



COMMUNICATION COMMUNITY and HEALTH

FINAL REPORT
Honduras Water & Sanitation Communication Program
1981-1985

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AID

COMMUNICATION COMMUNITY AND HEALTH

**Oscar Vigano
Field Project Director**

**Tegucigalpa, Honduras
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Ministry of Public Health of Honduras

Juan de Dios Paredes, M.D., Minister
Francisco Bueso Arias, M.D.
Maurice Andino
Juan Castro
Anarda Estrada, M.D.
Guillermo Consuegra.
Wilfredo Alvarado, M.D.
Francisco Segura
Eliseo Fajardo
Arturo Escobar, M.D.

Ministry of Public Health/PRASAR

Office of Health Education

Luis A. Canales
Gerardo Medina
Nelson Bejarano

Water and Sanitation

Rafael del Cid
Profirio Diaz
Samuel Alvarado

SANAA

Tomas Lozano

PRASAR/SANAA

Nelson Alberto Flores
Javier Rivera
Francisco Larios
Juan Pablo Escoto
Ramon Pino
Mauro M. Ramirez
Marta Hernandez
Marco Antonio Mejia

USAID/Honduras

Anthony Cauterucci
Carl Leonard
Thomas Park
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William Smith
Edmundo Madrid
Francisco Figueroa

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Anthony Meyer

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Elizabeth Booth
Ximena Downey
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On September 30, 1978 the Academy for Educational Development was contracted by the Office of Health and the Office of Education of the Bureau for Science and Technology (S&T/H and S&T/ED) of the United States Agency for International Development (AID) to implement a five-year project for the prevention and treatment of acute infant diarrhea in the rural areas of two developing countries. A project agreement was signed in September 1979 with the Government of Honduras, and in 1981 the contract was amended to expand emphasis given to water and sanitation messages and provide technical assistance to a separate program in three north-eastern provinces of Honduras. This became known as the Water and Sanitation (W&S) component of the Mass Media and Health Practices (MMHP) Project. MMHP was the predecessor of the current Communication for Child Survival (HEALTHCOM) project.

Executive Summary

The Academy for Educational Development, through the Mass Media and Health Practices Project funded by the Agency for International Development and the Water and Sanitation Project of Honduras (*Proyecto de Agua y Saneamiento Rural—PRASAR*), assisted the Government of Honduras to design a health communication program for rural communities. The program included person-to-person instruction, mass media, and courses in primary schools to teach new water and sanitation practices. The project also included training counterparts in production, training, evaluation, planning, and management of a new public health communication methodology. The project in Honduras started in February 1981 and ended in September 1985.

As a result of the program, by September 1985 all of the field promoters were trained in the dynamics of health communication, and the radio programs were reaching an estimated 300,000 people in the project area. Interviews with a sample of 520 people in December 1983 indicated that 75 percent were observing two or more of the four behavioral objectives set by the project. Original goals for materials production were doubled and in some cases tripled.

The Ministry of Health adopted many aspects of the health communication training system for its promoters and appointed the director of the health communication component of the Water and Sanitation Project a permanent member of the MOH's Training Committee.

Several other water and sanitation projects, such as CEDEN and *Plan de Honduras*, adopted the PRASAR educational model for their field work.

This program illustrates the application of public health communication to water and sanitation education. It suggests that the methodology is useful in settings where group or community behavior change is essential and highlights the special role that rural schools can play in effective communication.

The primary lessons that emerge from this and other health communication programs are:

1. The fundamental importance of detailed and repeated audience research;
2. The importance of integrated channels and close coordination of broadcasts, print, and face-to-face instruction; and
3. The need for creative solutions which break out of the traditional mold.

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**VALE MAS QUE YA LLEGASTE... EL NIÑO
TIENE MUCHA SED...**

**PERO MAMA, EL AGUA
ESTA SUCIA.**

INTRODUCTION

WATER AND SANITATION PROBLEMS IN HONDURAS

Honduras has one of the highest mortality rates in the world, much of it caused by water-borne diseases due to poor environmental sanitation. Water-related diseases such as gastroenteritis and colitis are the main causes of infant death in rural areas. To address this problem basic sanitation activities in Honduras were substantially increased during the period 1971-1978. Nevertheless, the morbidity rate for diarrhea remained the same and in some cases was slightly higher in 1978 than in 1971. Amebic dysentery increased until 1978 when the rate decreased slightly.

Although the sanitation infrastructure was expanded, there were no efforts to educate community members about the importance and benefits of using and properly maintaining the water supply and sanitation systems or the relationship between these systems and health. This indicated that provision of services, whether water supply systems or latrines, without health communication did not have a significant effect on water and sanitation related morbidity and mortality rates.

Several other variables within the environmental sanitation context should be taken into consideration if a change in these rates is desired. The safe use of water supplies and human waste disposal facilities by the target audience is a process that requires behavior modification and radical changes in cultural patterns. The individual must understand the relationship between health and environmental sanitation, personal hygiene, conservation and handling of food, the proper use of water, the safe disposal of domestic waste, and the control of insects, rodents, and domestic animals. Reduction of morbidity rates requires radical behavioral changes which deeply affect communities. In order to achieve these changes, two steps should be taken:

1. The creation of a sanitation infrastructure.
2. The implementation of a community health and sanitation education system closely related to and supporting the sanitation infrastructure.

Neither of these two conditions by itself will achieve the desired changes. Infrastructure without community education does not improve health status. On the other hand, the effects of health communications without the physical means to support the change are disastrous.

These two conditions and their effect were considered during the design of the Honduras water supply and sanitation project, and as a consequence a significant health communications component was included to support the sanitary infrastructure.

GEOGRAPHIC AND DEMOGRAPHIC CHARACTERISTICS

Honduras, the second largest country in Central America, covers 112,088 square kilometers, an area approximately the size of Ohio. The population of the country is estimated at approximately four million with a birth rate of 49.3 per 1000 inhabitants in 1974.

There are two geographical regions in the country: the mountainous interior and the Caribbean lowlands of the North Coast. The country is politically divided into 18 districts, each of which has an administrative capital. The district government is headed by a Governor named by the President. Likewise, each district is subdivided into municipalities (281 in all Honduras) which are administered by an *alcalde* (mayor) named by the district governor.

The *aldeas* (small villages) within the municipality are administered by an assistant *alcalde* named by the principal *alcalde*. *Caserios*, the smallest political units, are small groups of houses which are within the jurisdiction of an *aldea*.

A recent MOH study in one section of the Region showed the average family to have seven members. Seventy percent of the families had between four to eight members. Forty eight percent of the families were made up of a couple and children less than five years old.

Demographically 47 percent of the population of Honduras is less than 14 years old. Seventy percent of the population is rural and 30 percent urban. The annual average income in 1972 was US \$200. Almost 80 percent of all Honduran families have an annual income of less than US \$1,000 and only 3.1 percent have an annual income of more than US \$7,000.

Honduras is 90 percent mestizo and Spanish speaking. The Roman Catholic religion is professed by 89 percent of its population, and 20 protestant sects make up the balance. Literacy is reported at 47 percent of the population. Life expectancy is 53 years.

Women participate in the internal decisions of the household. However, they have less influence on decisions related to village life outside the home. Farming and traveling decisions are usually made by the men. In about a quarter of the homes, the husband and wife decide these issues. Decisions pertaining to food purchases and children are usually made by the women, but there are a substantial number of families where both parents share in the decisions pertaining to their offspring. This indicates that educational messages should be aimed at both parents in the family.

PROJECT BACKGROUND

On March 31, 1980, the Government of the United States of America, through the Agency for International Development (AID), and the Republic of Honduras signed a Loan Agreement (numbered 522-U-036) in the amount of U.S. \$10,500,000.00 to finance a water supply and sanitation project for rural areas of northwestern Honduras. Called the Proyecto de Agua y Saneamiento Rural (PRASAR), the project was to help develop multi-family wells, small aqueducts, sewer disposal systems, and latrines. Included in this Loan Agreement was a one million dollar grant for a health communication component with a contribution from the Ministry of Health of U.S. \$7.7 million used mostly to pay local salaries. The project is being implemented through the Ministry of Health (MOH) and the National Water and Sewer Service.

The purpose of the project is to help prevent waterborne diseases by improving the water supply and sanitation systems in rural areas and improving system maintenance, encouraging the proper use and care of these systems by the users, and changing present water and excreta disposal habits through health communication.

The project was expected to benefit 200,000 families by giving them direct access to potable water and sanitation facilities. Project goals were the construction of 1,000 shallow wells with hand pumps, improvement of 800 existing wells, installation of 20 windmills, construction of 180 gravity flow water systems, improvement of 50 existing water systems, construction of 20,800 pit latrines, installation of 74,000 water-sealed latrines, construction of 21 sewer systems, and changing water supply and sanitation-related behaviors through health communication.

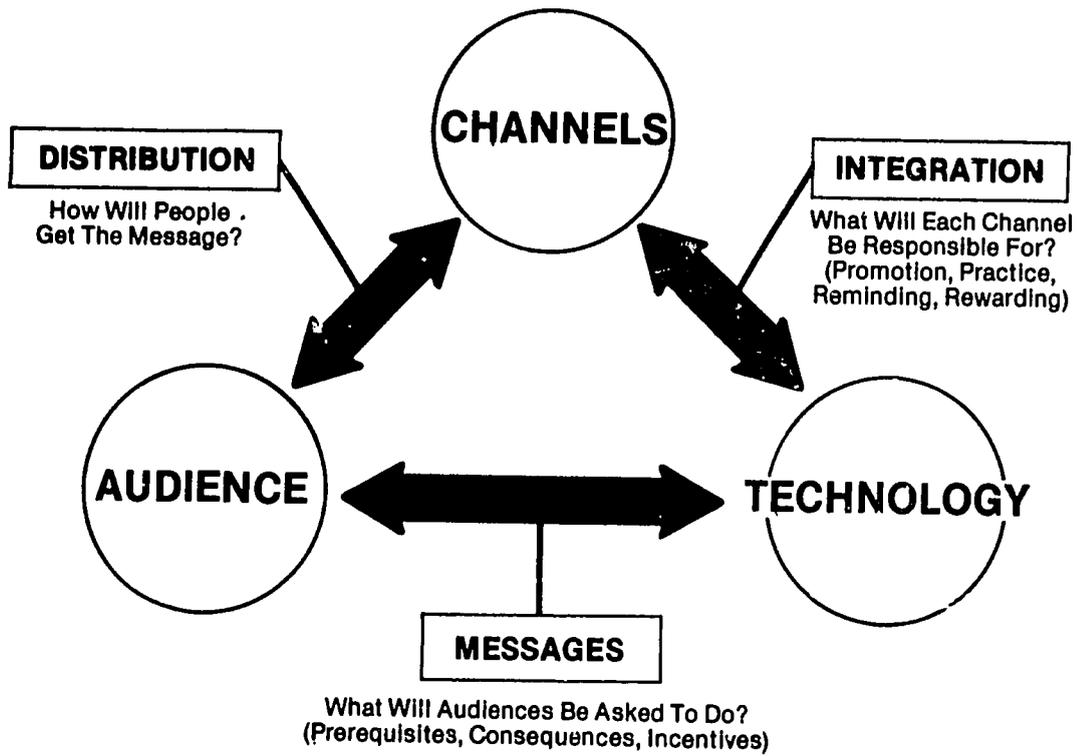
The project was concentrated within Sanitary Regions 3, 5, and 6 which include the departments of Lempira, Ocotepeque, Copan, Santa Barbara, Cortes, Yoro, Atlantida, Colon, and the Bay Islands. The project spans seven years beginning on March 1, 1980 and ending April 1987.

The health communication component is closely related to the construction and maintenance of aqueducts and basic sanitation and focuses on the specific needs of PRASAR in the health communication field, promoting effective community participation and supporting the project in attaining its goals and objectives.

The communication component was divided into two overlapping steps: promotion and education. The first step, promotion, started in December 1981 with the distribution of three posters and the broadcasting of three radio spots for two months in the areas affected by the project. The second step, education, started in September 1982 with 30 minute radio programs that were divided into two 15-minute segments.

Technical assistance was provided to the communication component through a USAID mission financed addition to the Mass Media and Health Practices Project (MMHP). MMHP was a research and development program created by the Office of Education and the Office of Health within AID's Bureau for Science and Technology. Its primary mandate was to develop an effective communication methodology for the rapid expansion of oral rehydration therapy. The early success of the project in Honduras and the synergy between diarrheal disease control and water and sanitation practices motivated the Government of Honduras and USAID/Honduras to request an expansion of the MMHP project in Hondu-

ras, adapting the public health communication methodology used for oral rehydration therapy to the specific problem of community water supply and sanitation practices. Under this expansion, more than five years of technical assistance was provided to the Government of Honduras.



THE COMMUNICATION STRATEGY

OVERALL STRATEGY

The public health communication strategy is an approach to large-scale popular education that attempts, in a predefined period of time, to change a particular set of behaviors in a large-scale target audience with regard to a specified problem. During the past two decades, dozens of campaigns on topics as varied as forest fires, mental retardation, energy conservation, smoking, alcoholism, littering, seat belts, venereal disease, malaria, breastfeeding, latrine construction, population control and infant diarrhea have attempted to inform, motivate, and often to change the behavior of a wide audience in a short time.

Experience with public education for health is extensive. In the population control area, for example, at least half a dozen projects with three years' experience or more have improved contraceptive availability, increased sales of contraceptive products, spread knowledge, and stimulated wider use of the methods promoted at a cost below that of most traditional programs.

The success of the health communication approach depends upon its ability to provide a sufficiently large number of people with practical and important new information. It must make an impact upon the consciousness of the intended audience by rising above the everyday clutter of advice and suggestions and becoming an important new priority in their lives. It must change what people do as well as what they think and believe. This cannot be achieved by the repetition of simple slogans, the mass exhortation to do the right thing, or the indiscriminate use of mass media alone. It requires a sensitive understanding of how people are affected by specific health problems, articulate crafting of educational messages which are both useful and practical, and a coordinated distribution network which reaches each individual through various channels simultaneously. In essence, the planners of such an approach will need answers to the following questions:

1. Which of the many desirable behaviors are important enough to make a difference and are also susceptible to change? Susceptible to change means people must:

- Have ready access to any new resources required to adopt the behavior.
- See positive benefits from adopting the behavior.
- See no serious negative effects from adopting the behavior.

2. What must be done to ensure that people:

- Believe that the behavior being advocated is the best alternative to solving a problem which *they* perceive as important?
- Understand how to perform accurately the behaviors so that predicted the positive rewards come about?

3. How will enough people become exposed to the advocated behaviors to make a difference in the problem?

4. How will long-term reinforcement of the behaviors be provided to ensure continued adoption?

5. How will success be measured?

6. How can all this be done at an affordable cost?

The program structure being proposed here (see graph below) reflects the importance of these elements as applied to a health problem. It includes a preprogram planning and development phase, an instructional intervention, and an ongoing monitoring and evaluation system with clear results in knowledge, attitude, and behavior.

The planning and development stage emphasizes the collection of critical information needed to prepare an effective program design. This information answers important questions such as: (a) Who in the total population should be selected as the principal audience? (b) What communication channels are most critical for these people? (c) What behaviors should be advocated? (d) What resources are needed to conduct the program? The final program planning, including budget and resource requirements, is based upon the results of this investigation.

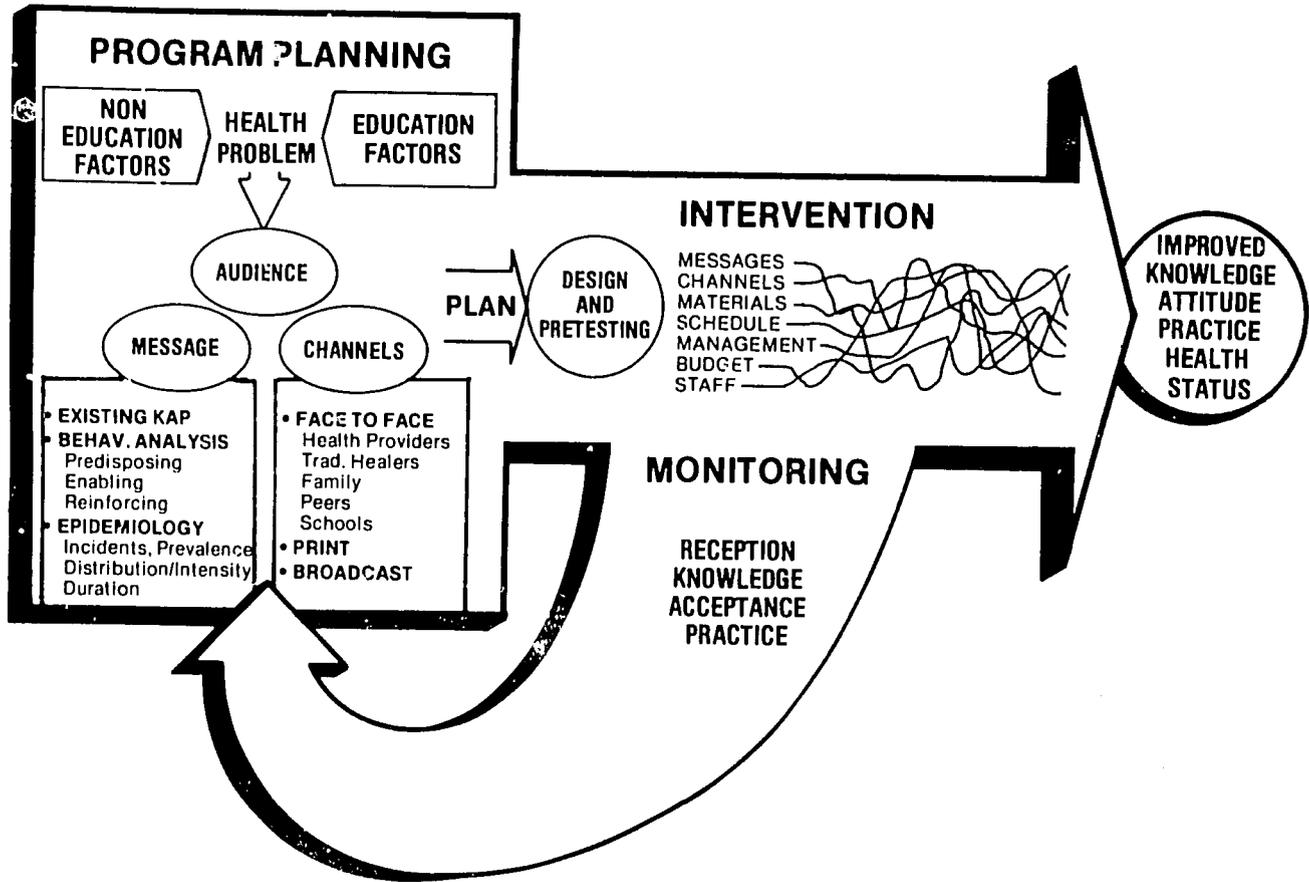
While it is impossible to predict the results of the preprogram research, it is possible to suggest certain basic features that might be included in any effective public education program. In order to reach large numbers of people, mass media, particularly broadcast media like television and radio, will play a central role. Three components—broadcast media, print materials, and fact-to-face community outreach activities—are structured in a coordinated whole so that one reinforces the information provided by another. Woman hearing health messages on the radio should also hear the same advice from a health worker, receive printed information from her child's school, participate in a community health fair, and see related posters.

The intervention is divided into discrete cycles. Each cycle covers the same basic information but with slightly different approaches. These cyclical changes reduce audience fatigue and permit a continued renewal of audience involvement. From an administrative perspective, the cycle approach is important because it permits program planners to de-

sign segments of the program sequentially. They do not need to design the entire program at once. This means they can work with fewer production facilities over a longer period of time; more importantly, they can incorporate results of the earlier phases into the planning of later phases. In essence, it permits the planner to make important iterative changes in educational strategy.

These changes must be made in response to information on the acceptance and efficacy of project activities. It is the purpose of the monitoring and evaluation component to ensure that this information be available at relevant and timely intervals. A monitoring system which permits the random sampling of selected segments of the audience should be developed. Planners will know: (a) how a microcosm of their intended audience feels about the advice they are receiving; (b) whether they are taking that advice; and (c) what obstacles they are encountering. These monitoring devices can also point up important logistics problems such as a breakdown in delivery of printed matter or the use of inappropriate broadcast times to meet audience needs. This type of ongoing evaluation is essential in making corrective changes in future cycles as well as in providing program administrators with a clear idea of their overall potential success.

HEALTH COMMUNICATION MODEL



TARGET POPULATION

The primary audience for PRASAR health communications activities was rural families in towns with fewer than 2,000 inhabitants, health promoters and engineers working with the project, and rural primary teachers.

Health communications activities were implemented in communities within the area covered by PRASAR, specifically those affected by the construction of water supply and excreta disposal facilities.

The program reached approximately 300,000 people through mass media, mainly radio, posters, and other printed materials. Of those, 80,000 were reached face-to-face through promoters.

The target population was divided into several groups, with different levels of education and experience:

- Heads of families: men or women with decision-making responsibilities in the home.
- Teachers: school directors and teachers working in rural schools within PRASAR's areas of influence.
- School children: the elementary school population in the project's areas.
- Opinion leaders: influential persons within the community.
- Organized groups: community committees and other groups and organizations.
- Workers: the ones participating voluntarily in the construction of the systems.
- Health personnel: personnel working for the MOH in the rural communities.
- General audience: PRASAR radio program listeners or those affected by any other of the mass media.



OBJECTIVES

Specific objectives of the PRASAR health communication campaign included:

- The participation of 25 percent of the heads of families reached by PRASAR health communication activities.
- Changing at least four sanitary behaviors among the families of communities within the project.
- Training all in-service health promoters in basic aspects of health communication, community participation methods, and the application of educational materials produced by the project.
- Introducing health communication in at least one school of each of the communities in the project's area including hygiene and environmental sanitation in coordination with the project.
- Coordination of activities of health communication with MOH personnel in the communities attended by PRASAR to support the MOH policies of extended coverage.
- Participation of organized community groups in health communication activities.
- Informing the inhabitants of Sanitary Regions 3, 5, and 6 about the objectives and achievements of the project.

At the end of the project, the audience should:

- Cover drinking water vessels at home to avoid dust, insects, or animals contaminating the water.
- Cover the latrine and keep its surroundings clean.
- Use a ladle or pour water out of the storage container avoiding putting hands in the water.
- Contribute money to maintain the rural aqueducts.





PRINT MATERIALS

MATERIALS SELECTION

The materials selection process was based on six variables:

Audience

- Understanding the graphic or audio messages.
- Acceptance of styles (colors, realistic illustrations for adults, humorous illustrations for elementary schools, tragi-comic situations for soap operas, etc.).
- Visual perception problems in the interpretation of graphic concepts and codifications.

Purpose

- What message should the materials relay?
- Do they allow an effective treatment of the message?
- Do they achieve the educational objectives?
- Will they be easy to distribute?

Cost

- Are the materials cost effective?
- Could the message be relayed using less expensive alternatives?
- Is the production cost within budgetary means?

Field Applicability

- Could the materials be used under any field situation?
- Are spare parts available for any equipment used?
- Does it need special darkened rooms or electricity?
- Does it need specialized and time consuming training for personnel to use it?

Effectiveness

- Is this the best channel to relay the educational message?
- Will it be useful to support the rest of the educational component?

Production Possibilities Without Project Funding

Finding materials that could be easily produced within institutional means was perhaps one of the most important factors considered in the selection of materials. Many, very effective materials or models could not be used due to exorbitant production costs or requirements for certain technical skills. Educational materials used in the project and in general in the whole educational system might be considered traditional and perhaps unsophisticated. The main difference was the methodology used in message preparation and teaching.

All materials were designed to create awareness among learners about problems within the community and their influence on family health, promoting an analytic rationalization of the real situation through dialogue and active participation.

Community education methods were adapted and used for person-to-person health communication. Flipcharts with illustrations of water supply and sanitation conditions in rural communities are used by health communication promoters to stimulate a dialogue through which participants themselves re-create their community's living conditions, analyze their problems, and propose solutions. Health promoters are moderators of the resulting interaction, reassuring and supporting ideas being generated by the participant.

MATERIALS PRODUCTION

The development of flipcharts began in January 1982. Three months later, the first 20-page version was ready for field testing.

The field test with community members took place in May during a workshop for promoters and engineers. After this test, some minor changes were introduced and the drafts were sent to the printers. By November 1982, after training promoters in its use, a copy of the flipchart and the user's guide were given to each of them.

By the middle of January 1983 two wall charts for rural schools about personal hygiene and latrine maintenance were ready for distribution. A comic book, "Juanita y La Gotita" ("Juanita and the Little Drop of Water"), came off the press. This comic book, distributed by June 1983, was part of the teaching module for rural schools. Another wall chart for adults was designed and tested. Its message was developed graphically, and afterwards a one line caption was added. Again, after testing, changes were made and 2,000 copies were printed. This adult wall chart served a double purpose. First, it supported



the talks given by the promoter on how to maintain latrines, and, second, it was a reminder of the message when distributed to the learning group members.

By February 1983 a photonovel was commissioned dramatizing the contents of the first flipchart. After testing, 10,000 copies were printed and distributed among members of learning groups which were using the first flipchart.

A technical flipchart explaining how to build latrines for use by promoters was ready in March 1984. This was designed for use with small groups of five to seven participants. Another flipchart was developed emphasizing the importance of maintaining the aqueducts and contributing money for up-keep.

The message strategy had two phases. In the first phase the emphasis was on promotion and infrastructure construction. The second phase was education on the safe use and maintenance of the infrastructure.

Promoters were heavily involved in the first phase as interpersonal communication was the primary message delivery system. The second phase was the opposite. Radio became the main delivery system using the promoter as support. The principal reason for this strategy was that promoters spent an average of three months with each community. As soon as the construction was finished, they moved to another community.

In person-to-person sessions promoters met with community groups using flipcharts, wallcharts, and photonovels. Wallcharts contained instructions on how to keep latrines clean and reminders to cover drinking water storage containers and wash hands, utensils, vegetables, and other items when preparing food. Once the meeting was over, the promoter distributed copies of the wallcharts to participants. The photonovel was used in the same way.



Teaching Modules for Rural Primary Schools

Recognizing the importance of rural schools in changing children's behavior towards water supplies and sanitation, and in turn influencing families and communities to change behavior, a series of modules were designed and used to teach children about water supply and sanitation problems and their influence on health. These teaching modules were closely related to the overall health communication effort; whatever was taught at school was repeated in group meetings, radio, and printed media.

Production of each teaching module started with an investigation of technical content through interviews with experts and a bibliographic review. Using results of the investigation, a series of learning objectives was developed and contents drafted. Afterwards, the most basic concepts were extracted and used for the student booklet.

CUESTIONARIO

1. ¿COMO CONTAMINABA BETO EL AGUA DE BEBER?

2. ¿ COMO SE DEBE SACAR EL AGUA DE BEBER SIN CONTAMINARLA?

3. ¿ CUAL ES EL LUGAR EN DONDE MAS SE CONTAMINA EL AGUA ?

4. ¿ QUE DEBE HACERSE PARA USAR Y CONSERVAR EL AGUA EN LA CASA?

5. ¿ POR QUE SE ENFERMABA LA HERMANA DE BETO ?

A draft of the teacher's guide and a rough version of the student booklet were made and field tested in rural schools. Based on results, the necessary changes were made and a final version was printed. For Module No. 1, a total of 5,000 copies of the student's booklet and 200 of the teacher's guide were printed.

After receiving special training in the use of materials and instructions about distribution, health promoters working for the project were given 200 modules for distribution to rural schools in their communities. Each school received an average of 20 student booklets and one teacher's guide.

Teacher's Guide

As a typical example, Module No. 1 has a brief introduction summarizing the concepts and contents of the guide, a list of teaching objectives, general instructions in teaching a class using the module, and a flow chart showing detailed instructions and procedures for each step.

Each step is divided into five parts: 1) objectives of the step, 2) basic information, 3) procedures, 4) exercises, and 5) the step's evaluation. The first part thoroughly describes the goals to be achieved by the particular step. Basic information provides rural teachers with the background they need to teach the course. They often have no means of researching a subject to develop their classes. There are no libraries in their villages, and books at school are practically non-existent. Therefore, a specific and fairly extensive chapter has been included in each step containing basic information on the module's topic to be used by teachers in class preparation. The procedure section instructs teachers on the application of each step. The exercise section contains a description of the different exercises recommended for each step. The evaluation section describes some forms of evaluation appropriate to the step.

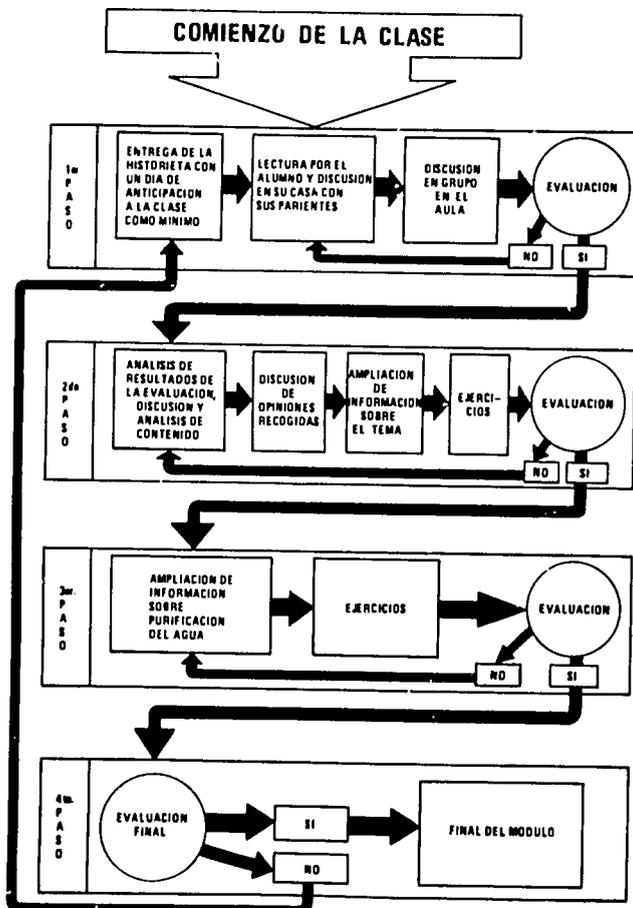
Student Booklet

The comic book "Juanita y La Gotita" was developed with single concept messages for distribution to students. It dramatizes basic information to introduce school children to the topic to be discussed in class and includes a questionnaire.

The comic book serves the dual purpose of providing information in an entertaining way and motivating students to participate when questions about the plot are asked in class. Modules have been designed to allow use by grades three through six.

Each step is equivalent to one lesson, contains only one learning objective, and ends with a series of exercises designed to create awareness about village conditions related to water and sanitation. For example, children visit village water sources, boil water at schools, oxygenate water by pouring it into another container, and do other exercises.

DIAGRAMA DE ACTIVIDADES DEL MODULO



YA VIENE MI MUCHACHO DE LA ESCUELA

**MIRE MAMA, EN LA ESCUELA ME
DIERON ESTE CUENTO DE
JUANITA Y LA GOTITA
Y DICE QUE LA GENTE
SE ENFERMA PORQUE
SE ENFERMA PORQUE
BEBE AGUA SUCIA...**



Using the Module in the Classroom

During class, teachers follow the module's pedagogical model within the boundaries set by the official curriculum for the corresponding school grade.

One day before class, comic books are distributed to each student to be read at home. During class, the comic books' questionnaires are completed, followed by a question and answer session where teachers reinforce the comic book information using contents from the "Basic Information" chapter. The basic information chapter constitutes a general frame of reference to teach different lessons which are adapted by teachers. The teachers select the different topics appropriate to the grade.

The lesson time limits were left open to teachers in order that other related topics generated by the discussion could be thoroughly explored.

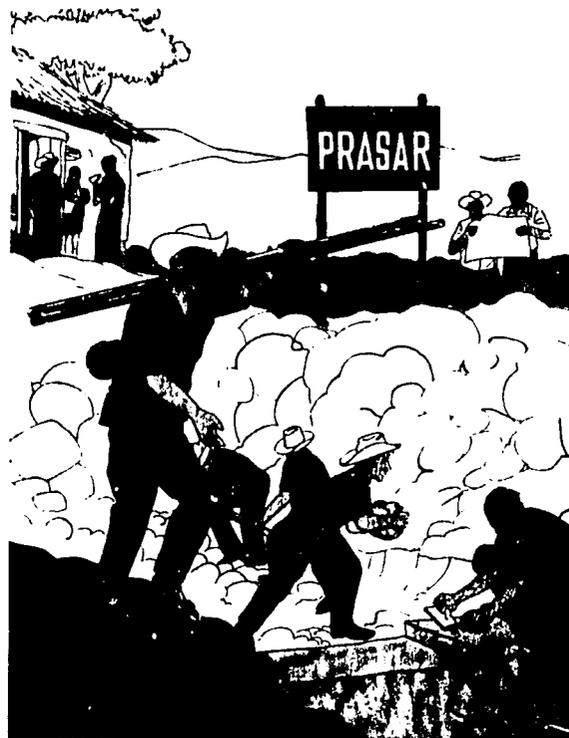
While using the module, teachers are encouraged to create a participatory environment geared to stimulate in students an awareness of water and sanitation problems within their community which, reinforced with practical exercises, is conducive to changes of attitudes and behavior. After the exercises, tests are given to evaluate the results of each step. The application of the module ends with a general test designed to evaluate all the steps.

Only two weeks after 4,500 copies of the modules had reached rural schools, information about teachers' reactions started arriving in the form of letters, telegrams, and feedback from promoters indicating that the materials were well received and considered effective.

Because of the limited number of modules distributed, the schools rotated issues among several grades. Although the module was designed to be used with children who already knew how to read, first and second grade teachers read the booklet to their students and conducted classes using the rest of the module according to instructions.

As a result, more money was allocated and 5,000 more copies of the student booklet and more teachers guides for Module No. 1 were printed and distributed during the new school year. Ten thousand copies of the student booklet, and 1,000 teachers guides were printed for Modules Nos. 2, 3, and 4.

The teaching modules fulfilled several needs for both the rural schools and the project. Schools periodically had approached the Ministry of Health clinics asking for materials and information for use in teaching health related subjects. The modules are already structured to permit their immediate application in class without much previous preparation. The project is able, therefore, to reinforce the educational messages reaching families and the community through other channels and to involve rural teachers in efforts to educate communities and help produce the changes which will enable them to fully benefit from the project.



The Flipchart

In Honduras a flipchart was developed to promote dialogue and drew upon actual village living conditions. It was specially designed and illustrated to generate community participation in the solution of problems identified on the flipcharts. The flipchart was not designed to transmit information in one direction as in traditional communication techniques which bring people together for a lecture. On the contrary, the fundamental purpose of the flipchart was to stimulate dialogue.

Flipchart objectives included:

1. Identification of problems related to water use, waste and sewage disposal, and other aspects of life in an unhealthy environment.

2. The changing of attitudes and the adoption of adequate sanitary practices for water use, waste and sewage disposal, and other practices and habits related to the environment and individual and collective health.
3. The promotion of activities which would solve water supply and sanitation problems, and at the same time promote improved domestic practices related to health and environmental sanitation.

Specifically it was hoped that the use of this flipchart would lead to:

1. Participants identifying at least three problems in their community related to water systems, sewage disposal, and sanitation practices and their implications for health and the environment.
2. Participants critically reflecting on the problems identified and proposing solutions to them.
3. Participants organizing themselves to implement solutions within the limits of available resources.
4. Participants carrying out implementation plans, combining local resources with those of PRASAR.

The flipchart consisted of 20 illustrations divided into four modules, each one developing a particular theme to achieve specific objectives as follows:

1. Clarification of the problem
2. Reflection and proposal of solution
3. Organization for action
4. Community action

Module No. 2 consisted of nine illustrations. The objectives of the first three were to encourage reflection on the possibilities for changing the situation and developing three basic concepts:

- People are able to improve their environment.
- People, acting together, can effect significant changes in their living conditions.
- The objectives desired are achieved by organizing and working together.

The five remaining illustrations present PRASAR as a possible partner in solving sanitation problems and as an available local resource. PRASAR is introduced once the group has had an opportunity to adequately reflect on the different possibilities for change and has identified concrete actions for solving problems. It encourages the community to include PRASAR in its activities so that community participation is effective.

Module No. 3 consists of three illustrations which introduce the idea of community organization, beginning with general meetings and the identification of organized groups, and culminating in the organization of a community board, a community education committee, and a public works and administration board. The concept of organization for action also includes the formation of support groups to develop community participation in the implementation of sanitation projects, as for example, the creation of work shifts.

Module No. 4 consists of three illustrations with the purpose of assisting the community to participate in an organized manner during the construction of sanitation projects. Parallel to this, the module also assists communities in consciously participating in the overall process of health education, leading to the acquisition of knowledge, changes in attitude, and the adoption of sanitary practices leading to improved living conditions and health. This module stresses the integration of the community with PRASAR so that the work is carried out in strict coordination. It is assumed that upon the completion of sanitation projects, the community would have an orga-

nizational base to continue the efficient operation and maintenance of the sanitation projects and to continue the health education process.

BUEN FUNCIONAMIENTO DE LA OBRA



Posters That Play Different Roles

Posters are generally considered a simple promotional medium. They are typically designed to carry a simple message and add some punch to point-of-contact advertising. It is generally held that posters are most effective when they attract attention with a simple message.

New uses for posters were experimented with in the water and sanitation program. Because program staff were deprived of regular contact with rural clients, the posters had to do more than “advertise” the program. The following examples illustrate how posters were used to achieve different objectives in the program.

Posters that Promote. During the early weeks of the program, PRASAR’s name was not well known, nor was its purpose. The first generation of posters responded more to the traditional promotional image—a simple message “BUILDING A BETTER LIFE,” showing men at work together unloading the water pipes PRASAR would be supplying.

CONSTRUYENDO UNA VIDA MEJOR



PRASAR · COMUNIDAD · SANAA · MSP · AID



Posters that Remind. A third generation of posters seeks now to remind people of skills already developed. Single images are combined with a calendar. The calendar was a popular format and increased the likelihood that people would actually put the poster up in their home. Notice that while the message is still educational, the drawings and images are attractive, emphasizing the benefits of using latrines, using a ladle, and having tap water available.

Posters that Teach. As the program progressed, however, it was necessary to go beyond simple name recognition and begin to actually teach and remind rural villagers of key skills areas. The posters combine the idea of a photonovel, so very popular in Honduras, with the wall poster format. In both cases Juanita, the comic book character, is used to emphasize the comic book relationship and maintain a single program identity. Each picture shows an important step in latrine maintenance and personal hygiene.



<p>AMIGUITOS... LA HIGIENE PERSONAL ES NECESARIA PARA TENER BUENA SALUD POR ESO DEBEMOS HACER LO SIGUIENTE:</p> 	 <p>LAVARNOS LAS MANOS CON AGUA Y JABON PARA QUE NO SEAN PORTADORAS DE MICROBIOS.</p>	 <p>LAVARNOS LOS DIENTES CON CEPILLO Y PASTA DENTAL PARA EVITAR LA CARIES.</p>
 <p>BAÑARNOS FRECUENTEMENTE PARA QUE NUESTRO CUERPO ESTE SIEMPRE LIMPIO.</p>	 <p>LA ROPA QUE USEMOS DEBE ESTAR SIEMPRE LIMPIA.</p>	<p>LA HIGIENE PERSONAL ES MUY IMPORTANTE. ¿VERDAD?</p>  <p>GOBIERNO DE SALUD PUBLICA PROYECTO COMUNITARIO SALUD Y VIDA</p>



RADIO IN HONDURAS

Due to low literacy rates in Honduras, radio continues to play an important role in reaching large segments of the population, especially in the rural areas. There are 126 AM and 98 FM radio stations in Honduras. Of these, 31 AM stations and 14 FM stations are located in Tegucigalpa, and five AM stations are located in Region 1. All of them except one, the Government-owned Radio Honduras, are commercial radio stations.

There are two major media networks in Honduras: Emisoras Unidas, S.A. and Audio Video, S.A. Emisoras Unidas, S.A., the largest network, has 14 radio stations, six of them in Tegucigalpa. These include some of the most popular stations in the country: HRN, Radio Centro, Radio Satellite, Estereo Mil, and Radio Exitos.

Audio Video, S.A., also has interests in television, owns ten stations, is affiliated with ten other stations, and owns licenses in FM, AM, and short wave.

Except for Radio Honduras which specializes in cultural and educational mini-programs, and Radio Centro which specializes in radio novels, programming for Honduras radio stations is very similar. The major difference in stations is the type of music which they play. Programming revolves around six major areas:

- News which is usually taken from the Honduras Press Department as well as international news agencies such as UPI, LATIN, DPA, and ACAN-EFE. HRN is known as the strongest news station in the country and 43.6 percent of its daily programming is news.
- Commercial spot advertising, usually 30 to 45 seconds in duration and sponsored by large commercial firms such as soft drink, beer, and coffee purchasing agencies and drug companies. A UNESCO study showed that a major portion of the daily programming is

IJA, JAI IQUE DIVERTIDO ES ESTE FRIJOL EL TERRIBLE!

IA VER CALLENSE! OIS, JUSTINA, ESTA OICIENDO QUE EL SANAA Y EL MINISTERIO DE SALUD AYUDAN A LAS COMUNIDADES



made up of commercials. Almost 22 percent of HRN's daily programming is dedicated to commercials.

- Music, usually Mexican "rancheras" mixed with other Latin-American music and North American "rock." The major differences in radio stations is the proportion of each type of music broadcast during the day.
- Social service spots wherein radio stations allocate time for the transmission of their audiences' personal messages. The method of receiving these messages varies from station to station. Some messages are received by telephone or mail, but in most rural stations the *campesino* visits the radio station to dictate his spot to the literate station staff or personally announces his own message.
- Radio novels. Some of the more popular radio novels are "Legends of Honduras" on HRN, and "Kaliman," and various daily soap operas on Radio Centro.
- Educational Programs. On commercial radio stations the number of educational programs is very limited. However, on Radio Honduras, the Government radio station, educational programs make up 17 percent of the station's programming.

HEALTH COMMUNICATION BY RADIO

In 1981, a contract was signed with Mr. Carlos Salgado, a professional radio producer, to deliver 60 fifteen-minute episodes of an educational comedy on water and sanitation. Mr. Salgado created a successful set of characters very popular with rural audiences. He had prior experience with educational radio, and although the main criterion in selecting him was the success of his characters, his experience was of paramount importance in the development of the educational series.

The series, in keeping with the overall approach of the health communications component, features community members analyzing water and sanitation problems among themselves and making decisions about the best solutions. Although characters portraying nurses and promoters appeared from time to time, generally they were kept out of the main action. The programs, confirming the health communication component's participatory approach, stress community organization and collective problem solving and expressly avoid the use of authority figures to solve problems.

To get listeners to use a ladle or pour water into cooking utensils, for example, a soap opera was developed in which the main character talks about the problems and consequences of putting hands into potable water with a glass or other container.

Radio spots dramatize the dangers of not using a ladle or not pouring water from the container. Since 1983, 120 sixty-second radio spots have been created by the same person who produced the radio novels. These spots deal with the four main behavioral objectives of the health communication component reinforcing the radio series and the work of the promoters. The spots have been broadcast six days a week, 20 times a day, on seven local radio stations. Total listenership is estimated to be over 300,000 in over 95 percent of the project area.



**DON MONCHO HA DICHO UNA GRAN VERDAD!
¿Y USTEDES CREEN QUE ESTO QUE VEMOS AQUI ES
BUENO O MALO?**



TRAINING

COUNTERPARTS

Counterpart training started in February 1981. The first exercises were in writing the three year implementation plan. It included validating available data, setting objectives, calculating educational materials production and budgets, setting a three year working schedule, designing a delivery system, and later implementing the plan itself.

During the first three years most of the decision making and project control was exercised by the consultant. Beginning in the fourth year, it was gradually transferred to the counterparts until the role of the consultant became purely advisory and the trained counterparts took complete control of the project.

Counterparts were trained in:

- Training promoters in face-to-face communication and use of materials in the field
- Planning rural communication strategies
- Planning and production of educational materials
- Budgeting
- Managing health communication programs
- Pre-testing education and communication materials
- Radio production and planning
- Printed material production and planning
- Production of teaching modules for rural primary schools
- Production of educational campaigns using mass media and person-to-person approaches
- How to produce mass media and person-to-person materials using private contractors
- The basics of formative evaluation
- Budget and production control

HEALTH WORKERS AND COMMUNITY LEADERS

The project's activities took place among different audiences with specific training and health communication topics geared to each audience. At the community level this included training in-service personnel in the dynamics of interpersonal communications, the use of community approach strategies, and production of support materials.

Educational activities took place within the communities during construction of the sanitation systems. These included maintenance and safe operation of the systems, the production of technical manuals for the community, and the training of local voluntary personnel in systems maintenance.

Community health communications included basic knowledge of water and environmental sanitation problems, attempts to modify health attitudes related to environmental sanitation and water supplies, sanitary practices related to the use of water, human waste disposal, food handling, control of insects, rodents and domestic animals, the maintenance and proper use of the installed systems for protection of individual and community health, the relationship between the proper use of water supply and sanitation systems, and the prevention of diarrheal and parasitic diseases.

The training curriculum covered methods of generating community participation, investigation of community living conditions, interpersonal communication, and codification-decodification of perceptions within local environments.

The environmental sanitation curriculum included excreta disposal, solid waste disposal-

al in rural areas, water systems maintenance and human waste disposal, insect and rodent control, and domestic animals and family living environment.

The health curriculum included the relationship between feces disposal and contaminated drinking water, the prevention of gastrointestinal diseases and parasitic infestations through safe handling of drinking water, the relationship between health and adequate systems of human waste disposal, sanitary practices related to the newly installed systems, and practical methods of water purification for the community.

Home hygiene subjects were the handling of drinking water at home, good habits and practices in personal and family hygiene, and the relationship between poor health and the presence of domestic animals inside living quarters.

One hundred percent of the project's promoters were trained during the period February 1981 to September 1985 in:

- Communication process
- Communication models
- Communication barriers
- Communication media
- Communication methodology
- Elements and theory of person-to-person communication
- Communication within the rural community
- Investigation of contents
- "Problematization"
- Analysis
- Organization towards action
- Community participation
- Evaluation
- Methodology
- Use of the community participation flipchart
- Educational methods
- Formal education
- Non-formal education
- Basic functions and philosophy of health communication





HEMOS HECHO UN BUEN TRABAJO. TODAS LAS CASAS TIENEN SU LETRINA Y LOS POZOS QUE CONSTRUIMOS TIENEN AGUA ABUNDANTE Y DE BUENA CALIDAD

IYA NO TENEMOS QUE IR AL MONTE, AL FIN VAMOS A HACER DEL CUERPO SIN ENSUCIAR EL AGUA QUE TOMAMOS!

RESULTS

The first evaluation made in December 1983 indicated that 75 percent of the affected population had put into practice two or more of the four basic recommended practices of the project. The most difficult practice to introduce was the use of the ladle, as only two percent of the 520 households sampled used it to get water out of storage containers. Nevertheless, 40 percent poured the water out of the container as recommended in the educational messages.

There is strong anecdotal evidence that the majority of the latrines are properly used and maintained and that people are making efforts to avoid contamination of drinking water. Regarding the contribution of money for aqueduct maintenance, people know what the money is for and who should administer it. However, there seems to be some problems in collection. Many of these may originate with the collection system itself. There does not seem to be a clear and uniform policy on how much the contribution should be or how the money should be collected.

As a result of counterpart training, the Director and his assistant were able to write the 1984 and 1985 implementation plans, prepare budgets, plan and produce all necessary materials, and conduct the supplementary promoters training in 1985. The Assistant Director was also able to conduct the impact investigation in December 1983.

Health communication activities are expanding, and new personnel have been hired to strengthen the office. Plans for 1985 include the use of cassette tapes for which the necessary equipment has been acquired and is ready to be used.

The training of promoters brought about change in the traditional training methods of the MOH affecting not only training but also the promoters' approach to the community. The project's training system was included

within the MOH official curriculum for promoter training, and the director of PRASAR's Health Communication Office and his assistant were appointed as the only two members of the MOH's Training Committee that were not MOH employees. This committee oversees and organizes all training activities for the MOH.

Other organizations in the field demonstrated great interest in this particular educational model. World Relief, CEDEN, and Plan en Honduras have sent their promoters to be trained by the project and are using the same approach and materials. The water and sanitation project of the Ministry of Health/AID in the Dominican Republic has adapted the flipchart, and the education approach is being used by the project's promoters at health communications meetings.



LESSONS LEARNED

Water and sanitation education, as traditionally practiced, has often meant:

- An isolated poster, pretested with the local cleaning lady because “she’s from the rural areas,”
- A flipchart developed for group presentations that never take place because there is no money for travel or the flipchart never reaches health workers,
- A few “slick” TV spots which please the ministers but give little useful information,
- Radio programs which advertise services that do not exist or give advice no one can take,
- Hours of lectures on community participation given to health workers who are too overworked to treat patients, much less organize community groups.

Far too often ill-conceived messages have been pushed through weak channels at the wrong people with almost pitiful levels of resources.

All of this occurs despite the fact that we know better. It is not that we do not know how to teach people—just as it is not true that we do not know how to rehydrate a child. The problem is how to implement what we know—how to put a system in place which reflects our understanding of how people learn and what works in the real world of poorly trained and overworked staff, scant and unreliable budgets, and varying health changes.

Public health communication has demonstrated that such a system exists. We now know that people learn new behaviors best when:

- They are learning something they feel is useful,
- They practice what they are learning to do; the more practice the better,
- They receive feedback on how they are doing and are rewarded when they do well,
- Rewards are from several sources and are as immediate as possible,

Programs that seek to teach new behavior, particularly to large, dispersed audiences, are better when they:

- Define through research what the health problem really is, whom it affects, how those people understand and respond to the problem, what obstacles they are likely to encounter, and how the audience can be influenced to change.
- Segment general audiences into smaller groups of people who view the problem in similar ways, permitting more effective appeals to be directed at each different group.
- Use marketing behavior analysis and anthropological research to create message/products that are:
 - salient in solving the problem,
 - actionable given all the real-life constraints on the audience segment,
 - attractive when compared to other alternatives facing that segment.
- Test these messages and products to determine whether they actually meet the requirements, and make appropriate changes if they do not.
- Ensure the practical and timely availability of whatever materials, supplies, and equipment are needed for the audience to act on the advice being given.
- Integrate various communication channels (mediated, print, face-to-face) around a single set of coherent themes for each segment, thereby ensuring that the audience receives the same messages from more than one credible source and maximizing the particular strength of each channel.
- Monitor all of the inputs through repeated mini-evaluations of selected outputs to determine if the system parts are in place, and if changes need to be made in the approach.
- Commit to the long haul, thereby avoiding quick solutions and flashy

campaigns, in favor of a long-term strategy which is modifiable but consistent over time.

In carrying out the stages of the Public Health Communication Model, the following basic principles have emerged from past experiences:

- Build in participation of local policy makers and training of project implementers to the extent possible so that they can learn from the project and replicate the process with minimal outside expertise. The local agency should be encouraged to articulate project design and take the lead in project implementation.
- Consult with people from different disciplines and backgrounds (including physicians, marketing professionals, auxiliary health personnel, commercial retailers, and communication specialists) throughout the life of the project, to secure the diverse skills and technical expertise needed.
- Emphasize the need for communication projects to accompany and reinforce service availability. To this end, maintain contact with other AID-funded activities and private agencies to share resources and ensure well-trained communication support in expanding services.
- Provide for coverage, timeliness, and credibility—all three are needed. Coverage is the ability to reach many people quickly, and it is best achieved through the media. In most countries, this means radio. Timeliness, or the availability of specific reminders about child survival behaviors at the moment they are needed is best accomplished by printed graphic materials—for example, a growth monitoring chart or immunization card. Credibility, or the acceptance of child survival behaviors by patients, is best achieved through the full support and use of these technologies by recognized health professionals in the country—physicians, nurses, and health workers—as well as product distributors and community level opinion leaders, such as traditional healers.
- Have a Complete Plan, not a piecemeal one. One needs:
 - A product designed to meet consumer needs at a price they are willing to pay;
 - An adequate supply and distribution system;
 - A single set of simple, noncontradictory messages and an explicit linkage between what service providers, product distributors, radio, and print media tell the public;
 - A training program for health workers and product distributors which emphasizes teaching skills as well as service delivery;
 - A broadcast schedule timed to reach specific audiences;
 - A series of simple print reminders of primary skills for each health technology.

-
- Base the plan on field research. An effective plan must be based on field research of existing audience practices and beliefs, as well as product and feasibility testing, and channel research.
 - Segment audiences for specific, consistent continuing messages and maintain regular direct contact with and feedback from these groups. Do not neglect influentials.
 - Develop messages that are compatible with the audience's belief structure, that emphasize the personal advantages of the health technology for the target audience, and that attract and hold attention.
 - Collaborate closely with health care providers—government and private, medical, traditional, and commercial—to stimulate their use of or reference to materials and messages in working with clients. Provide training as needed.
 - Use many intermediate measures, as well as goals, to assess project effects and make mid-course corrections. Encourage attention to management needs and capabilities as well as audience impact.