

Report of the Sixth International Conference of the
International Nutrition Planners Forum

EFFECTIVE NUTRITION COMMUNICATION FOR BEHAVIOR CHANGE

4-6 September 1991

UNESCO Headquarters

Paris, France

Report by:
Cheryl Achterberg, Ph.D.

Sponsored by:
International Nutrition Planners Forum
Cosponsored by:
UNESCO

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FOREWORD

This publication summarizes the presentations made at the international conference "Effective Nutrition Communication for Behavior Change." This conference was the sixth in a series of conferences held by the International Nutrition Planners Forum (INPF), a nongovernmental organization of developing-country nutrition professionals concerned with upgrading the state of nutrition in these countries.

The Sixth INPF Conference followed on the fifth conference which addressed the crucial elements of successful nutrition programs. By illustrating mechanisms for achieving effective nutritional behavior changes, the Sixth INPF Conference demonstrated the successful use of these crucial elements. It also offered a unique hands-on learning experience for the participating country teams, giving them the opportunity to incorporate what they learned from the presentations into plans for new nutrition communication projects for their home countries.

These country teams were composed of a senior level, technical nutrition specialist, a nutrition practitioner with responsibility for nutrition education and training activities, and a media specialist. This combination of skills is important to the long-term success of a nutrition education project.

INPF is once again indebted to the Office of Nutrition of the U.S. Agency for International Development, headed by Mr. Richard Seifman, for its generous support of this conference. Dr. Norge Jerome provided leadership in developing the conference program assisted by the technical expertise of the Academy for Educational Development through Mr. Mark Lediard. Mr. Lediard and his staff provided specific support to the country teams as they developed their new nutrition communication projects, thereby adding to their take-home knowledge.

INPF also appreciated the generous support provided by the United Nations Educational, Scientific, and Cultural Organization (UNESCO). The use of their facilities in Paris, France contributed greatly to the success of the conference.

On behalf of INPF, I hope this publication will provide guidance to those who are involved in designing and implementing nutrition communication projects to aid in combating malnutrition around the world.

Professor Mamdouh Gabr
Chairman
International Nutrition Planners Forum

ACKNOWLEDGMENTS

The International Nutrition Planners Forum (INPF) wishes to express its sincere appreciation to the participants of its Sixth International Conference for their valuable contribution throughout the conference. Those who prepared and presented case studies or participated in panel discussions provided valuable insights into the components of successful nutrition communication projects. The country team members, by engaging in discussion of the case studies and by presenting ideas for new projects to be implemented in their countries, provided vitality and a true sharing experience to the meeting.

The Office of Nutrition of the United States Agency for International Development, under the direction of Mr. Richard Seifman, provided financial and technical support for the conference through a cooperative agreement with the Nutrition Foundation, Inc. Dr. Timothy Morck skillfully guided the preparations for the conference with the help of Mr. Dwayne Milbrand, Ms. Diane Dalisera, Ms. Andrea Okwesa, and Dr. Suzanne Harris.

The United Nations Educational, Scientific, and Cultural Organization (UNESCO) provided valuable cooperation in facilitating the administrative and logistical arrangements for the conference. Dr. Susan Van der Vynckt's commitment to and involvement with the conference was greatly appreciated.

Mr. Mark Lediard, Academy for Educational Development, and members of his staff—including Ms. Margaret Parlato and Ms. Cecilia Versoza—provided the program direction for the conference. Credit for the conference vision goes to Dr. Norge Jerome, USAID, along with the INPF Steering Committee chaired by Dr. Mamdouh K. Gabr. Dr. Gabr also served as the conference chairman.

A special appreciation is extended to Dr. Cheryl Achterberg for serving as the conference rapporteur and preparing this meeting summary. The report will be available in French and Spanish as well.

INPF wishes to acknowledge the active participation of the following international organizations: United Nations Children's Fund (UNICEF), Food and Agriculture Organization of the United Nations (FAO), Pan American Health Organization (PAHO), World Health Organization (WHO), and the International Development Research Centre (IDRC). Their perspectives on the important considerations in designing successful nutrition communication projects were most important.

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EXECUTIVE SUMMARY

The Sixth International Conference of the International Nutrition Planners Forum (INPF), on "Effective Nutrition Communication for Behavior Change," was held in Paris, France, 4-6 September 1991. It was sponsored by the Office of Nutrition of the U.S. Agency for International Development (USAID) and was attended by 68 professionals from 22 countries. There were eight case studies from Africa, Egypt, Thailand, Brazil, Peru, Mali, The Philippines, and Indonesia, each followed by a discussion; 12 developing-country team presentations; and presentations by donor agencies.

Each case study explored a successful nutrition or health communication program targeted to a specific population group in a selected country. Each developing country that participated at the meeting was represented by a professional team consisting of a nutrition specialist, a nutrition practitioner, and a media specialist to facilitate the exchange of information about effective communication strategies among themselves and to learn about each other's experiences in the field.

Key insights were gained from this exchange of information. First, effective and affordable nutrition communication projects can be designed and implemented in a variety of countries and circumstances to address a variety of needs. These effective programs are accomplished when professional communicators and nutritionists collaborate together *throughout* the design and implementation of interventions aimed at changing nutrition-related behavior. It was recognized, however, that nutrition-related behaviors are more complicated to change than many other health-related behaviors. Therefore, special attention must be given to the process of developing, pretesting, and delivering the messages. Continuous program monitoring is needed to make changes throughout the program as necessary. Nutrition behavior change must be subtle, and it often requires an entire series of messages that build to the desired change in stepwise fashion. Such messages work best if linked to a program (such as building wells) or value (such as healthy children) that the target audience already wants.

Key principles include the following:

I. Program success depends on a comprehensive and systematic approach to conceptualize, implement, and evaluate the program.

- ❑ A thorough understanding of the target audience, including its behavior, attitudes, and political and environmental constraints, is an essential component of effective communications programs. Involving community members in a "bottom-up/top-down" team approach is recommended.
- ❑ Realistic objectives based on a knowledge of the target audience must be set. Nutrition communication cannot be expected to resolve all nutrition-related problems, for example, accessibility to vitamin A capsules.
- ❑ Flexibility is essential. Mid-course adjustments should be expected and are necessary to maximize success.

- ❑ A variety of social science research techniques should be used for evaluating the program. A mix of qualitative and quantitative approaches is recommended.

II. Support of policy-makers and the health care community is essential.

- ❑ The medical or health care community must also be integrated and involved in the development and implementation of the nutrition communication intervention. Such coordination is critical for long-term success.
- ❑ Pretesting of all materials and messages is vital not only with members of the target audience but also with members of the medical community, government workers, educators/practitioners, policy makers, and other gatekeepers who decide which materials to use.

III. A nutrition communication program that uses a multimedia approach including face-to-face communication, other traditional communication means, and mass media technologies is most likely to succeed.

- ❑ Television messages have tremendous power to change behavior, but by themselves cannot bring about sustainable behavior change. Alternative media channels can also be as effective.
- ❑ Educational programming must use an entertaining, nondidactic approach.
- ❑ Free materials and donated services can be incorporated into nutrition communication interventions, but there are trade-offs in their use. They are short term in nature and usually do not allow for evaluation, continuity, sustainability, or integration into the existing health community.

In every case study presented at the meeting, social marketing provided the model for guiding the program's development efforts. It should be emphasized that the application of this model, as described in the papers at this meeting, is different from many behavior change programs. Whereas past programs may have overemphasized promotion, the case studies summarized here incorporated all four "p's" (price, product, promotion, and place) in the social marketing model. In addition, another "p" emerged from these presentations that appeared critical to the success of these programs.

Although not made explicit by the presenters, it was evident that a new "p" for process should be added to the model, because the process used to identify and develop each of the other "p's" determined the success of the entire effort. As Mr. Lediard pointed out in his keynote address, health communication models identify what should be done, whereas social marketing models identify how to take action. Hence, funds for assessment, pretesting, and evaluation, as well as for mass media and other forms of communication, are essential for successful implementation and outcomes.

In sum, the "products" (or targeted behaviors and message strategy) of a social marketing program rarely can be

transferred to other sites or situations, but the decision-making process can be. Thus, a key component of any program is the strategic plan on how to segment the audience and how to determine what actions to take. That is, what themes should be developed in the messages, what support can be drawn from workers in the community, and what other supports can or should be developed for the program?

Discussion of this process and improvement in understanding various problem-solving approaches justify the need for further conferences of this nature.

A. INTRODUCTION

The Sixth International Conference of the International Nutrition Planners Forum (INPF), on "Effective Nutrition Communication for Behavior Change," was held in Paris, France, 4-6 September 1991. It was sponsored by the Office of Nutrition, United States Agency for International Development (USAID), through a cooperative agreement with the Nutrition Foundation, Inc., within the International Life Sciences Institute (ILSI), and by UNESCO. USAID-supported Nutrition Communications Project (NCP) staff of the the Academy for Educational Development (AED) provided expertise in developing the program.

BACKGROUND

The conference was a follow-up to the Fifth International Conference of the INPF, held in Seoul, Korea, in 1989. That conference identified the elements in community nutrition programs that are essential to success. The purpose of this Sixth INPF Conference was to expand on that subject matter, but with a focus on the communication aspects of community nutrition interventions and programs. It was felt within INPF that many nutrition-related problems in developing countries could be solved if effective communication were used to educate and change behavior patterns, in some instances even without an increase in available food or food resources. Special attention was given at this meeting to three target audiences for these communications: policy makers and planners, practitioners, and consumers. The intention was to show how messages, transactions, materials, and strategies should be targeted to each of the three groups, whose characteristics are known and understood, instead of to an amorphous "general public."

The fundamental premise of the conference was that communication is part of the universe of health communication, but at the same time is distinct from other types of persuasive communication, whether in health, agriculture, education, or other spheres. Theories, models, practices, and approaches of past successful (and unsuccessful) programs were described to show different perspectives on the target audience and the steps needed to effect behavior change. Insights, information, and lessons learned from these programs were exchanged, leading to group consensus about the crucial strategies needed for communicating nutrition and behavior change for developing countries.

OBJECTIVES

The conference provided a mechanism for professional teams of nutritionists and communicators from developing countries to exchange information about effective communication strategies and learn from each other's experiences in the field. Each team consisted of a nutrition specialist (researcher, academician, or scientist), nutrition practitioner (typically from a ministry of health or agriculture, with responsibility for directing nutrition education, training activities, and related programs), and a media specialist (working in the press, radio, television, film or video, social marketing, or community-based media). By inviting country teams, the conference planners hoped to mobilize and/or strengthen a core group of nutrition and media practitioners from selected developing countries to play leadership roles in planning and executing effective nutrition communication programs.

The specific objectives of the conference were to:

- ❑ illustrate mechanisms for achieving effective behavior change in nutrition practices,
- ❑ develop strategies for changing nutrition-related behaviors in different target groups, and
- ❑ empower "country teams" from developing countries to launch successful nutrition communication initiatives.

PARTICIPANTS

A total of 47 professionals from 18 developing countries in Africa, Asia, and Latin America attended the conference. Also in attendance were 15 U.S. participants and six observers from international organizations and donor agencies (see Participant List, in Appendix 1).

CONFERENCE FORMAT

Days 1 and 2 of the conference consisted of plenary sessions featuring addresses by individual speakers and case study presentations. On day 3, the country teams described the programs and strategies each team hoped to pursue in its home country. (See Appendix 2.) Their presentations reflected ideas garnered from their participation at this conference and helped forge a commitment to action by the nutrition communication team upon their return home.

Part 1. During the opening ceremony at the beginning of the first session, Dr. Gabr reviewed the history and purposes of INPF, thanked the sponsors, USAID and UNESCO, and introduced Dr. Victor Kolybine, director of the Division of Education for the Quality of Life at UNESCO. Dr. Kolybine emphasized the importance of nutrition education in bridging the gap between misery and good health and the need to exchange information that will improve ability, skills, experience, confidence, and preparation to solve nutrition- and health-related problems. He said that the results of this conference would be helpful to the participants, UNESCO, and perhaps other countries of the world as well.

Mr. Richard Seifman, Director of the Office of Nutrition of USAID, also spoke. After welcoming the participants, Mr. Seifman discussed the themes and objectives of the conference and noted how rare it is that policy makers champion nutrition. He also told meeting participants that they had a unique opportunity, through the meeting, to affect the process of, and level of knowledge about, nutrition communication to benefit the quality of life of children, families, and communities.

The keynote address was given by Mr. Mark Lediard from AED. Mr. Lediard reviewed the history of health and nutrition education, summarized current thinking about how to influence nutrition behavior change, and highlighted the unique attributes of nutrition communication.

Following the keynote address, case studies from Africa (continent-wide), Egypt, Thailand, and Brazil were presented. On the next day, four more studies were presented from Peru, Mali, The Philippines, and Indonesia. Each case study demonstrated how a successful, large nutrition or health program could be targeted to a specific population segment in a developing country. The case studies were followed by a panel discussion led by Dr. Clifford Block. Many of the presenters, it should also be noted, demonstrated video clips and other media aids between sessions.

Part 2. Representatives from 12 country teams described plans or proposals for initiating selected nutrition communication interventions in Botswana, Burkina Faso, Egypt, Haiti, Indonesia, Morocco, Pakistan, Peru, The Philippines, Senegal, Sierra Leone, and Zimbabwe. These presentations sensitized donor agencies to specific nutrition communication needs for changing negative patterns and practices in some parts of the developing world and promoted the sharing of ideas and approaches among participants.

Following this, observers from donor organizations were introduced in a panel discussion. Each donor described his or her grant programs and opportunities for funding. Then, Dr. Gabr and Mr. Lediard summarized the main points of the meeting.

At the closing plenary sessions, Dr. Gabr thanked all participants, UNESCO, USAID, and Dr. Suzanne Harris of The Nutrition Foundation, Inc., which serves as INPF's secretariat. Dr. Susan Van der Vliet of UNESCO spoke and summarized what she thought were the most important lessons learned at this conference, emphasizing child health. Mr. Seifman also contributed his reflections on the meeting. Dr. Harris thanked the UNESCO staff, the translators, her staff, and the rapporteur, Dr. Cheryl Achterberg of The Pennsylvania State University, for their services at the meeting.

This report consolidates the notes taken by the rapporteur during all sessions. It reflects the numerous areas of discussion that emerged from the question-and-answer periods as well as the content presented and submitted by the authors of the papers.

B. KEYNOTE ADDRESS

From Nutrition Education to Social Marketing, Mark Lediard, Academy for Educational Development, USA.

In his keynote speech, Mr. Lediard reviewed the definitions of nutrition communication, its history, and its efficacy, proposed a model, and suggested guidelines for future work. The main point of his presentation was that effective and affordable nutrition communication projects are entirely possible and within reach of most programs.

Nutrition communication, Mr. Lediard said, is an umbrella term for a wide range of information and education interventions for influencing nutritional status, including nutrition education and social marketing.

The *efficacy* of nutrition communication has been questioned despite the fact that communication has made a major contribution to such fields as child survival and family planning. Historically, nutrition communication programs have had limited success because they were of poor quality, that is, were tacked on to other programs with little thought, implemented by people with neither knowledge of nutrition nor an interest in education, focused on issues not easily remedied by communication interventions (such as poverty), or were short-lived.

Nevertheless, several success stories were worth highlighting. For example, the Iringa project in Tanzania, the Rural Action Committee Pilot Project in Bangladesh, and the Applied Nutrition Education Program in the Dominican Republic all substantially reduced malnutrition.

Historically, nutrition communication evolved from primarily face-to-face instruction in nonformal health clinic settings in the 1950s and 1960s to a social marketing approach in the 1970s that incorporated market research methodologies and mass media. Some early examples were conducted in India, Tanzania, and Korea. India was able to change awareness of recommended weaning behavior from 50% to 93% using culturally appropriate messages and a mixed media strategy. Tanzania pioneered mass media and showed that messages should be targeted. Lesotho waged a two-week campaign using radio and comic books to increase knowledge of a healthy diet.

In the 1980s new research techniques were incorporated that have proven especially useful in identifying behavior susceptible to modification and in formulating specific messages. Whereas earlier programs focused on promotion, these programs began to focus more on "product" as an idea, such as breastfeeding. The concept of "price" was also expanded to include not only money, but other costs in opportunity and time. Important examples included efforts in Honduras, the Gambia, and Bolivia. Another important development has been the growing emphasis on prevention, and hence nutrition education, that accompanied the introduction of the primary health care concept in 1978. The adoption of the Growth monitoring, Oral rehydration, Breastfeeding, and Immunization (GOBI) child survival strategy by UNICEF and WHO in 1983 further brought nutrition

communication into close rapport with maternal and child health program:

The public health communication model was presented as the basic model for successfully guiding nutrition communication work. Based on experience from 40 countries, this model contains five steps:

- Assess the problem, the audiences' present behavior, knowledge, and attitudes toward the problem, and the delivery mechanisms available to influence those audiences.
- Plan a communication program and deliver messages to a specific audience segment through various channels in a way that is attractive, persuasive, and provides repeated exposure.
- Develop and pretest materials for face-to-face, community, print, and mass media channels.
- Deliver materials, messages, and support needed to complement service delivery timing.
- Monitor and change tactics, messages, materials, and channels as needed to meet changing audience needs.

Nutrition communication is considered unique from other types of health communication or social marketing challenges because improved nutrition requires sustained and repeated individual behavior. Furthermore, changes in eating behavior have less tangible and less immediate payoffs than other preventive measures such as immunization. The locus of change is usually home-based and often requires the collaboration of family members. A range of behaviors often need to be changed, requiring several target audiences, and interpersonal communication is often given the lead role while the mass media play a more supportive role. Training of health workers to understand the consumer perspective is important, demonstrations of food preparation and child feeding techniques are often required, product development is a major focus, and integration of other sectoral interventions can be central to program success.

Based on the experience of the past two decades, certain guidelines for nutrition communication were offered:

- Multiple channels are needed for a mutually reinforcing effect.
- A mix of face-to-face extension education and mass media is needed.
- Preliminary research is needed before objectives can be set to ensure quality. Careful message design, field worker training and supervision, monitoring, and mid-course adjustments are also needed.
- Nutrition communication should be used in conjunction with the provision of material inputs, not as a substitute for them.
- Providing incentives for educators and their clients is effective.
- Continuing high-level support and the necessary financial and human resources are essential for high-quality programs. When budgets are limited, program objectives and coverage should be scaled back commensurately.

- Priority topics need to be established at the outset, with the most urgent problems addressed first. Too many topics confuse the audience and dilute the message.
- Planners should analyze the behavioral tasks required of the target audience before setting objectives. The desired behavior change should be feasible and relatively easy to execute.
- It is important to identify the real decision-making authorities for nutrition communication policies and programs.
- Preliminary research, or formative evaluation, helps to uncover the resistance points, or factors affecting behavior change, and is indispensable to message design and testing.
- Community members must be involved in the formulation of concepts and messages.
- Programs need to allocate staff and funds to disseminate materials, whether through the mass media, community displays, outreach workers, or mobile vans.
- Nearly all food and nutrition projects offer an opportunity for nutrition communication.

C. SUMMARY OF PROGRAMS REVIEWED

CASE STUDY 1

Media and Health Behavior: Building Partnerships Between Broadcasters and Health Professionals, Kassaye Demena, Union des Radiodiffusions et Télévisions Nationales d'Afrique (URTNA), Sénégal.

OVERVIEW

This study described the organization and activities of the Union of National Radio and Television Organizations of Africa, or URTNA, and discussed the feasibility of nutrition information exchange among broadcasters, educators, and the nutrition community for media products and training that extend across international borders. This model has been used successfully for two decades in Africa for entertainment and family health messages, and may serve as a template for nutrition and for other regions of the world.

BACKGROUND

Established in 1962 and funded by its members and donor organizations such as UNESCO, UNICEF, other UN agencies, and Agence de Coopération Culturelle et Technique (ACCT), URTNA is an association of African radio and television institutions representing 48 countries. URTNA was established to create a cultural and information bridge through electronic media among African countries. Its activities include:

- ❑ exchange of broadcast programs (begun in 1977),
- ❑ research on technical aspects of broadcasting (begun in 1966),
- ❑ training broadcast personnel (begun in 1978),
- ❑ workshops on effective use of electronic media (begun in 1985),
- ❑ coverage of international sporting and cultural events (begun in 1972), and
- ❑ television news exchange (begun in 1991).

During the past 10 years, more than 2,000 radio and 900 television programs were exchanged. At least 120 technicians have graduated from URTNA's training programs, three-fifths of them in production and two-fifths as technicians. Between 1985 and 1990, more than 250 African television news journalists benefitted from professional training in Cairo. A news exchange program centered in Algiers was also established to coordinate the exchange of news between the hours of 1600 and 1630 Greenwich mean time (GMT) Monday through Friday. Nonetheless, health programming is a relatively new phenomenon to URTNA, which was encouraged by the project described below.

THEORY

The basic premise of the population media project was that there was not enough health information being given to the population over the electronic media, owing in part to the considerable distance between media, health, and population professionals. Professionals in each field have different training and different outlooks. Communicators are generalists, whereas health and nutrition professionals are specialists. Their timetables are quite different, and so are their viewpoints. There are, however, important areas of overlap. For example, both groups share goals and missions. Therefore, shared efforts are possible, especially with training and an organization that fosters information sharing.

METHODS

The John Hopkins University Family Health Project, initiated in 1983, established a close relationship between media and health professionals under the URTNA umbrella. The Family Health Project encouraged the use of electronic media to promote family planning and health issues, training, promotion and exchange of radio and TV programs, publication of a family health bulletin containing ready-to-air materials, provision of technical and financial assistance for country production projects on population and health, and continuation and encouragement of partnerships between broadcasters and population and health professionals.

When the project began communicators did not often consult population and maternal and child health experts, and there was little or no dialogue between the two groups. Family health programs tended to be heavily didactic. Exchange programs helped to demonstrate what was possible, and this in turn stimulated the development of other, higher-quality programs. Training, however, was a key element as were regular meetings (once every two weeks was suggested) between communicators from national broadcast organizations and experts in family planning and maternal and child health.

OUTCOMES

Eight years after the program was launched, there are major differences in the amount and quality of radio and television programming on family health and family planning. At least 336 radio programs and 136 television programs have been exchanged among 48 URTNA countries, with a 70% utilization rate. This is in spite of the fact that many of these countries speak different languages.

Training events were begun in 1984 to address some of the barriers to the effective use of radio to motivate, inform, and educate rural populations about child spacing, breastfeeding, and maternal nutrition. The major objective of the training was to bring together broadcasters and health professionals to form working collaborations. Where mentioning family planning in the media was once taboo, it is now routine.

Recently, two training seminars for broadcasters in Tanzania and Zimbabwe were held on advanced television production techniques, and 17 issues of a broadcasting bulletin containing ready-to-air radio programs were produced. The bulletin promoted the dissemination of information to broadcasters on how to add family-planning and health messages to existing programs.

In all cases, the quality of the resulting products attests to the success of these collaborative ventures.

CONCLUSION

Several key lessons have emerged from the URTNA experience and the John Hopkins Project:

- ❑ Broadcasters and health specialists can form successful collaborations that enhance the work and interests of both parties.
- ❑ Script writing is the most difficult step in production, so the best people possible must be found for this task.
- ❑ It is important to blend an entertaining approach with "educational" programming.
- ❑ Program exchange activity has good potential for dissemination of material.
- ❑ A thorough survey of member countries' interests in the field, attitudes toward the topic, and policies and structures for addressing the topics, is needed to guide the action programs of a project.
- ❑ Cooperation between broadcasters and health professionals cannot be taken for granted, but must be constantly sustained through action.
- ❑ A continuous series of innovative approaches to population and health issues over the media is needed.
- ❑ Any products or services being promoted must be widely available and affordable.

In addition, several recommendations for action in the future were suggested, in order to begin applying these lessons to nutrition messages. These include a thorough survey on nutrition-related topics to guide programming between communication media and nutritionists, a workshop on how to use social and other scientific research as a basis for creative development, and a writers' workshop.

CASE STUDY 2

The Egyptian Experience with Nutrition Behavior Change, Farag Elkamel, Center for Development Communication, Egypt.

OVERVIEW

This paper described a long-term success story. Modern social marketing theory was applied to a specific problem in Egypt (oral rehydration therapy), formative evaluation was thorough, message testing was exemplary, multiple target audiences were included (mothers as well as physicians), the program was monitored and revised as needed during implementation, and the outcomes have been impressive. Hundreds of thousands of children's lives have been saved as a result of this nutrition communication effort. Discussed in the paper were each of the five steps of the public health communication model and what can be achieved if this model is closely adhered to.

BACKGROUND

Until 1983, Egypt lost 150,000 infants per year to dehydration, accounting for half of all deaths of children less than five years old. Dehydration can be controlled with oral rehydration solution (ORS), but it was not being used. Therefore, a social marketing campaign was initiated to reduce infant mortality by 25% over a five-year period. Several barriers were noted including those that affect mothers, physicians, and the unavailability of ORS.

THEORY

A comprehensive social marketing plan was developed and implemented which included a communication strategy that incorporated the use of mass media, training, and market research. Culturally relevant use of the media was a central concern. Sociological and anthropological research findings were to be incorporated into message development, and the communications program was to be an integrated element of the overall program to reduce diarrheal disease and associated mortality. Thus, there was constant attention to coordinating the campaign with the work of other divisions to ensure that the supply of ORS could meet the demand in a timely fashion.

METHODS

A baseline community survey of 2,100 mothers revealed that television was watched by 90% of Egyptian households, radios were found in 95% of all households, and the majority of the population was illiterate. In addition, mothers did not know what dehydration was or how to treat it. The majority of mothers mistreated diarrhea by withholding liquids and solids. The majority of physicians did not believe in ORS.

Based on these results, two specific objectives were set and the messages were carefully crafted to meet these objectives. The first objective was to use social marketing methods to educate the public about nutrition needs during

diarrhea. The second objective was to produce, distribute, and promote the use of ORS, again using social marketing techniques. Two groups of target audiences were identified (see Figure 1): mothers (or care givers) and health providers, including physicians, nurses, and pharmacists.

A three-month pilot campaign was initiated in Alexandria from August to October 1983. Fifteen minutes of radio time were donated daily by the mass media to talk about ORS. Television was used in only the last week of the campaign. Radio and television time was augmented by billboards, flyers, and interpersonal communication via skits and rallies, with movie stars and physicians helping out. Print materials were used very selectively and each TV spot was developed on the basis of research before the media campaign and was also subjected to pretesting.

The messages were carefully crafted, with the major theme for mothers being that of love and of caring for their children. The campaign messages used a mixture of emotion and information. The use of fear, however, was downplayed because planners thought it would hinder learning. Therefore, fear was used only very lightly and selectively and in contexts where anxiety was immediately relieved in the same messages.

Evaluation of the pilot program revealed that radio and television were more effective media. Focus group evaluations also revealed that physicians did not accept the public messages delivered by a well-known comedian (even though the public accepted it well). Therefore, this star was replaced with a soap opera star (who usually portrayed the good, loving mother) to maintain physician support to the program.

After revisions were made based on the pilot results, the program was implemented nationally. Most attention was given to television spots (there were 70 of them), and the radio broadcasts used the television-spot sound tracks. Prime time was purchased with USAID monies. Outside support, however, is decreasing, but the Ministry of Information and the Ministry of Health have assured that in the future, time will be donated.

Evaluations were performed at each step using surveys, focus groups, and interviews.

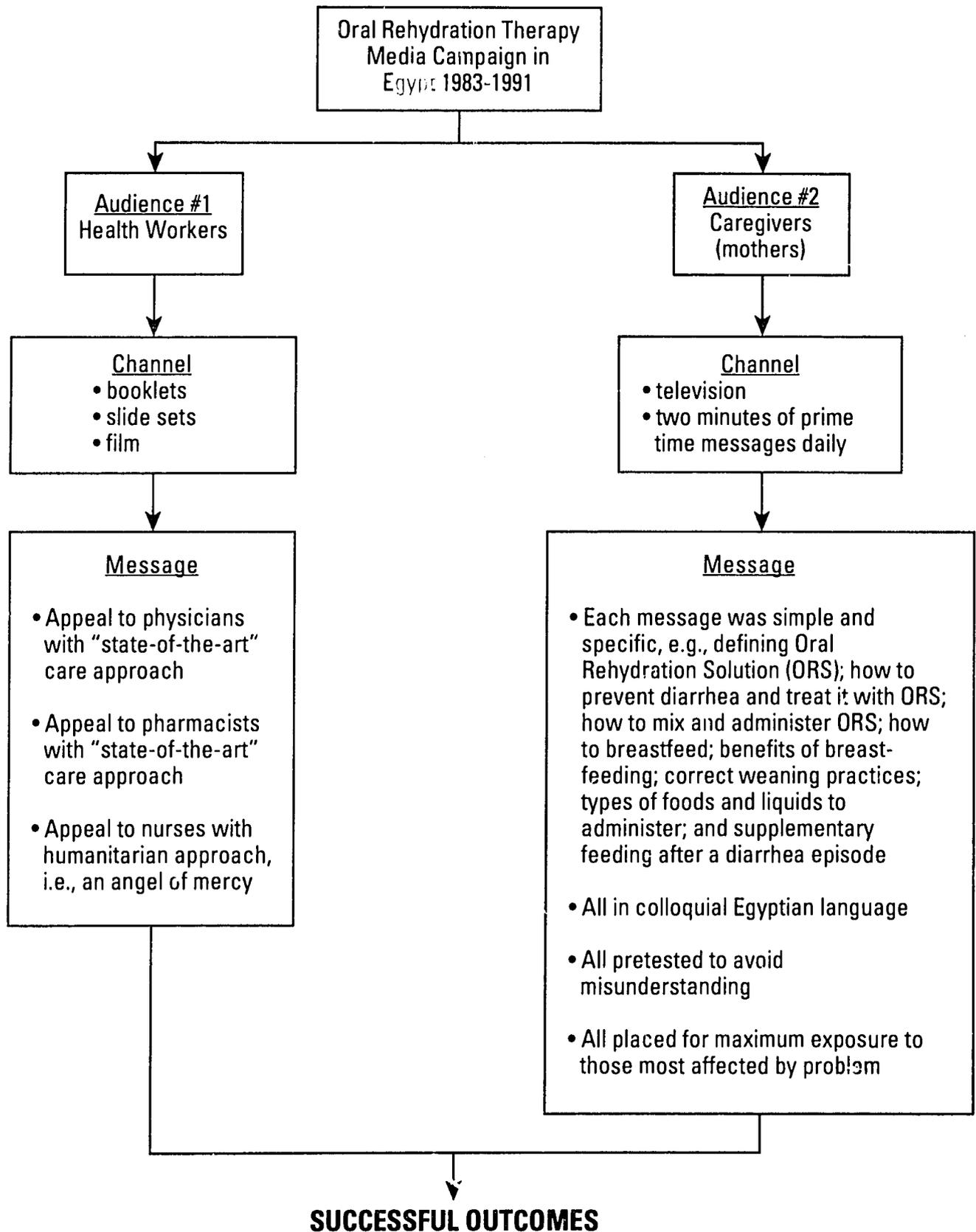
OUTCOMES

Starting from nearly zero in 1983, knowledge of ORS rose to 94% in 1984 and was sustained at 99% in 1990. Use of ORS was about 50% in 1984 and was 79% in 1990. An estimated 300,000 children were saved between 1982 and 1989 through ORS. The concept of dehydration is now so well known in Egypt that the Arabic word for drought means dehydration.

The figures appear to plateau after 1984, but this is normal after the second or third year because of a reduction in diarrhea cases overall. Therefore, it is expected that everyone who knows about ORS does not use ORS because not everyone needs it.

One of the unexpected outcomes of this study was that individuals with the lowest educational level adopted the new innovation faster than the other groups did. This may be because the marketing strategy was aimed at that lower socioeconomic group because it was assumed that they

Figure 1. A summary of the target audiences and messages selected and developed for the Egyptian nutrition communication



needed this information the most. Success can also be attributed to the low price and ready accessibility of the ORS product.

CONCLUSION

This campaign worked for five reasons: 1) the media were used effectively (the timing, wording, and spokespersons were right), 2) the indigenous culture was closely observed, respected, and incorporated into the program, 3) sociological and anthropological research findings were integrated into the creative process and everything was tested for media accuracy and cultural relevance, 4) coordination was carefully attended to, and 5) all steps of social marketing were included. Other lessons learned are summarized as follows:

- ❑ Mass media can teach new skills that lead to behavioral change. Short, focused messages are better understood by individuals with low educational levels.
- ❑ Although a comprehensive media strategy is essential, it is also important to be flexible enough to revise the strategy based on feedback from monitoring and evaluation.
- ❑ A multipronged approach is necessary. For example, both health providers and recipients are different segments that need to be reached, educated, and convinced almost simultaneously. Reaching them requires the use of different media and messages.
- ❑ Campaign planners must be careful not to raise false expectations. Messages should be specific about what ORS can and cannot do. Before the campaign begins, planners should be sure that ORS packets are available, accessible, and affordable.
- ❑ The appeal to fear should be used carefully and lightly. This not only is conventional communication theory, but was also demonstrated by the success of this campaign.
- ❑ The content of messages for the general public should be approved by medical authorities. The choice of formats, however, should be influenced only by the preferences of the target audience (and, of course, should not be offensive to anyone).
- ❑ One television spot announcement cannot say it all. Technical experts often pressure communication specialists to cram too much information into each spot, which tends to reduce the audience's ability to learn anything at all. Do not overload a single message with too much information.

CASE STUDY 3

Participatory Action for Integrated Nutrition Communication Programs: The Thai Experience in Changing Dietary Behavior Through Social Marketing, Suttitak Smitasiri, Mahidol University at Salaya, Thailand.

OVERVIEW

This paper provided an excellent example of what a comprehensive marketing approach can accomplish in only three years. The project invested considerable effort in developing a philosophy and conceptual framework for planning, and then managed a complex of people, media, problems, and ideas to develop a program that is "owned" by the community and the participants. A high level of community participation was achieved at a relatively low cost. A key element to this work is that the agent of change was not a fixed expert but, instead, a team comprising specialists and community members, each with his or her own special and necessary expertise to offer.

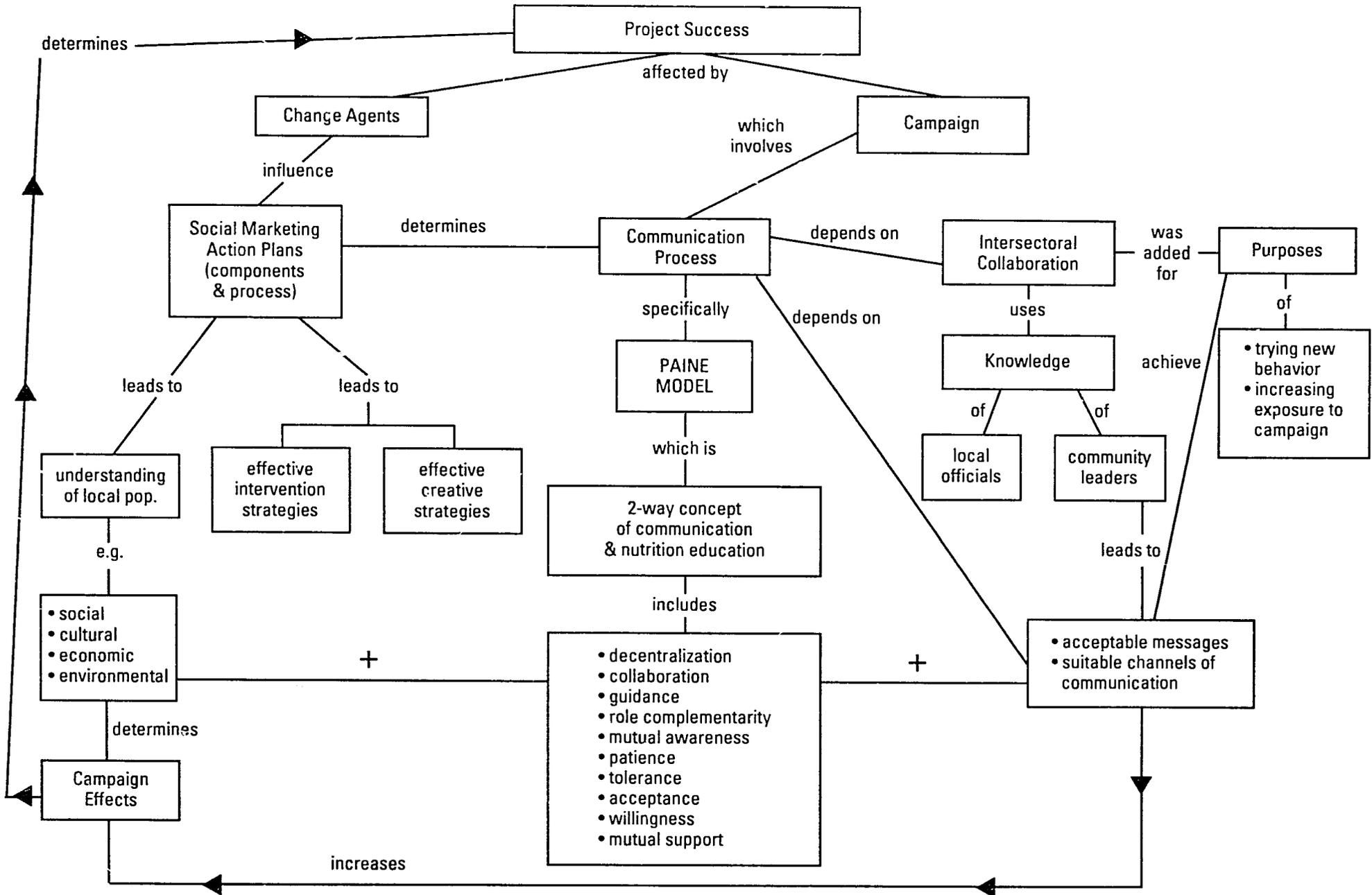
BACKGROUND

A randomly selected survey of schoolchildren and pregnant women showed that vitamin A deficiency was a public health problem in Thailand. As many as 20% of the school-age population exhibited subclinical symptoms, which in the past seven years or so have been linked with high morbidity and mortality rates. Vitamin A supplementation and fortification can eliminate the problem in the short term. Long-term effectiveness, however, requires that a balanced diet adequate in vitamin A be consumed. This requires fundamental change in people's nutrition-related behavior, which in turn relies on efficient and effective nutrition communication strategies. These must consider the behavioral and attitudinal factors from which people's behaviors stem, as well as broader environmental factors.

THEORY

Traditional social marketing theory based on the four P's—product, price, place, and promotion—served as the basis for this project. The author, however, stressed that an effective behavior change program requires a new, more holistic perspective (see Figure 2). Knowledge is an important base, but is not the sole factor in behavior change. Program planners need to understand a person's total life; they need an accurate picture of the community level and of what is practical within the context of village life. They also require an interactive atmosphere with an emphasis on effective management. Most important, program planners must be willing to be flexible and change when needed to meet community needs. The biggest challenge is to develop a national commitment to the program. Ultimately, though, the villagers must change their lives themselves.

Figure 2. A concept map summarizing the conceptual framework used to guide the nutrition education/social marketing program in Thailand. Note that the framework has three main components, including social marketing action plans, the communication process and intersectoral collaboration. The deliberate use of intersectoral collaboration and the emphasis on change agents is unique to this project.



METHODS

This three-year project was designed to meet eight key requirements: 1) integrate behavioral and biomedical disciplines to effect nutrition change, 2) consider cultural, economic, political, psychological, and physical environmental appropriateness, 3) use a decentralized, intersectoral "bottom-up/top-down" planning process to promote community input at each stage, with specific objectives assigned for each component of the campaign over time, 4) conceptualize nutrition education not only as a habit-forming mechanism but as a means for people to internalize nutrition knowledge and principles that can be transferred to other situations, 5) define specific audience segments, 6) create innovative and useful messages, derived from formative research and pretesting, to support well-paced behavioral changes, 7) use creative media, multiple channels, and scheduling to stimulate interpersonal communication, and 8) use intersectoral feedback to monitor and evaluate progress over time.

The objectives of the project were to improve knowledge, attitudes, and practices regarding dietary intake of vitamin A-rich foods, increase actual dietary intake of vitamin A, and improve vitamin A status in pregnant and lactating women and children five to 60 months old. All this was to be accomplished with a thorough documentation of the process and careful measurement of the results, with the goal of developing a model for improving vitamin A status through nutrition education.

A baseline evaluation and a follow-up evaluation were planned at the outset, along with preliminary research to characterize target groups and audiences, select product, identify appropriate channels, test media and messages before mass implementation, and monitor the progress of the educational programs. A survey of 24-hour food recalls, a market survey, and a survey of market gardens at schools that supported school lunch programs with food items and cash were conducted along with in-depth interviews and focus groups with community women. To test program outcomes, a simple quasi-experimental design was used with a treatment and control group for comparison.

The districts selected were in the region of highest risk in northeast Thailand. The product selected was the ivy gourd plant (*Coccinia indica*), a green vegetable that was locally available, culturally and economically acceptable, but underutilized in this region. The primary target audience was mothers (who select and prepare foods for their families), but other target audiences included pregnant women, schoolchildren, and grandmothers. The message content addressed both general nutrition and vitamin A-rich foods.

The communication strategy included eight stages: formative research, audience segmentation, intervention development, creative strategy development, implementation, monitoring, reimplementation, and evaluation. At every stage an explicit and consistent effort toward decentralization was followed to assure sustainability and project ownership at district and community levels. The formative evaluation was conducted to determine the people's wants and needs.

Based on the formative evaluation, the communication channels selected were interpersonal or group communication;

public address systems; radio spots and programs; outdoor activities such as shows, exhibitions, dramas, and concerts; posters (usually displayed on homes, schools, and other important village locations); printed materials (manuals, T-shirts, direct mail); billboards; and audiovisual materials (videos, cassette tapes). The primary audience was the consumer or the primary child care givers (mothers, grandmothers, unmarried sisters). The secondary audience was practitioners, comprising those community members who could teach, support, and reinforce the nutrition campaign, including teachers, volunteer health workers, and community leaders. The tertiary audience comprised policy makers who could serve as valuable sources of information for project development along with community groups. These individuals included health, education, agriculture, and rural development personnel, local mass media representatives, and university researchers.

In developing and pretesting messages, media, and materials, the project used low-cost and participatory approaches. Nutritionists developed the initial recipes and village mothers pretested them. Community members also entered an informal "slogan writing" competition. The winning message was "A Mother Loves Her Child," which became the theme for the entire communication effort. Spokespersons for the message included a Mr. Ivy Gourd actor, monks, popular local social development leaders, and a caricature of an ivy gourd leaf with a smiling face for print materials. Training of staff sectors (agriculture, health, education) was accomplished via workshops, formal and informal presentations, case studies, and experiential learning. Emphasis was placed on acquiring skills for imparting information at workshops and for promoting dialogue to assess current activities and propose alternative or additional ones.

School-based programs were also developed in communities. To increase community participation and improve home gardening, students in grades 3-6 competed in propagating the ivy gourd. Religion also played a promotional and educational role. Buddhist monks supported the project through meetings where they expressed ideas for project activities.

OUTCOMES

There are home gardens now in virtually every household compound, and ivy gourd cultivation is commonplace. Community members asked for information on constructing trellises on which to grow the ivy gourd and for advice on pest control and the use of fertilizers. These components, although not anticipated by the program planners, were added to meet participant needs and to coordinate a health project with an agricultural focus.

Other preliminary data reveal highly significant changes in knowledge of, attitudes toward, and consumption of vitamin A-rich foods. Furthermore, poor food habits and beliefs have been successfully changed, much to the surprise of provincial health authorities. Other evaluation data are being collected and analyzed. Information on vitamin A status, dietary intake measurements, a macro-level qualitative study at the provincial, district, subdistrict, and community levels, and a social marketing evaluation will become available later.

CONCLUSION

The success of this project can be attributed to the comprehensive approach taken by the project planners as summarized by a new model with the acronym SUTTILAK:

- S**trategic thinking
- U**nderstanding the target population
- T**alent and creativity to produce innovative and useful messages
- T**echnology—use it appropriately and creatively, in multiple channels, stimulating interpersonal communication
- I**nteractive orientation and capability
- L**isten to the people, for they alone are expert about the practicability of an intervention in their lives
- A**im to make a healthy difference
- K**nowledge of theoretical and conceptual frameworks

The author stressed that the program itself is probably not transferable to other countries; the thinking and strategies, however, are. The principles discovered through this experience can be extended elsewhere and incorporated into other project planning and implementation efforts. The cost in time is admittedly high, especially for the first such effort, but once the investment is made, program implementation becomes much more cost effective. Whether the behavior change is sustainable will be difficult to evaluate, because there is no money available for program evaluation—a chronic problem in community programs like this one.

CASE STUDY 4

The Six Months Worth a Lifetime: Brazil's National Breastfeeding Program, Gerson da Cunha, National Technology Missions, India.

OVERVIEW

One of the best-known and earliest success stories in social marketing to effect nutrition behavior change was the subject of this paper. Once again, success could be largely attributed to the quality and extensiveness of the baseline research as well as message testing before the mass media campaign began. Breastfeeding in Brazil doubled as a result of this program, although modifications in the program's approach curtailed some of the gains. This experience provides us with many insights into both the capability and the limitations of mass media behavior change campaigns.

BACKGROUND

Brazil is a large country with 120 million people, a third of the population in South America. In the 1960s, breastfeeding was universal, whereas in the 1980s it was rare. Breastfeeding for six months or more fell from 70% to 12%, and 96% of deaths among children eight to 11 months of age were of infants breastfed less than six months. Therefore, a goal was set for an intervention program to induce women to

exclusively breastfeed their babies for an adequate period (at least four months, but as long as possible).

THEORY

Because the low incidence of breastfeeding was a national problem, a national solution was required to remedy it. Thus, a national mass media program to reach the entire country was planned from the program's inception. Furthermore, government support was essential because only the government could address all the important factors simultaneously for a problem of this magnitude. The government, once committed, wanted to save as many children as possible in the shortest time possible. The only strategy considered was a comprehensive social marketing approach utilizing mass media.

Among the advantages of a program that is national in scope is that the resources catchment area is enlarged and resources are used that would never become available otherwise.

The primary target of this program was the mother. The mother was, in effect, "encircled in battle" by the many factors impinging on her infant feeding choice. Therefore, she needed to receive a direct, undiluted message about breastfeeding without interference from these other factors. This supported the use of mass media, especially in a society where women are often poor and illiterate.

METHODS

The first step was to produce a professionally made video targeted to the key policy makers, the Minister of Health and the Minister of Social Programs. The video emphasized the food loss to Brazil resulting from bottle feeding (7.2 billion cruzeiros per year, a sum equal to the government's annual budget for food and nutrition) and was so successful that these decision makers wanted a national program implemented immediately.

The Ministry of Health sponsored the program. A program strategy and plan were devised based on a comprehensive baseline study using both quantitative and qualitative parameters. The baseline study of 1,000 mothers in the Sao Paulo region indicated that the attitudes of mothers toward breastfeeding were strongly positive. Nonetheless, there was a lack of knowledge about how to breastfeed and mothers worried about insufficiency of milk, rejection by the infant, and so on.

A community analysis revealed that the difficulties in infant feeding were rooted in many sectors. For example, doctors had significant contact with formula manufacturers and were likely to recommend formula feeding. However, the mother was seen as the most important factor in the baby's feeding, so she became the primary target audience.

Based on this assessment, four objectives were set: 1) educate the mother to increase her confidence, 2) train hospital and health system personnel to provide information, motivation, and support for breastfeeding, 3) develop advocacy for breastfeeding in the whole realm of "officialdom," especially among women's groups, and 4) change industry policies to support breastfeeding.

The messages were developed and pretested and the theme "Six Months Worth a Lifetime" was selected and infused into all messages. Message content was realistic (the conventional, romantic approach was rejected), informing women in everyday terms about what to expect and how to breastfeed. Five 30-second television commercials were made. Three featured well-known actresses who breastfed their children; one featured the captain of Brazil's World Cup football team who as a father spoke of the virtues of breastfeeding; and the fifth was a "macho superstar" in the music world who paid homage to women who breastfeed their children. The messages contained information on how to breastfeed, assured mothers that they could breastfeed, and pointed out that there is no such thing as "weak milk," and the personalities told stories that were relevant to the target audience and the program's basic message. The superstars breastfeeding on camera also added "value" to the basic message.

A separate set of messages was developed for health care providers, including an audiovisual for doctors, a flipchart to use in educating others, print materials, an audiovisual for advocacy groups, and public relations materials.

Most of the costs of program development were donated. An advertising agency donated its services free. Orchestras played background music for the video productions free of charge. The television time for two years was free. A benchmark study was done in two cities, and then the program was extended nationwide.

OUTCOMES

After three years an independent research team concluded that Brazil had the first large city in the world that showed a reversal in the trend toward early weaning. In 1981, the median duration of breastfeeding was 60 days. Two and a half years later it was 120 days. Even after three or four years, mothers could remember the television messages they had seen. The projected reach for television was 50-60%, but the actual reach was nearly 80%. Health service providers — hospitals, doctors, nurses, and prenatal classes—apparently had little, if any, effect.

The market price for this intervention program was US\$1 million, but the amount actually paid was \$22,000. The remainder was donated.

Moved by the success of the program, the government decided to modify it in 1987-1988. At that time, the breastfeeding messages were incorporated into a more comprehensive health communication effort; the breastfeeding message became one of four different messages related to maternal and child health. Conceptually, this change made sense. Unfortunately, this new version was not based on extensive, community-based research, and the results were disappointing. Rather than the successful campaign pulling the others forward, the unsuccessful campaigns pulled the one successful example backward. In other words, this program was not ready to be attached to other programs. Mothers are now bottle-feeding their babies in Brazil at exactly the same rate they were prior to the initial intervention, in spite of the fact that many mothers successfully breastfed a previous infant and that many mothers remember the original television spots.

CONCLUSIONS

The most important conclusion that can be drawn from this work is that television can make a tremendous impact in changing a population's values and habits. Its potential, however, cannot be realized unless appropriate research and message testing have been done prior to any media campaign. If the structure, purpose, or nature of the messages is changed during the campaign, the same kind of research and message testing must be repeated. It should be noted, however, that no social marketing program can be expected to continue "as is" for an indefinite period of time with or without resources. By definition, social marketing programs *must* change because the population itself changes.

It is also apparent that the changes accomplished by television alone are not sustainable in the population, but must be continuously reinforced. This project also demonstrates that very expensive mass media can be obtained by donation if a massive, nationwide program is planned. Many commercial interests may then be more interested in participating for humanitarian and, perhaps, for advertising or competitive reasons.

Finally, a more effective means for integrating desired behavior changes into current medical practice and society at large needs to be developed. Without change in these sectors, all other behavioral changes are likely to be only temporary.

CASE STUDY 5

Nutritionists and Communicators Can Work Together: Nutrition Interventions in Peru and Nigeria, Cecilia Cabañero Versoza, Academy for Educational Development, USA.

OVERVIEW

This paper presents an excellent example of nutritionists and communicators working together as a team from inception to completion of a community-based nutrition program. The program formulated realistic objectives, a variety of comprehensive social science research techniques were used in Phase 1, there were multiple levels of involvement and support in the community ranging from physicians to housewives, and the mix of traditional and mass media was specifically targeted to selected audiences and uses. Each of these components as well as the overall team concept were central to the success of this project.

BACKGROUND

The objective of the four-year Dietary Management of Diarrhea project in Peru, supported by USAID and implemented by John Hopkins University and the Academy for Educational Development, was to ameliorate the adverse nutritional consequences of diarrhea. In Peru, the infant mortality rate is about 67 per 1,000 live births. There are 21 million people, and 26% of its female population is illiterate. This intervention took place in Callejon de Huaylas, a valley with a population of 110,000 people, a mix of rural and urban centers, and a mix of Spanish and Quechua languages.

THEORY

Nutrition behavior change requires the concerted effort of two types of specialists: nutritionists and communicators, who need to work in tandem throughout the entire project. Some years ago, this kind of partnership meant that the nutritionists did the research work and the communicators did the marketing. In this case, both kinds of specialists were involved at all stages of development, marketing, and decision making.

Communicators and nutritionists must answer four key questions as a team: to ensure the success of community behavior change interventions. Who is the target consumer? What is the product? What is the message? What are the channels of communication? This project emphasized "product," although the other three questions were addressed as well. It was noted that the decision-making process is always a balancing act that requires judging which product attributes consumers like and weighing these facts against nutritional considerations.

METHODS

The project was laid out in three phases (see Figure 3): the community-based research phase, clinical trials, and communication to change feeding practices. Communicators and nutritionists invested considerable effort in Phase 1, using five separate social science research techniques to better understand consumers and the possible acceptance or rejection of a new product developed specifically for the communities in the project area. Based on these results, clinical trials were launched in Phase 2, the results of which were again checked in the community (via recipe trials) before the third and final phase of the project was launched. Mothers in the community participated in the recipe development process to ensure that the recommended recipes would be acceptable to both themselves (in terms of preparation) and their children.

The results of Phase 1 indicated that all children were breastfed, but not necessarily for four to six months. Half were on solids by five months. Mothers did not change infant feeding practices during diarrhea, but were concerned about their children's loss of appetite. The results also indicated that it would be difficult to change weaning practices given the fact that the parents worked in the fields all day and that soup was the primary food given to young children. Energy and protein intakes were well below recommended levels for all children and they had insufficient feedings per day.

Based on these data, the team decided that their new product would be marketed as a "diarrhea food" (as opposed to a general weaning food). The product was developed and named "Sanquito" based on a traditional food called "sanco," which was fed to children on special holidays. Sanquito was composed of readily available ingredients and fortified with pea flour, carrots, and oil, all of which were foods that mothers considered good for children with diarrhea. The food was intended to be home-processed to fit the preferences of the community, and the product had the desired nutrient composition. The cost was 20 cents per day for a three-year-old child.

Only 90 days were devoted to the communication effort. In view of the short time period, the team set relatively modest objectives: to generate awareness and knowledge of Sanquito in 20,000 households; to have 20% of the households use Sanquito during a diarrhea episode; and to have 5% of households adopt Sanquito for use during the next diarrhea episode.

The communication mix included messages targeted to local physicians as well as to the primary target audience, children's care givers. Radio messages were made in the native language, Quechua. Because they were the first Quechua productions, they were widely accepted. Radio messages included testimonials about Sanquito and informed care givers about where workshops were being held on how to prepare Sanquito. In addition, the messages included a radio drama series about how to treat a child with diarrhea. All of these forms of communication were familiar to and well accepted by the target population. Print materials were developed for physicians. Professional seminars were held for them, and there were one-to-one visits by "detail" teams to ensure their support and cooperation in the project. Flipcharts to use during the cooking demonstrations in the mothers' clubs were also developed, but these were primarily pictorial because the audiences were only semiliterate. Thus, the pictures carried the message. The other written materials were in Spanish because that is what the local team recommended for best acceptance. Traditional media were also used, including a local theater group that performed 60 educational skits in the mothers' clubs, along with the cooking demonstrations.

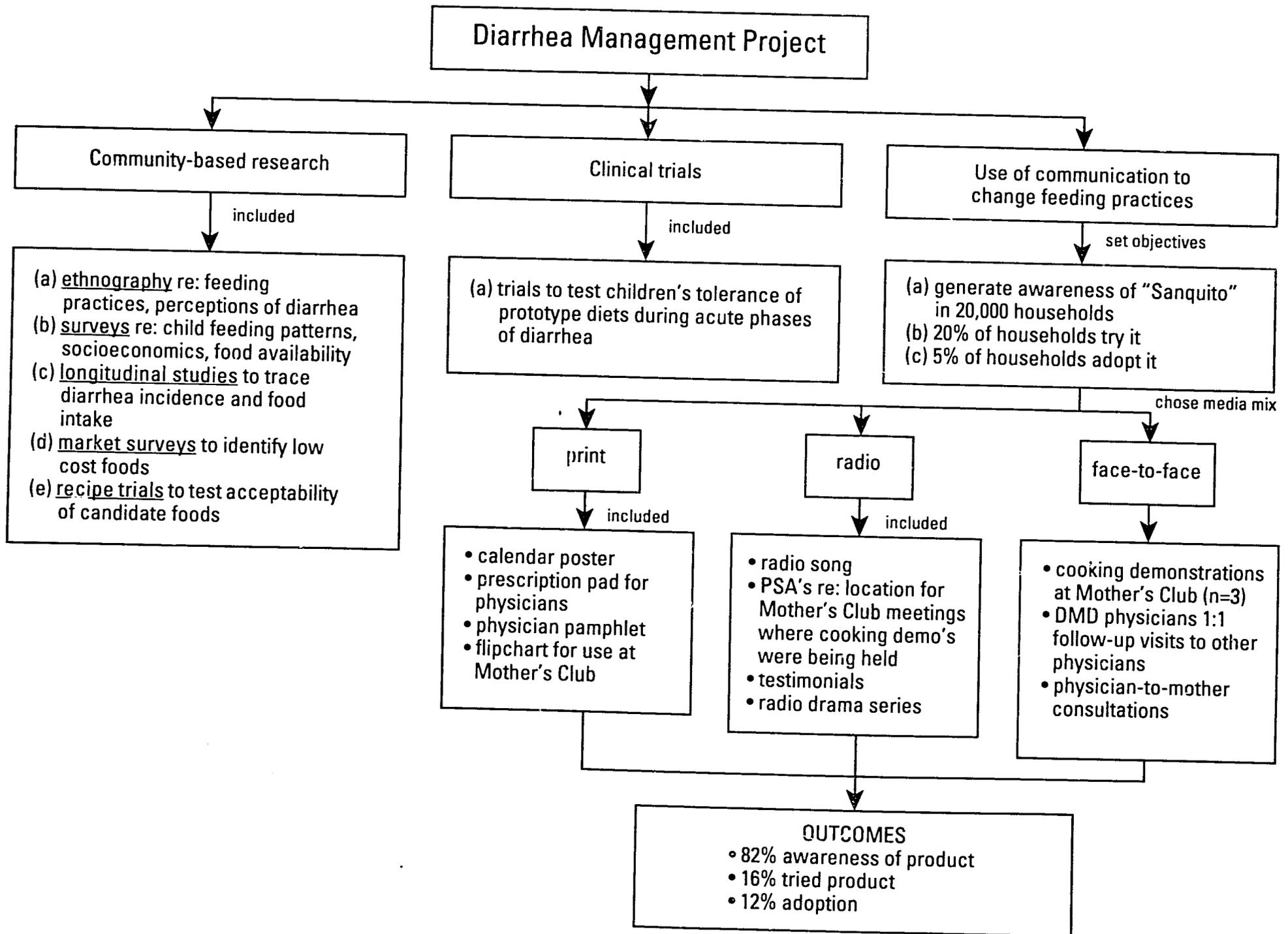
OUTCOMES

Results were determined by a postcampaign survey of 648 representative households divided among 30 cluster sites. All of the project's objectives were surpassed. Radio reached 87% of the population, home clubs reached 25% of households, print 19%, friends 16%, and a doctor or nurse reached 5%. Sixteen percent of the households tried the new product and 12% adopted it. Interestingly, 97% of those who tried Sanquito at home adopted it, compared with only 75.5% who tried it at mothers' club demonstrations. Those who heard of Sanquito only through the radio had the lowest adoption rates, but those who heard the message from radio plus another source had the highest adoption rates.

CONCLUSION

Nutritionists and communicators have complementary and supportive roles to play throughout the design and implementation of interventions aimed at changing nutrition-related behavior. The nutritionist is the product specialist who ensures that the intervention has a scientifically valid, nutritional underpinning and that the product will make a significant impact on the public health needs of the audience. The communicator brings the consumer perspective to each step in the intervention process to ensure that all strategies will be accepted by the consumer. Both perspectives are needed to ensure success.

Figure 3. A summary of the research process used to develop the messages in the Peruvian Diarrhea Management Project



CASE STUDY 6

Nutrition Promotion in Mali: Highlights from a Rural Integrated Nutrition Communication Program, Dandara Kante, Ministry of Education, Mali.

OVERVIEW

This presentation focused on how to start a rural education program using social marketing techniques in a traditional society in Mali. The first stage—needs assessment and formative evaluation—is described, and is the only stage completed at this time. The usefulness of focus groups and a combination of qualitative and quantitative approaches is also demonstrated. Together they provide a strong base for developing a program. There will be much to learn from the program after it has been implemented.

BACKGROUND

Mali is a Sahelian country. Ninety percent of the population lives through subsistence farming. The dietary staple is millet, which while relatively high in protein, is incomplete nutritionally. One child in four suffers from moderate to severe malnutrition, which contributes to an under-five mortality rate of 293/1,000. The need for supplemental foods during pregnancy is largely unrecognized. Women continue eating as usual during pregnancy, and many experience night blindness as birth approaches. Additionally, Malian parents feel strongly that breastmilk is sufficient food for infants until they are old enough to reach out and take food themselves, usually at nine to 12 months of age. Thus, it was readily apparent that dietary practices, and not lack of food *per se*, were contributing to poor vitamin A status of mothers and young children. Educational efforts had been tried previously by the Ministry of Health to teach mothers to prepare improved porridges, but these had a limited effect. In many households, the men control all economic resources including food; however, there are women in nearly every village with some control over resources that they can use to barter or sell. Therefore, a new approach focused on directing resources within the household and motivating women to take better care of themselves was selected.

THEORY

A consortium, which included several rural child survival projects supported by USAID, the Ministry of Health, and a U.S.-based technical assistance agency, developed this program using a social marketing approach that began with ethnographic research to examine behavioral correlates of malnutrition in rural communities. Based on this approach, two strategic decisions were made. First, it was decided that a two-stage approach for nutrition communication was required. The first stage depended on, and linked nutrition to, other health or social interventions (which in turn required a minimum level of motivation to adhere to and which gave the target population a sense of control) before the second stage introduced specific nutrition behavior change messages. This

strategy allows a population to recognize the need for nutrition behavior changes that might otherwise be ignored.

Second, it was determined that popular awareness of children's dietary needs must be developed gradually, in a manner consistent with cultural patterns of child care, health, and feeding practices. In short, while changes in nutrition behavior take time, the change becomes more likely if the benefits are apparent, the change suggested is small, and the persons asked to make the change believe it is within their power.

METHODS

The nutrition and health education staff participated in media training and in-depth qualitative research of the population. In-depth interviews, focus groups, and two seasonal market surveys were used to collect information and insight into how villagers think about food. "Good food" was defined in terms of taste, not nutrition, and it was considered wasteful to give "good food" to children. "Good food" included fresh fish and meat and was reserved for men and older people. Children were not seen as having any special nutritional needs. Women served "good food" at night to attract their husbands in this polygamous society. Thus, it seems possible to teach villagers that children's needs are different and that children might be given "healthy food" such as fruits and vegetables, if not "good food."

The people also accepted night blindness as a natural part of pregnancy and therefore did nothing to remedy it. It seems possible to teach women that night blindness is the result of a deficiency not only to herself but to her baby as well. Both men and women might be motivated to purchase inexpensive vitamin A-rich foods in the marketplace.

As noted above, some women can barter produce they grow themselves or control other resources while others are dependent on their husbands for all purchases. Based on this it was determined that there should be two target audiences: women who can purchase their own supplemental foods, and men, who often shop for snacks or special foods in the marketplace. In general men would be motivated to contribute more financially to the nutrition of their families.

There are many objectives for the project; they complement each other and will be implemented gradually. The consortium defined their objectives by reviewing the research and then analyzing the results through a combination of analytic discussion, role playing, and brainstorming.

OUTCOMES

The final report on the knowledge, attitudes, and behavior baseline study as well as the children's anthropometric measurements has just been completed. The primary output, however, is the comprehensive strategic plan and organization, including key decisions on how to segment the audience, what actions to take, what themes to develop in the messages, what support can be drawn from workers already in the community, and what other support should be developed for the program. Training of community, health, and other agents has begun to integrate the program as much as

possible into village life. To this end, face-to-face counseling, literacy programs, child-to-child activities, and special events, such as drama and marketplace promotion, are being tried. The health team will complete their training in the spring of 1992. Mass media will be incorporated in the future, as will post-literacy basic education intervention. However, mass media, including radio, will primarily support more personal means of communication, including communication with village leaders. These measures will ensure the sustainability of the project. Postevaluation is currently scheduled for winter 1992.

CONCLUSIONS

Two points should be stressed here. First, if the population to be served does not perceive nutrition as a priority, then actions that serve nutritional ends must be linked to what is of concern—health care, sanitation, literacy, or community organization. Second, the rapporteur noted the remarkable speed with which high-quality ethnographic research was performed and suggested it may serve as a model for nutrition educators in other countries. This success is attributed to having an anthropologist already familiar with the society direct the research. Many of the ideas developed during this project may fit in well in other circumstances, for example, in work with educators to develop literacy training materials that incorporate important nutrition promotion concepts.

CASE STUDY 7

The Philippine Experience in Social Marketing for Nutrition, Mercedes Solon, Nutrition Center of The Philippines.

OVERVIEW

This review of a long-term commitment to social marketing and nutrition promotion in the Philippines highlights how programming can be developed by using donated services from the private sector. Partnerships with advertising agencies may be particularly productive and allow campaigns to take place that would not otherwise. There are trade-offs, however, and quality is almost always sacrificed at some stage. Evaluation seems to be the most vulnerable stage, but other areas may be compromised as well.

BACKGROUND

The Philippines have a high urban population and many nutrition problems, including protein-energy malnutrition, vitamin A deficiency, iron deficiency anemia, and iodine deficiency disorders in alarming proportions. Although there were significant reductions from 1978 to 1982, the proportion of acutely and chronically malnourished preschool children in 1987 reverted to levels of a decade before. Much can be attributed to poverty, and the most vulnerable groups are preschoolers, schoolchildren, and pregnant and lactating women. Seven out of 10 households in metropolitan Manila do not have enough money to buy sufficient food.

The National Nutrition Council was established in 1974 to coordinate the Philippine Food and Nutrition Program. Ten government agencies and three private sector institutions constitute the council.

THEORY

The series of projects described below adhered to the social marketing model described by Manoff in 1975. Most interventions followed a five-step methodology: 1) assessment, including quantitative and qualitative surveys, to identify existing attitudes, practices, and constraints, 2) communication blueprint and timetable, 3) development and pretesting of materials for understandability, audience comprehension, and acceptability, 4) implementation, including the training of field implementors, distribution of the campaign materials, and implementation of the campaign, and (5) evaluation using both quantitative and qualitative surveys to compare with the baseline surveys.

METHODS AND OUTCOMES

Among the several different campaigns described, the first was an immunization campaign. A decade ago it was noted that only 21.3% of all eligible children were actually immunized. A media campaign was designed to address the various constraints noted within the larger community, and a single key message was broadcast on a variety of media: immunization is important and is given free on Wednesdays. The campaign was evaluated using a pre-post design involving 2,400 mothers and significant changes in knowledge, attitudes, and behavior. Success was attributed to the comprehensive and systematic approach used to conceptualize, implement, and evaluate the whole project.

The second campaign related to the control of diarrheal disease. A baseline quantitative survey of existing knowledge, attitudes, and practices among low-income mothers revealed that mothers perceived the presence of loose stools as the main problem in diarrhea and therefore wanted therapy that would stop or harden stools. In this setting, oral rehydration therapy was difficult to market, a situation worsened by the fact that there was no word in Filipino or in the dialects for "dehydration." A campaign was developed first to create a mental niche for dehydration and define it with a clear and acceptable metaphor. The message was tested on focus groups and then communicated via poster, print ads, and television advertising materials as well as radio (which utilized two evil characters, Diarrhea and Dehydration, who conspired in attacking the baby). Evaluation of the results indicated that 50% of the respondent mothers actually mentioned the term dehydration and were able to describe it accurately. The success of this program was attributed to the extensive pretesting of the materials.

The third campaign was more general and involved foods for infants and growing children. Traditionally, malnutrition is viewed as a problem of economics in the Philippines, but low-cost, highly nutritious foods are actually available. The problem is that there is a lack of knowledge about them. Thus, a series of radio and television advertisements were created that featured children saying little rhymes about the foods to impart

the new knowledge. This strategy, based on a traditional custom in the Philippines, provides an entertaining yet highly informative series of commercials with memorable lines. A post-only evaluation revealed that 76% of respondents were aware of the message and 78% reported using food items in the campaign.

Another campaign focused on breastfeeding and used children to appeal to the high value that parents place on education and their dreams for their children's future. The campaign was entitled "Little Dreams" and featured 30-second radio and television commercials that were metered and rhymed. Each depicted a particular child with a particular dream (of becoming a nurse, teacher, and so on) with information for the parent on how to feed that child to help him or her attain the dream. Print materials were also inserted into vernacular comic books, popular magazines, and calendars. Post-only evaluation indicated that most mothers were aware of the ads and that most (42 of 44) could recall the message after viewing the ad.

CONCLUSIONS

Based on the experiences described above, a series of conclusions can be drawn, including the following:

- ❑ Program success depends on a comprehensive and systematic approach to conceptualizing, implementing, and evaluating a program.
- ❑ A single message in multiple media should be used to maximize the effect of the message.
- ❑ Pretesting of all materials and messages is vital, especially if the techniques used and the concepts being communicated are innovative and unfamiliar.
- ❑ Free materials and services can go only so far. Networks and stations aired the spots mostly on low-rating time slots because the high-rating slots are reserved for paid ads. Continuity of the campaign cannot be assured, so communication momentum is often lost. Also, production values of the commercials were compromised to save money.
- ❑ Money for evaluation is almost never available although media or communication services are donated free of charge. This makes it difficult to ascertain the value of using such services.

In sum, donated services are useful, but money is sorely needed to purchase preferred time slots for airing nutrition spot commercials, improve the quality of the commercials, buy into one of the nationwide omnibus studies regularly conducted by the larger research companies in the country to track results, and design planned media campaigns with predetermined phases over a period of several years. Donated services tend to be short term and not integrated into national or regional public health programs.

CASE STUDY 8

The Impact of Social Marketing on Megadose Vitamin A Capsule Consumption Rates: Results of a Pilot Project in Central Java, Dr. Satoto, Helen Keller International, Indonesia.

OVERVIEW

This paper describes a pilot project to increase the number of children given megadose capsules of vitamin A in a high-risk area. A limited social marketing model was implemented with emphasis on promotion, but relatively little attention was given to place, product, or price. A thorough needs assessment that was consumer driven was not performed. The net result of the campaign was both statistically significant and practically important, but it might have been even more successful if a greater investment had been made in the early stages of assessment and planning. This project also demonstrates the limitations of a communication effort if it is not well coordinated with the product delivery system.

BACKGROUND

Indonesia is a poor country with many health problems and an illiteracy rate of 95%. Indonesia, however, employs all possible measures to control vitamin A deficiency, including nationwide distribution of vitamin A capsules, consumption of vitamin A-rich foods, and fortification of food products such as monosodium glutamate (MSG). The vitamin A megadose capsules are delivered to control child mortality. This distribution process looks simple on paper, but experience has shown that distribution and consumption are very low. Vitamin A capsules are delivered to health posts that are open only two or three hours a month, and vitamin A is distributed to these health posts only twice a year. Thus, a program was needed to encourage more mothers to come to the health posts for vitamin A capsules at a specific time.

The government of Indonesia funded an experimental pilot project to reach 1.3 million people to determine whether a communications program could improve consumption of vitamin A capsules.

THEORY

The project team used a modified social marketing methodology that incorporated principles from advertising and market research to design, produce, communicate, and evaluate socially beneficial messages. The primary target audience was mothers, and the secondary target audience was volunteer health workers.

METHODS

The objectives of the study were to change mothers' awareness and knowledge of vitamin A capsules, increase the percentage of eligible children receiving the capsules, and determine whether the observed changes were the result of

project interventions. All of the project's vitamin A messages were based on a core of five key points: 1) the product is vitamin A in capsule form; 2) the capsules are for children one to five years of age; 3) they're distributed at the health post; 4) they're available only in February and August; and 5) they're free. Three media channels—radio, print, and interpersonal—were integrated to communicate these messages. Evaluation was performed by two surveys one year apart via interviews with 800 women at each time point. The design approximated a pre-post model, but the "pre" measurements were collected somewhat after the communication effort had begun.

Radio time was purchased, and an advertising agency was hired to design the messages. All messages were recorded in the local dialect. Leaflets were sent by direct mail to the village level to reinforce these messages and encourage the health workers. Some of these leaflets pictured the governor and his wife to indicate that the government supported the campaign; others came directly from the Ministry of Health and were directed to the health workers as a motivational tool. Additionally, the banners customarily used in this society were hung at the health post to reach the village as a group.

OUTCOMES

Mothers' awareness of the capsules in the intervention area increased significantly from 56.5% to 68.9% as a result of the intervention. Awareness, however, was higher at both Time 1 and Time 2 in the control area, and no difference in mothers' knowledge was noted between treatment and control areas. Capsule consumption rates, however, increased from 24.2% to 40.4% in treatment communities with a health post, but did not change in treatment communities without a health post. The correlation between accessibility of information about vitamin A and consumption of vitamin A was 0.7.

The increase in awareness in the intervention areas was attributed to exposure to the radio messages and the banners. The increase in vitamin A consumption was attributed to interpersonal communication with members of the health system.

Based on these findings, the approach is being used nationwide and will employ radio spots and direct mail.

CONCLUSIONS

There are two constraints to the consumption of vitamin A capsules: access to information and access to the capsules. A communication campaign can overcome the first barrier but not the second. The capsules either must be readily available at both a time and a place that are convenient to the mother or must be personally delivered to the child. Thus, a communication effort can play a role in changing the vitamin A status of the child population, but it must be integrated into a more comprehensive system to realize its full potential.

Other conclusions from the study are that megadose supplementation should be regarded as a short-term solution only (the author believed that food fortification provides the best long-term solution); radio was more cost effective than banners; radio was effective for general information but

interpersonal communication was more effective for neighborhood-specific information; and personnel in several departments need to be coordinated to deliver *specific* information at the village or neighborhood level, including workers in the Health Department, Home Affairs Department, and nongovernmental organizations (such as the Family Welfare Movement).

D. GENERAL DISCUSSION

The papers presented at this conference together clearly demonstrate the efficacy of nutrition communication for behavior change. A number of key principles based on the social marketing model emerged that could be generalized to all nutrition communication efforts, regardless of scale or type of media used. A number of unresolved issues were also identified that must be answered by professionals working in nutrition communication in the future.

A key principle learned from the presentations is that **a systematic approach that includes preliminary or formative research, pretesting, and evaluation is essential in planning a successful nutrition communication program.** The planning process should include a way to prioritize problems and select those that are amenable to change. Secondly, **the support of high-level policy-makers is critical for project sustainability.** A third principle is that **multiple channels of communication are a prerequisite for success.** It became apparent at the conference that the mass media cannot be used to replace traditional media and interpersonal communication but, rather, should support and supplement those forms of communication. In addition, formulating messages in the local dialect and with local community involvement was highly recommended.

All of the papers presented important insights. Highlights include the paper from Africa (the URTNA study) which identified methods for building and maintaining partnerships between broadcasters and nutritionists. It also identified some key differences in perspectives between broadcasters and nutritionists. The paper from Egypt emphasized the need for, and value of, good planning, preliminary research, and evaluation. The paper from Thailand demonstrated how a "bottom-up/top-down" development process works and how mass media and personal interaction can be combined in a successful social marketing program. The paper about breast-feeding in Brazil revealed how success and failure in a social marketing program depend, in large part, on the presence or absence of quality baseline research to guide key program decisions. If new decisions must be made, new research data are needed to inform the decision-making process.

The use of consensus building—that is, developing explicit support among health professionals, policy makers, and other gatekeepers concerned with the provision of health and education services to target populations—varied among the projects described. Consensus building occurred at different times, at different levels, and with different gatekeepers, producing what appeared to be different kinds of results. For instance, in Egypt, two types of consensus were sought: among physicians regarding the content of messages and among both physicians and mothers regarding acceptance

of the messages. The result was uniform involvement in and long-term support of the program. In Thailand, the entire program was built on the concept of community consensus, which was nurtured throughout program development and implementation stages. The Brazil breastfeeding program, by comparison, sought consensus among policy makers at the outset (using carefully targeted methods), but it did not emphasize consensus building later in the development and implementation periods. The lack of consensus building especially among members of the medical community (though they were involved in the project) may have contributed to the decline in effect when the television spots on breastfeeding were discontinued. In other words, consensus building may be important for maintaining community momentum created by a campaign over time. Its role in sustaining financial support for a program needs to be evaluated independently in the future.

Important but unresolved issues identified at the conference include generalizability of results from one program or context to another, sustainability of existing programs within the home country or region, when and how to use free mass media, lack of financial resources (an issue affecting all communication programs), and how to effectively combine a specific nutrition communication campaign with other campaigns in nutrition or health education (or how to move from a vertical program to a horizontal program). Each of these issues needs further research to determine how best to resolve them. The problem that received the most discussion was sustainability. As Dr. Gabr and Mr. Lediard pointed out, major nutrition communication efforts require substantial investment. Once in place, these efforts cannot be continually propped up with outside funding. Therefore, an effective strategy must be developed to help professionals design a program that will be sustainable after the outside funding stops. The question of how to maintain campaign momentum regardless of resources was also identified as an issue. Of equal concern was how to generate funds for assessment, pretesting, and evaluation as well as for the mass media component of programs.

Many participants speculated whether products or elements of a particular national or regional intervention could be used in or generalized to another country or region. It was emphasized by many of the presenters that such a transfer is unlikely. The methodologies, strategies, and approaches used, however, could be applied to other situations, places, and times. In other words, **it is the process, not the product, that can be transferred.** By sharing the process and improving upon it, the professional community can make the most progress and better serve its individual constituencies.

Concern was also raised about how to include "hard to reach" or underserved individuals not served by the health care system. These individuals are also not reached by mass media. Several conference participants emphasized that mass media should not replace more traditional interpersonal communications. Indeed, the health community should consider linking up with doctors and other traditional practitioners to reach these people. Communication efforts then should make use of all existing systems and methods of communication to convey the message.

Some of the participants raised questions about methodology. For example, which methodologies should be

selected for modest-sized interventions and low-cost yet effective assessment, pretesting, and evaluation efforts? Many conference participants noted the value of qualitative methods such as in-depth interviews and focus groups, but specific guidelines were not given about numbers and "how-to's." These methods are described in the anthropology literature and the marketing literature. Information on systematic methodologies for the creative development of materials may not be as readily available. As one participant emphasized, the most difficult task in producing effective communication messages is the process of creative writing.

The rapporteur noted that other disciplines or theories than those typically associated with social marketing may provide useful insight and guidance for this process in the future. For example, dual-code theory, information-processing theory, the theory of meaningful learning, and cognitive development, reading, and low-literacy theories may all contribute principles and ideas worth trying. Workshops to explore these theories may be useful.

One of the unresolved issues that continually arose during the question-and-answer period regarded the definition and acceptance of social marketing as both a term and an approach. As Mr. Lediard noted in his keynote address, social marketing began as the simple application of marketing techniques to social problems. The early emphasis was on the four p's of product, price, place, and promotion, with the greatest emphasis on promotion. Over time, greater emphasis was placed on the other three p's, with a special focus on process, that is, on methods for identifying and evaluating the important components within the four p's, particularly as they relate to the consumer perspective. In sum, social marketing is a methodology model that embodies a consumer-oriented philosophy and a stepwise procedure for designing, implementing, and evaluating a health communication intervention.

Resistance to the term social marketing may be associated primarily with old-style promotion and the "top-down" approach. Indeed, early social marketing efforts looked somewhat like social engineering efforts. Modern social marketing, however, relies on a "top-down/bottom-up" exchange, and promotion is only one of a complex of procedures and decisions. Confusion may be diminished, as Dr. Smitisiri suggested, if the more modern approach were called "health marketing" instead of social marketing.

It is also worth noting that social marketing is not a theory in the formal sense of the word because it does not attempt to explain causes. Rather, it is a model that orders and structures information and procedures, and as such, it allows for the incorporation of a number of different theories. Choice of theory (regarding, for example, motivation, information processing, or family dynamics) should depend on the problem to be addressed. The theory may then be used to explain, predict, or guide results and activity within one or more steps of the social marketing model.

Finally, it is worth noting that the conference provided examples of projects that focused on some target audiences, particularly mothers, but not on others, such as political leaders or possible donors. This may be explained, in part, by the funding sources available (often maternal and child health

grants) and by the study designs (the need to target interventions narrowly to achieve success). Nevertheless, many of the projects described in the case studies included the health care community (including physicians, nurses, and pharmacists) as well as policy-makers, but few of them used social marketing research methods to carefully segment these audiences and develop materials specifically for them. Thus, experience in how to target nutrition messages to these audiences is limited.

The rapporteur suggested that the failure to successfully incorporate these audiences into the program may also explain some of the problems with program sustainability. Political instability in some areas, however, may make it difficult to systematically evaluate how to target any gatekeeper groups, especially in long-term intervention programs.

In conclusion, this conference established that a substantial number of successful nutrition communication programs in various parts of the world have significantly changed specific nutrition and food-related behaviors. These programs used the social marketing model to guide their program design and implementation. Tremendous progress has been made since initial nutrition communication efforts were made in the late 1960s and 1970s.

All of the questions related to nutrition communication are not yet answered; there is still a need for further research. The major outcome of this conference is that, taken together, the experience and results shared at the meeting generated confidence in the efficacy of nutrition communication for behavior change, and reinforced the social marketing model as an effective approach in developing successful nutrition communication programs.

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APPENDIX 2

CONFERENCE PROGRAM

DAY 1: WEDNESDAY, 4 SEPTEMBER

0800-0900 *Registration*

0900-0930 *OPENING CEREMONY*

Welcome by Conference Chairman

Professor Mamdouh K. Gabr, Cairo Faculty of Medicine, Cairo, Egypt

Opening Statements:

International Nutrition Planners Forum (INPF)

United States Agency for International Development (AID)

Academy for Educational Development (AED)

United Nations Educational, Scientific and Cultural Organization (UNESCO)

0930-1045 *SESSION 1: KEYNOTE ADDRESS*

From Nutrition Education to Social Marketing: An Overview of Methodologies and Introduction to Case Studies

Mr. Mark Lediard, Academy for Educational Development, Washington, D.C., U.S.A.

1045-1100 *Coffee Break*

1100-1145 *SESSION 2: CASE STUDY I—AFRICA*

Media and Nutrition Behavior: Building Partnerships Between Broadcasters and Nutrition Professionals

Mr. Kassaye Demena, Union des Radiodiffusions et Télévisions Nationales d'Afrique (URTNA), Dakar, Senegal

1145-1245 *SESSION 3: CASE STUDY II—EGYPT*

The Egyptian Experience with Nutrition Behavior Change

Dr. Farag Elkamel, The Center for Development Communication, Cairo, Egypt

1245-1430 *LUNCH (On Your Own)*

1430-1530 *SESSION 4: CASE STUDY III—THAILAND*

Participatory Action for An Integrated Nutrition Communication Program: The Thai Experience in Changing Dietary Behavior through Social Marketing

Ms. Suttitak Smitasiri, Institute of Nutrition, Mahidol University at Salaya, Thailand

1530-1545 *Coffee Break*

1545-1645 *SESSION 5: CASE STUDY IV—BRAZIL*

The Six Months Worth a Lifetime: Brazil's National Breastfeeding Programme

Mr. Gerson da Cunha, Consultant, National Technology Mission, Government of India

1645-1700 *WRAP-UP*

Professor Mamdouh Gabr, Cairo Faculty of Medicine, Egypt

1830-2000 *RECEPTION*

UNESCO 7th Floor Restaurant

DAY 2: THURSDAY, 5 SEPTEMBER

0900-1015 *SESSION 6: CASE STUDY V—NIGERIA AND PERU*

Nutritionists and Communicators Can Work Together: Nutrition Interventions in Nigeria and Peru

Ms. Cecilia C. Versoza, Academy for Educational Development, Washington, D.C., U.S.A.

1015-1030 *Coffee Break*

1030-1130 *SESSION 7: CASE STUDY VI—MALI*

A Comprehensive Nutrition Education Project Demonstrating the Use of Ethnographic Research, Media Development, Training, and Linkages with Private Voluntary Organizations (PVOs)

Ms. Dandara Kante, Ministry of Education, Bamako, Mali

1130-1230 *SESSION 8: CASE STUDY VII—THE PHILIPPINES*

The Philippine Experience in Social Marketing for Nutrition

Ms. Mercedes Solon, Nutrition Center of the Philippines, Manila, Philippines

1230-1415 *LUNCH (On Your Own)*

1415-1515 *SESSION 9: CASE STUDY VIII—INDONESIA*

The Impact of Social Marketing on Megadose Vitamin A Capsule Consumption Rates: Result of a Pilot Project in Central Java

Dr. Satoto, Helen Keller International, Semarang, Indonesia

1515-1530 *Coffee Break*

1530-1630 *SESSION 10: REACHING POLICY MAKERS*

1630-1700 *WRAP-UP*

Professor Mamdouh Gabr, Cairo Faculty of Medicine, Egypt

Mr. Mark Lediard, Academy for Educational Development, U.S.A.

1715-1900 *COUNTRY TEAM CONSULTATIONS*

DAY 3: FRIDAY, 6 SEPTEMBER

0900-1030 *SESSION 11: COUNTRY TEAM PRESENTATIONS*

Moderator: Mr. Mark Lediard, Academy for Educational Development

| | |
|-----------|--------------|
| 0900-0915 | Botswana |
| 0915-0930 | Burkina Faso |
| 0930-0945 | Egypt |
| 0945-1000 | Haiti |
| 1000-1015 | Indonesia |
| 1015-1030 | Morocco |

1030-1045 *Coffee Break*

1045-1230 *SESSION 11: COUNTRY TEAM PRESENTATIONS (continued)*

| | |
|-----------|--------------|
| 1045-1100 | Pakistan |
| 1100-1115 | Peru |
| 1115-1130 | Philippines |
| 1130-1145 | Senegal |
| 1145-1200 | Sierra Leone |
| 1200-1215 | Zimbabwe |
| 1215-1230 | Open |

1230-1415 *LUNCH (On Your Own)*

1415-1515 *SESSION 12: DONOR INTRODUCTIONS AND RESPONSES*

1515-1530 *Coffee Break*

1530-1600 *PARTICIPANT'S EVALUATION OF THE CONFERENCE*

1600-1630 *CLOSING CEREMONY*