threatening infectious diseases. Breast milk contains a variety of immunological and other factors that protect against infection. When diarrhea or other infections occur, in most cases, they are found to be less severe among breastfed infants, and can be treated more easily.

Exclusive breastfeeding through the first four to six months of life delays the return of ovulation and menses. Many studies have demonstrated that duration, frequency, and intensity of breastfeeding contribute to the biological mechanisms that result in an increased interval between births.

The current levels of postpartum fertility suppression that result from breastfeeding cannot be readily replaced by existing family planning services. Fertility rates in developing countries would be much higher if women did not breastfeed.

In some countries, both the initiation and the duration of breastfeeding have increased impressively as national policy-makers, the medical community, support groups and families have begun to recognize the many benefits of breastfeeding. Breastfeeding promotion and support programs work.

Unfortunately in some areas, breastfeeding has declined in the wake of modernization and urbanization. In cities, women are more likely to give birth in hospitals, to work in the wage sector of the economy, and to live without a network of family

and social support for breastfeeding. Most hospitals do not emphasize breastfeeding and employers rarely provide working mothers with adequate opportunities to breastfeed.

Breastfeeding support programs may be sponsored by government, hospitals, private health care providers, and community organizations. The hospital-based or clinical model generally uses outreach nurses or certified lactation-support personnel to provide in-hospital and follow-up support. The effectiveness of clinical programs increases greatly when these programs develop their own mother support system or coordinate with private, non-profit community groups that offer breastfeeding counseling and support. These non-medical groups comprise a second model using trained peer counselors, who may function in the primary health-care setting, in the home, or through community lectures and contacts.

The third model, grassroots woman-to-woman counseling, has been spread most widely through groups like LaLeche League International, which emphasizes the support of one breastfeeding mother to another. LaLeche League is an international organization that was founded in 1956 to give information and encouragement, mainly through personal help, to all mothers who want to breastfeed their babies. LaLeche League recognizes the unique importance of one mother helping another to overcome problems she is having breastfeeding her child, and the effectiveness of mother-to-mother support groups to sustain and reinforce the practice of breastfeeding. The League now exists in 46 countries and serves more than 100,000 women in the world each month through group meetings, telephone help, referrals, materials, or individual one-on-one support.

From presentations by Dr. Sandra Huffman, Center to Prevent Childhood Malnutrition, and Dr. Miriam Labbok, Institute for Reproductive Health & Natural Family Planning, USA; and Paulina de Smith and Mari Carmen Mariscal, LaLeche League/Mexico



Young mothers need family support to avoid bottle feeding and continue exclusive breastfeeding for the first 4-6 months of life.

Family Planning Promotion

MEXFAM and Gente Joven (Young People) are organizations in Mexico working to provide information and orientation on sexuality and reproductive health to teenagers and adults. Years of experience working in urban communities have resulted in the development of innovative programs concerning family planning which include community promotion, education, and medical services.

These organizations base their programs on what they perceive to be the needs of urban adolescents:

- better communication with parents;

- adult (and parent) role models who have a clear and positive attitude about their own and teenage sexuality;
- information on sexuality, human reproduction, the prevention of sexually transmitted diseases, and contraceptive methods to avoid unwanted pregnancies;
- help with defining their personal values and making sound decisions that might affect their future.

MEXFAM carries out several basic strategies in family planning promotion. First, they identify highly populated urban zones with a low prevalence of contraceptive use. They then provide the area with a family medicine clinic that offers contraceptive services and counseling. Voluntary health promoters visit homes to inform them of family planning services. In zones with low prevalence of contraceptive use, MEXFAM offers ongoing support to family planning services provided by existing health institutions.

MEXFAM supports family planning programs through the production of learning materials which contribute to the diffusion of family planning messages to groups and population sectors which currently are uninformed. They also provide technical assistance in family planning services to organizations concerned with training their personnel on these topics.

Gente Joven has an educational program oriented around five basic topics which attract youth. The topics are offered in workshop sessions lasting two hours, providing adolescents with a basic orientation to reproductive health and fertility control. These topics are communication within the family, puberty and the process of human life; sexuality and adolescence; sexually transmitted diseases and their prevention; and the consequence of undesired pregnancies and the use of contraceptive methods to prevent unplanned pregnancies.

From a presentation by Dr. Jaime Valencia, Fundación Mexicana para La Planeación Familiar (MEXFAM)

HIV/AIDS Education

Most HIV/AIDS control programs of developing countries welcome the help of non-governmental organizations to monitor the course of the AIDS pandemic within national boundaries, to inform about human immunodeficiency virus infection, and to implement an array of programs to prevent the further spread of infection. Current policy is to integrate HIV/AIDS prevention programs within existing health and population programs and to build national capabilities to undertake long-term prevention programs.

A high degree of sustained involvement on the part of donor agencies, federal and municipal government, and private providers working in partnership with non-governmental or pri-

ate voluntary organizations will be necessary if the AIDS pandemic is to be controlled. Urban policy makers and health officers must incorporate comprehensive HIV/AIDS prevention activities in urban health programs to prevent the spread of HIV infection to women, newborns, adolescents, and other family members at high risk.

Information, education, and communication programs are a key strategy to promote behavioral change to prevent HIV infection. The first step in many countries is to convince national leaders of the need for such programs. The start of an awareness program for the general public has sometimes been seriously delayed because of the government's unwillingness to permit use of the mass media to convey controversial messages about sexuality. Some governments have allowed for a restrained number of informational activities but have kept themselves removed, thereby weakening the messages and denying the need for behavioral change. Fortunately, many governments have been quick to recognize the threat that AIDS poses to their people, and are strong supporters of public communications about HIV/AIDS prevention activities.

Public information campaigns use a variety of media and communication techniques to reach as many people as possible with messages about the causes, effects, and prevention of AIDS. The messages focus on providing basic facts, dispelling rumors and misconceptions, and breaking down the barriers to discussing sexual behavior.

An example of an urban IEC program implemented by a non-governmental organization is the AIDS telephone hotline in Nairobi, which was developed by a non-governmental organization, Africa Health Services, to inform people about the disease. People call the hotline to get answers to their questions about AIDS. The hotline provides people with easy access to information about AIDS, refers people with health problems, and is able to maintain confidentiality.

The goal of AIDS education is to help people translate information about AIDS into the adoption of the safest protective behavior possible. Education seeks to move people beyond being aware, to being concerned and knowledgeable, and on through the stages of behavioral change to sustained change. Carefully designed, well-executed, and sustained communications to the general public help prevent the spread of HIV infection.

From a presentation by Dr. Charles Maringo, Africa Health Services/ Kenya

Environmental Protection

Recent environmental changes and population growth have had a significant negative effect on public health in Mexico. The population has grown as life expectancy rates have increased and mortality rates have dropped. Rapid industrialization has concentrated populations in large cities. Emissions from energy use, and pollution generated during production and consumption, damage the quality of air and water. Migration into cities from the countryside has created a larger work force and a consumer market. The more people, the more the demand on the environment. And, the more difficult it is for government to respond when populations grow quickly.

The situation is particularly difficult in Mexico because a general societal recession (increased poverty, construction declines, and industrial closures) has caused the government to accumulate a large budget deficit, making it more difficult to fund efforts to ameliorate or reverse the degradation of the environment while at the same time meeting the demand for services and housing.

The environmental stress brought about by rapid industrialization and increased production has put pressure on family health conditions in Mexico, as it has in other countries of the world. Although research on environmental health and child survival is scanty, researchers have documented mortality, acute morbidity, and developmental impairment effects as consequences of air pollution. There is, for example, the hazard of leaded fuel emissions from traffic congestion. Studies in the Mexico valley have found that lead exposure is so high that some newborns have levels of lead in their blood high enough to cause mental and physical impairment. Chronic health consequences from severe air pollution are still to be uncovered. It is believed that smoke-filled air from factories and indoor cooking in poorly ventilated homes contributes to chronic respiratory illness in children. Future research should be oriented toward predicting the magnitude and character of health risks related to air pollution and other environmental pollutants.

These environmental concerns are not limited to one country or one region of the world, and can be found in rural, urban, and peri-urban areas. However, the children of the urban poor



MIHV PHOTO

The health committee working with MIHV/Kenya took action to deal with polluted water in the streets and coordinated efforts for burying garbage.

need special protection. Hazardous environmental conditions in the urban slums and squatter settlements expose children to open sewers, unsafe water, polluted air, lead from vehicle emissions, inadequate shelter, rat infested rubbish dumps, toxic fumes, hazardous waste ... the list goes on.

PVOs should document information on health outcomes and environmental risks, policies, and regulations existing in the urban neighborhoods served by the Child Survival projects. And, PVOs must mobilize communities to take environmental action. Data and commitment to decreasing morbidity and mortality can influence the course of change in environmental health policy now starting to take place.

*From a presentation by Dr. Carlos Santos-Burgos,
Director General, Escuela de Salud Pública de México*

Prevention of Alcohol & Substance Abuse

Drug and alcohol addiction are common problems found in most countries throughout the world; Mexico is no exception. Prevention and treatment programs have been created to decrease the number of cases of drug and alcohol addiction, and to provide guidance in human interactions. The Centros de Integración Juvenil in Mexico City is an outstanding example of such a community based, family directed, urban program.

The Centros de Integración Juvenil combines both human and material resources from the public, private, and social sectors, to provide preventive and treatment services for drug and alcohol abuse in Mexico. Multidisciplinary mental health teams and volunteers aid their local communities in understanding and addressing drug and alcohol problems.

Drug and alcohol prevention programs are considered part of the health education program provided for youngsters. Their objectives focus primarily on community sensitization and the creation of an understanding that drug and alcohol abuse are real health problems common to every community.

Media campaigns create general awareness about the magnitude of the drug and alcohol problem in the community. Increased awareness creates the conditions for effective participation.

Group presentations are also a major educational activity. The strategy focuses on sensitizing community members to local problems of drug and alcohol abuse, and involves the community in generating possible solutions to the problem.

This non-governmental organization believes it is important to give family members the social skills to deal with problems of drug and alcohol abuse, both at a personal and family level. Staff train community members in communication, family dynamics and methods of handling and expressing emotions. The group training also develops knowledge and skills which enable

teenagers and adults to participate in drug and alcohol preventive activities.

*From a presentation by Lic. Jesús A. Cabrera Solís,
Director General, Centros de Integración Juvenil/México*

"Health Begins in the Home"

In Mexico, the Program on Maternal and Child Health provides universal services to those most vulnerable groups from the general population—mothers and children. Women within the ages of 15 and 49 comprise approximately 26 percent of the population while 11.7 percent of the population are children under the age of five. Intestinal infections, and pneumonia are among the major causes of death among children; maternal deaths are chiefly due to hemorrhages during pregnancy or labor, toxemia, and puerperium complications. The program intends to decrease maternal and infant mortality by 30 percent within the next five years.

In accordance with Ministry of Health policies, a unique maternal and child health initiative is improving outreach to disadvantaged families. This initiative is called "Health Begins in the Home." Without such special strategies to reach the urban



"LA SALUD EMPIEZA EN CASA"



poor, they often are missed by routine health services.

The program makes a special effort to address the health needs of urban families. Some of the major constraints found among these communities are family dissolutions, births in young teenagers; promotion of bottle feeding and a lack of continuity in breastfeeding; deficient diets; and lack of clear, formal goals for community providers.

The strategies set forth by the Program on Maternal and Child Health emphasize prenatal care, the promotion of breastfeeding, infection control, nutritional aspects of child growth and development, and the evaluation of mother and child services.

The health center in each area offers all primary health care services, including immunizations and programs dealing with nutrition, family planning, and child growth and development. Another service the government provides for the community is a traveling mobile dental office which is stationed on cert-

streets on different days of the week, giving free dental, and occasionally medical, attention for children and adults.

Some of the established community-participating services are popular "community kitchens" where both children and adults are fed breakfast for a small fee, and meals are prepared by several of women who volunteer from the surrounding area.

Intersectoral coordination results in a wider range of community health services. Community members are organized to train others and demonstrate a sincere sense of unity, carrying out joint activities such as the repairing of roads and promoting better water, sanitation, and chlorination techniques.

*From a presentation by Lic. Yolanda Senties,
Director General de Salud Materno Infantil, Mexico, and
from information obtained by workshop participants
during site visits to three communities.*

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PVO Lessons Learned Conference

The Challenges of Child Survival in an Urban Environment

Objectives

1. To develop an understanding of the consequences of rapid urban growth on the health status of children.
2. To explore key implementation strategies for protecting the urban child at risk.
3. To learn how "people-to-people" contact models, such as mother support groups, are being used to motivate and sustain desired health behavior.
4. To discuss health information systems for identification and follow-up of high-risk families in areas with dense populations and high migration.
5. To discuss ways to mobilize community participation for improved health conditions for urban and peri-urban communities.
6. To examine strategies and constraints involved in achieving sustainability of child survival interventions in urban communities.

Participants

Country national managers of urban PVO Child Survival projects in Africa, Asia, and Latin America attended the conference. They represented 11 projects in eight countries. A.I.D. sponsored one country national from each of the following: African Medical & Research Foundation/ Kenya; Adventist Development and Relief Agency/ Haiti; LaLeche League International/ Guatemala; LaLeche League International/Honduras; Minnesota International Health Volunteers/Kenya; Plan International/Dominican Republic; Project Concern International/Guatemala; Project Hope/Honduras; Rotary PolioPlus/India; Save the Children Federation/Indonesia; World Vision Relief & Development/Bangladesh.

In addition, one representative from each of the 10 PVO headquarters attended.

The conference was organized by The Johns Hopkins University in coordination with the Maternal and Child Health Department of the Ministry of Health, Mexico City, and

the National Institute of Public Health, Cuernavaca.

The conference was funded by the Office of Private and Voluntary Cooperation, Bureau for Food and Humanitarian Assistance, Agency for International Development. Other collaborating agencies represented were Fundación Mexicana para la Salud, El Colegio de México, MEXFAM, and Centros de Integración Juvenil, from Mexico; the Pan American Health Organization; and UNICEF. Participants from the United States included representatives of Georgetown University, Community Systems Foundation, and the Center to Prevent Childhood Malnutrition.

Participants shared a common background in health. Among the resource specialists were physicians with expertise in public health, epidemiology, biology, nursing, pharmacy, and sociology.

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