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Social Marketing and Communication: Changing Health Behavior in the Third World

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Section Editor: Rena Pasick

Abstract

Development communication, particularly within the health sector, is relatively new and still shrouded in mystique. Many health planners and policy-makers in developing countries and elsewhere do not yet fully appreciate the role communication plays in primary health care interventions. Nevertheless, communication theory, embracing diffusion of innovations and social marketing, can make a significant contribution in improving health status. This paper explores, through an examination of the literature and the experience of a worldwide research and development project, the synthesis of development communication, diffusion, social marketing, and primary health care. It attempts to demonstrate the value of integrating these paradigms within the context of a public health communication model. Focusing on the use of radio and interpersonal communication, the paper describes model projects in India and Honduras and reveals through their example the role of communication in changing health behavior in Third World settings.

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INTRODUCTION

On her way to work one day, an American woman hears a familiar jingle on the car radio reminding her which soap to use for beautiful skin. Halfway around the world, in a remote Indian village, another woman hears a message on the community radio which teaches her about oral rehydration therapy for her child's diarrhea. Each of these women is part of a target audience for a well-planned marketing campaign. But while the American woman is listening to traditional Madison Avenue marketing, the woman in India is a "consumer" to whom a relatively new kind of message, grounded in social marketing, is being delivered.

Commercial marketing employs powerful techniques for selecting, producing, distributing, promoting, and selling an enormous array of goods and services to a wide variety of people in every possible political, social, and economic context. Even those who resent "Madison Avenue hype" must accept that marketing works. It creates products, positions them in the marketplace to meet consumer demand, makes the products available and affordable to particular segments, and motivates consumers to buy and use products by illuminating their benefits.¹

Despite resistance to applying commercial marketing techniques to the social good from those who find this approach "glitzy" and potentially manipulative, an ever-growing body of experience, particularly in the Third World, speaks to the salience of such an approach. When combined with the sound application of diffusion theory, and integrated with solid qualitative research methods, social marketing can provide the bridge linking development communication to primary health care.

This paper attempts to illustrate the linkages between development communication, primary health care, diffusion theory, and social marketing. It begins with a brief discussion of social marketing and diffusion theory. A model primary health care project in India is described, demonstrating a health-related innovation diffused in a developing country. The role of communication in health promotion is discussed with particular reference to radio. A public health communication strategy in the Central American country of Honduras which was aimed at reducing child mortality related to diarrheal disease is presented as a case study. Finally, limitations, concerns, and potential applications in the developed world are discussed.

SOCIAL MARKETING — BLUEPRINT FOR ACTION

In the late 1960s, marketing scholars began to think about new applications for marketing strategies, perhaps stimulated by G.D. Wiebe's now famous question, "Why can't you sell brotherhood like you sell soap?"¹ Kotler and Zaltman are credited with articulating a definition of social marketing, or the marketing of socially relevant programs, ideas, or behaviors, concerned with "the design, implementation, and control of programs calculated to include the acceptability of social ideas and involving considerations of product planning, pricing, communication, distribution and marketing research."² Kotler also articulated another major principle of social

marketing: "Marketing relies on designing the organization's offering in terms of the target market's needs and desires rather than in terms of the seller's personal tastes. Marketing is a democratic rather than elitist technology. It holds that efforts are likely to fail that try to impose on a market a product, service or idea that is not matched to the market's tastes or desires."³ According to Solomon,² Kotler and his followers subscribe to the philosophy that marketing is an exchange process based not only on need, but also on consumer perception, preference, and satisfaction. This makes the four "Ps" of marketing, product, price, promotion, and place, critical to the success of social campaigns, particularly in the Third World. These four factors must all be carefully considered in designing a social marketing strategy. The product, or offering, must be carefully defined on the basis of market research. Pricing considerations include not only monetary costs, but psychological and social costs as well. Place of distribution must take into account a variety of practical considerations. Promotion includes not only all the components of a persuasive communication strategy, but cultural sensitivity and a sound knowledge of technical limitations.

The social marketing process begins with sound research which helps to define the problem and set realistic goals. It adheres to the principle of segmentation and consumer analysis. It also pays particular attention to influence channels, including mass media. Social marketing goes beyond advertising and communication. It seeks to bring about change in behavior as well as in attitude and knowledge of the target audience. By adding a number of elements, including market research, product development, incentives, and facilitation, it expands the advertising and social communication approach.

DIFFUSION OF INNOVATION

The social marketing model described above, particularly as it re-

lates to health behaviors in the Third World, is clearly a complex phenomenon. As a communication model, it is grounded in the larger theory of diffusion of innovations. One of the foremost diffusion theorists, Everett M. Rogers, defines an innovation as "an idea, practice, or object that is perceived as new by an individual or other unit of adoption."⁴ Diffusion is defined by Rogers as "the process by which an innovation is communicated through certain channels over time among the members of a social system. It is a special type of communication, in that messages are concerned with new ideas."⁴ Simply stated, Rogers and other diffusion scientists are concerned with how people create and share new information. In this sense, social marketing becomes a sort of functional blueprint. On closer scrutiny, the process of information exchange reveals a more complex set of interactions and possible intervening variables. Diffusion, as Rogers' points out, is a "kind of social change, defined as the process by which alteration occurs in the structure and function of a social system."

Rogers⁴ cites four main elements in the diffusion process: the innovation, communication channels, time, and the social system. Other significant aspects of diffusion include such features as characteristics of innovations (relative advantage, compatibility, complexity, trialability, observability), process and rate of adoption, adopter categories, and consequences of innovations.

Opinion leaders and change agents are key to the diffusion of innovations. Opinion leaders are individuals in the community who influence others' attitudes or behaviors. Change agents are individuals who influence their clients' innovation decisions.

These raw elements of diffusion theory begin to take practical shape in a social marketing campaign which systematically applies the components of the theory to bring about

behavior change. An innovation is introduced through a variety of complementary channels following in-depth audience research. The question: "What are consumer practices, perceptions, and preferences in terms of specific innovation?" must be answered in order to "position" the "product" — in this case, a new idea or behavior. Communication channels play an enormously important role in delivering and reinforcing messages about the innovation. An integrated approach between mass media, print, and interpersonal channels should be reflected in the final stages of a sophisticated campaign. However, before reaching this stage, opinion leaders and change agents play a critical role as influence channels in both research and dissemination efforts. During the research and dissemination phases, timing and a full understanding of the social system and existing infrastructure will also be important. Because of the inevitable changes, perceived or real, in the characteristics of innovations, research and evaluation are an ongoing process aimed at ever improved "products" and outcomes.

THE DIFFUSION OF HEALTH-RELATED INNOVATION

An example of a health-related innovation diffused in a developing country will serve to illustrate some social marketing components of diffusion theory. Fifteen years ago, Dr. Maybelle Arole and her physician husband created what has become a model primary health care program in Jamkhed, Maharashtra, a poor, drought-ridden village 200 miles east of Bombay, India. The project adheres to three basic principles of primary health care: community involvement and participation; a non-hospital, non-physician orientation; and a prevention and promotion emphasis. When the program began, trained nurses were sent into villages to work. These nurses were indigenous Indians, but not from the local villages. While they gave good nursing care, the villagers would not accept them: the

nurses were perceived as too far removed from village society, and they intimidated villagers by their level of education. This spontaneous "research" finding led Dr. Arole to determine that rather than utilizing outside change agents, the villagers should choose a woman from among them — an opinion leader — to be trained as a primary health care worker within each neighboring village. Formal education was not essential; in fact, the women who participated were all illiterate, but the key components — high motivation and interest — were there. Coming once a week for instruction, the women eagerly learned about family planning, maternal and child health, nutrition, and sanitation. They carried this new knowledge back to the other women at home. Through these interpersonal channels, a cadre of locally trained women village workers delivering primary health care (diffusion of a new innovation) has built up to a current ratio of one health care worker for every 1,000 villagers. The program now extends to more than 200 villages which represent a population of more than 300,000. The workers engage in primary health care activities and make house-to-house visits routinely, with astonishing results. Almost 98 percent of children in participating villages are immunized; pregnant women receive regular pre- and post-natal care; infant mortality and the crude death rate are dramatically lower than the national average; most families elect sterilization after two children. All services are paid for by the people of the village. Perhaps the most exciting innovation of all, illiterate women are now lecturing physicians throughout Maharashtra as the program is replicated!⁵

In a social marketing context, through this example, we can begin to understand the relevance of researching the target audience's, or consumer's, perceived needs. The product — improved health practices — must be positioned in a non-threatening way. Appropriate channels of communication must be

employed to improve rate of adoption, and the non-monetary price must not be too high.

This example also helps us understand the role women play as change agents within a primary health care context, and the potential impact of a well-designed strategy on their lives. Dr. Arole's program demonstrates nicely the synthesis which is possible, and indeed necessary, between communication principles and delivery of primary health care. In addition, it illustrates that "information is an essential component in all primary health care activities."⁶ The woman-to-woman transfer of knowledge and information in Dr. Arole's program was a key component to success.

THE PRIMARY HEALTH CARE CONCEPT

The above example provides insight into the primary health care (PHC) philosophy. Primary health care is a health delivery system approach intended to emphasize affordable, accessible, low cost health care interventions. The concept of primary health care stresses the provision of essential health care at the local level with input from the community. Here, the role of opinion leaders is critical. Primary health care is also distinguished by certain elements and characteristics which include the extension of health services to underserved areas by training community workers; emphasis on prevention and promotion; and a restructuring of health delivery systems to support the peripheral level with referral services, technical support, and essential supplies.⁷ Respecting and utilizing the inherent social system is also an important asset.

Many other developing countries, including Egypt, Bangladesh, Niger, and Ecuador, are committed to this new primary health care approach in an attempt to extend care to large segments of the population traditionally underserved because they live too far from urban facilities. As Solomon, et al. have pointed out,⁸

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this "growing emphasis on the needs of the rural poor in less developed countries (LDCs) has focused attention on creating innovative means of extending health care to rural areas." Complementing this priority is a growing interest in and respect for diffusion as a theory and social marketing as a model. Adding to this new area of potential for academicians, policy-makers, and planners, still another related phenomenon has emerged. It focuses on the role of communication in the development arena.

DEVELOPMENT COMMUNICATION

While health traditionally has been a somewhat reluctant partner of communication because of medicine's adherence to an acute care model,⁹ it is increasingly recognized that "much health care activity is, in a basic sense, a form of communication. It involves the interaction of health providers and health receivers and the provision of information as well as drugs and hospital care. Health care and health communications and information do not reach the majority of people in most countries. Improving the communications components of the health care system can help to make it serve the poor majority more efficiently and effectively."¹⁰

An increasing appreciation for the role of communication in health delivery, both here and abroad, has led to "a growing genre of health education activities referred to generally as the public health education or public health communication approach. This approach attempts, in a predefined period of time, to change a particular set of behaviors in a large-scale target audience with regard to a specific problem."¹⁰ Expressed in this way, the linkages between a public health communication approach, social marketing, and diffusion theory begin to take shape.

Health communication strategies which adhere to this public education approach in developing

countries are part of a larger context of development communication — a field that studies, analyzes, promotes, and evaluates the application of communication technology to all sectors of development. Development communication is based on the premise that the problems of development, particularly as they impact the lives of the poor, are massive in scale and require more than experimental solutions or unreplicable models.¹¹ While the earliest application of development communication was in the field of education, applications have now extended to a number of other sectors, including health. "In each case, the objective is the extension of the educational impact of specific development programs by adding a communication component to an existing program or by addressing a development problem directly through a communication strategy."¹¹

Communication theorist, Robert Hornik,¹² has pointed out that development communication is an eclectic specialty which has only recently formed its own constituency. It serves a variety of functions (e.g., institutional catalyst, accelerator of action, equalizer, low cost loudspeaker) but the central theme of its success lies in its ability to serve as a "complement to a commitment to social change, changing resources, good instructional design, other channels, and detailed knowledge about users."¹² Here, Hornik seems to capture the essence of development communication's contribution to primary health care and its relationship to diffusion principles as applied through social marketing. He recognizes the separate yet conjoint roles of contributing disciplines as they work towards the common aim of improved (health) outcomes. He relates development communication to innovation, influence channels, consumer research, resources (and therefore "price" issues), and social change. Most importantly, Hornik recognizes the role of communication in supporting behavior change in a fashion compatible with the con-

sumer's reality.

THE ROLE OF RADIO

A wide variety of technologies are involved in development communication spanning all levels of sophistication. Of all modern technologies, however, none has so successfully penetrated the poverty barrier as radio. It is estimated that the 16,000 radio stations and one billion receivers in the world reach one of every five people on earth.¹³ "Worldwide, radio is the most potent communication innovation since the printing press. It has a larger audience than that of any other mass medium. The large-scale manufacture and distribution of inexpensive, battery-operated, transistor radios have brought much of the world's population into an international communications network. While radio ownership is not universal, few communities are without at least one receiver."¹³

The benefits of using radio are many. Radio is one medium which can reach rural illiterates. It is the only medium which can be localized. Radio also makes it technically possible for poor, illiterate people to communicate with each other. As a mass medium, radio is probably best suited to messages of interest to relatively large groups of people. Radio can reach people frequently, create and maintain motivation, inform, teach, and induce behavior change.¹³ In short, it provides a viable communication channel to support the social marketing approach to diffusion of innovations, or knowledge transfer.

Open broadcast is used more often than any other strategic use of radio for development and offers the most advantages. It can reach everyone who has access to a receiver, teach specific cognitive skills, reinforce and remind, inform large numbers of people, stimulate popular support, link rural people from distant areas, transmit concerns, increase acceptance of extension workers, and motivate while providing ongoing

support. However, public health education and social marketing campaigns go beyond simple mass media programs by integrating and supporting the above roles with print and interpersonal channels. Consistent messages, based on audience research, are developed for radio spots, posters, flyers, health workers, and opinion leaders. Without this integrated approach, any significant changes would be unlikely to occur.¹

A CASE STUDY

While the role of radio in support of social marketing programs is still evolving, there is a considerable body of experience in using the medium to support health objectives.² One of the more impressive examples is the Communication for Child Survival Project, HEALTHCOM, being implemented by the Academy for Educational Development (AED) for the U.S. Agency for International Development (USAID), Bureau for Science and Technology.

In 1978, USAID initiated a project to apply what is known about communication and social marketing to promote oral rehydration therapy and related child survival practices. The project began work, first in the Central American country of Honduras, and then in The Gambia (Africa), as the Mass Media and Health Practices Project, focusing primarily on oral rehydration therapy and the control of diarrhea. Today known as HEALTHCOM, the project has an expanded focus and includes a variety of child survival technologies, particularly immunization, infant nutrition, and preventive measures.

HEALTHCOM's methodology employs concepts of social marketing, behavior analysis, instructional design, and anthropology to assist in the implementation of mass media programs in 17 countries worldwide to promote changes in behavior with regard to child health. Social marketing serves as the organizing discipline which guides the implementation process. Behavior

analysis provides a systematic means for measuring the potential practicality of new messages and products against existing behavior patterns of the intended audience. It also provides a set of proven principles for effective face-to-face training of providers and others, as well as organizational principles to guide continued correct use of new messages, services, and products. Through the science of anthropology, a more in-depth understanding of how traditional beliefs and practices affect program planning is provided. Research techniques that help monitor program impact and a cultural context within which to place specific behavioral findings are also contributions of anthropology.

In both Honduras and The Gambia, HEALTHCOM focused on children under age five. Using mass media, combined with health worker training and simple print materials, rural women were taught the basic components of oral rehydration therapy, how they could use it at home, and how to monitor their children's progress during episodes of diarrhea. Special emphasis was also given to feeding advice in an effort to break the vicious cycle of diarrhea and malnutrition.

In Honduras, the three-year social marketing program provided resources for materials production, broadcast time, developmental research, and long-term technical assistance. Project personnel assisted national health personnel in developing a public education campaign. This campaign was based on principles of diffusion theory which combined radio, specialized print materials, and health worker training to deliver information on home treatment of infant diarrhea, including the proper preparation and administration of oral rehydration therapy. Other critical messages included water use, breastfeeding, weaning food preparation, personal hygiene, and sanitation practices.

The particular health communication strategy adopted by the HEALTH-

COM Project relies on three key stages germane to the social marketing model: preprogram planning and development; instructional intervention; and ongoing monitoring and evaluation.

The planning and development stage emphasizes the collection of information needed to prepare an effective program design. This information answers important questions about the audience, channels, and resources. The final program plan, including budget and resource requirements, is based upon the results of this investigation.

In Honduras, the instructional intervention was divided into discrete message cycles. Each cycle covered the same basic information with a slightly different approach in order to reduce audience fatigue and permit a continued renewal of audience involvement. Women hearing health messages on the radio also heard the same advice from a health worker, received printed information from the child's school, participated in a community health fair, and saw related posters. This cycle approach was important to planners who could then incorporate results of the earlier phases into the planning of later phases. During these cycles, the integration of media was critical.

Monitoring and evaluation permitted the planner to detect problems and to make important iterative changes in strategy. This is a key component in the social marketing approach. The monitoring system permitted regular sampling of select segments of the audience. Monitoring also revealed logistical problems such as the use of inappropriate broadcast times. This attention to detail underscores the focus on the consumer.

The working premise which made this model relevant to the prevention and treatment of infant diarrhea was the belief that lives could be saved by altering the way in which rural people were behaving. Improvement did not require new investments in health infrastructures, such as water

systems or latrines or health centers. The project did not attempt to install new technologies, or to promote cognitive changes. The task was simply to alter the likelihood of people doing things which are well within their capabilities, based on feasible innovations consonant with consumer lifestyle and needs.

The success of the public health communication campaign in Honduras depended on its ability to provide a sufficiently large number of people with practical and important new information in a timely fashion. A brief description of some specific project activities will illustrate how this was achieved within the framework of diffusion theory and the social marketing model.

After defining the problem and establishing specific communication objectives, the audience was segmented into primary and secondary groups. The former consisted of rural mothers and grandmothers with children under five and primary health care workers called "guardianes." The secondary audience included health care providers, fathers with children under five, rural school teachers and school children, and regional health promoters. The project was designed to teach the primary audience to properly prepare and administer pre-packaged oral rehydration salts according to age and/or symptoms, to seek outside assistance if the child did not improve, and a cluster of behaviors associated with breastfeeding, infant food preparation, and personal hygiene. The secondary audience was taught to support the primary audience through providers using oral rehydration therapy in all fixed facilities, fathers and midwives understanding and approving oral rehydration therapy, rural schools teaching prevention measures, and regional health promoters distributing oral rehydration salts packets. Thus, problem definition, objective setting, and audience segmentation are recognized as first steps basic to a social marketing campaign which understands innovation, opinion

leaders as communication channels, and the social context.

Based on audience research, the tone of the integrated media campaign was serious and straightforward. It sought to promote a mother-craft concept which supported what mothers were already doing and added several new components to "being a good mother." Oral rehydration therapy was presented as the latest achievement of modern science as a remedy for appetite loss and an aid to recovery, not as a remedy for diarrhea.

Over a two-year period, some 20,450 radio spots were broadcast, in conjunction with 200,000 print materials and 150,000 packets of oral rehydration salts produced and distributed.

The four sequential phases of the campaign were timed to coincide with the peak seasons of diarrhea, illustrating attention to timing. Phase I, which preceded the first diarrheal peak, stressed face-to-face training of health workers and medical professionals. Phase II, during the first diarrheal peak, shifted from an intensive interpersonal effort to a media-based mass campaign directed at rural mothers and grandmothers. Messages focused on diagnosis; procurement, mixing, and administration of oral rehydration therapy; and recovery. Some prevention was addressed. Phase III shifted to a prevention focus, but selected treatment messages were broadcast to reinforce therapy compliance. Phase IV, during the second large diarrheal peak, reemphasized oral rehydration therapy. During this phase, print and electronic media were used to reinstate treatment behaviors and to provide continued reinforcement towards prevention. This phasing and emphasis on seasonal influences represents another example of social marketing's attention to individualizing for a specific target audience.

Treatment and prevention message patterns were developed which differentiated messages by specific target audiences. Radio was the principal means of contact with most

rural mothers. While simple print materials were widely distributed, planners expected that many mothers would only receive the radio messages. Word of mouth was expected to be an important secondary source of information for mothers. The primary contact point for mothers were local clinics, children's hospitals in the district, rural schools, and "guardianes," or community health workers. The "guardianes" were reached by a preliminary intensive training effort, and supported by regular meetings, radio broadcasts, and simple print materials. Secondary audiences were reached principally through print media, although regular news items were important motivators for these groups.¹⁰

The results in Honduras were impressive. One year after the launch of the mass media campaign, which followed the extensive research phase, a survey of 286 mothers showed that 49 percent of women reported having used the local oral rehydration salts packet during an episode of diarrhea at least once. During the same period, recognition of LITROSOL, the local oral rehydration salts packet, as appropriate during diarrhea increased from 0 percent to 74 percent of the sample. Of those who reported using LITROSOL, over 90 percent could mix it properly and 60 percent were able to state the correct recommended daily amount. Two years after the start of the mass mediated intervention, the proportion of deaths involving diarrhea in any way among children under five fell 40 percent. Ninety-five percent of mothers who had heard campaign messages could name LITROSOL as the medicine promoted. Over 60 percent of women in the project area reported having used LITROSOL during diarrhea at least once. Mothers reported using LITROSOL for over one-third of all episodes of diarrhea. Of those who said they used LITROSOL, at the end of the campaign over 90 percent knew how to mix it properly and an average of more than 70 percent were able to

state the correct daily amount.¹⁴ A team of independent evaluators from Stanford University concluded that "the overall picture that emerges of the project in Honduras is one of an intensive, well-integrated campaign that is achieving impressive successes in teaching people health information and getting them to change specific behaviors related to infant diarrhea."¹⁵ Such behavior change includes actions ranging from continued feeding during diarrhea to seeking help at a health center.

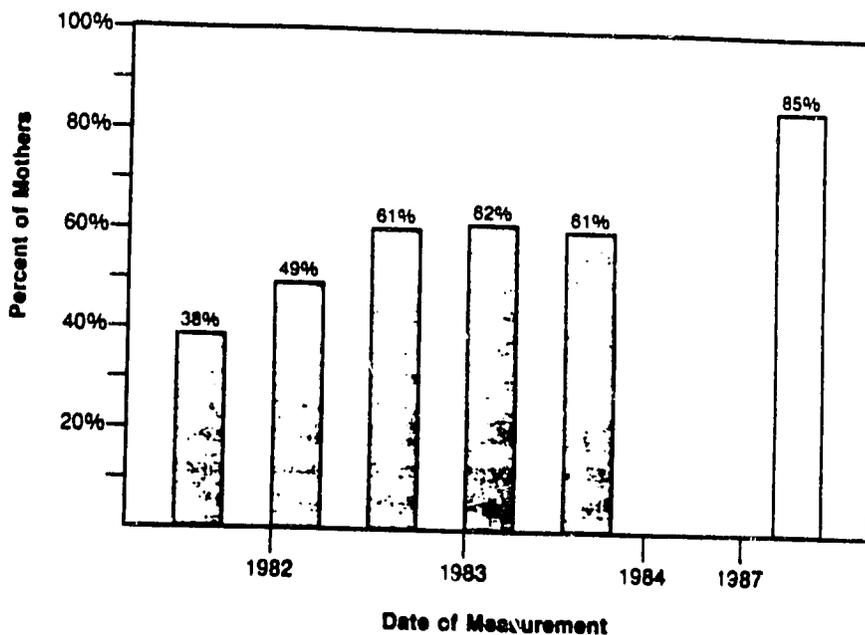
A 1987 resurvey in Honduras revealed that awareness of oral rehydration therapy has continued to climb as the intervention has evolved from a pilot project to a national program. The use of oral rehydration therapy for recent cases of diarrhea is now higher nationally than it was at the close of the intensive pilot phase. As demonstrated in Figure 1, the proportion of mothers who have ever used oral rehydration therapy has risen to an extraordinary 85 percent. Figure 2 shows an increased use of LITROSOL during diarrhea as reported by mothers from 1982 to 1987.¹⁶

LIMITATIONS, CONCERNS, POTENTIAL APPLICATIONS

The success of projects employing mass media as one part of a social marketing approach to health innovations is clearly encouraging. Evaluation studies show that these projects can reach large numbers of people in a short time for relatively low cost. Research has shown that ten to 50 percent of those reached by mass media remember the main message. Magnitude of effect studies which examine related behaviors or attitude change show results in the same range.¹⁶

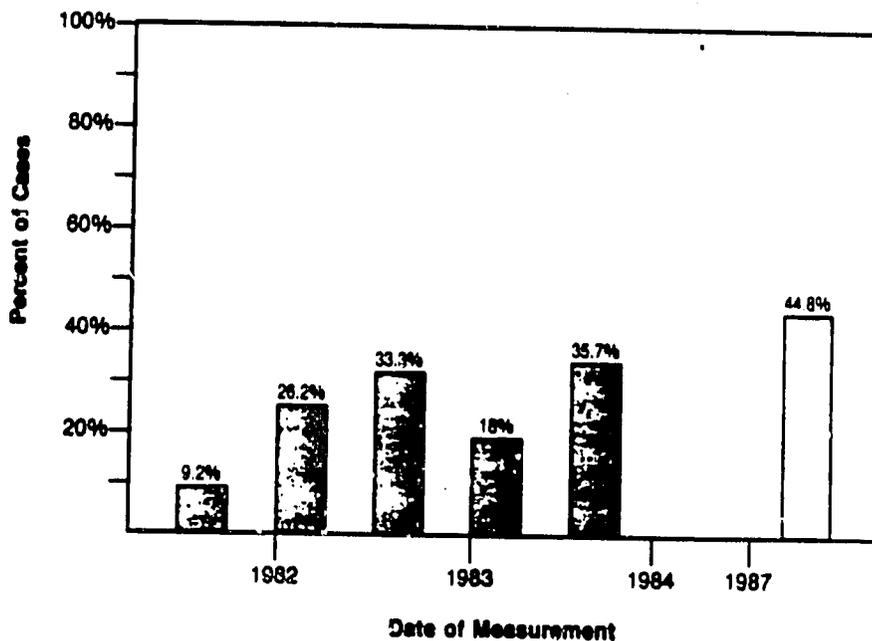
Nevertheless, limitations and concerns about these approaches need to be addressed. Many now recognize that children's health depends on improvements in the health, status, education, and income-earning opportunities of women as prime caretakers. Given the reality of

Figure 1
Percent of Honduran Mothers Who Have Ever Tried Litrosol¹⁶



Data source: Baume, C. HEALTHCOM: Preliminary Report on the Results from the 1987 Resurvey in Honduras.

Figure 2
Use of Litrosol for Diarrhea Within Two Weeks of Interview¹⁶



Data source: Baume, C. HEALTHCOM: Preliminary Report on the Results from the 1987 Resurvey in Honduras.

women's lives in the Third World, this may be difficult. Women may lack time, energy, or understanding needed to provide primary health care for their children. Asking women to prepare special weaning foods, to leave their work in the field to bring a child to the health center, or to find extra fuel for boiling water, may be unrealistic.¹⁷ The current "child survival revolution," or commitment to reduced morbidity and mortality in children under five through immunization and oral rehydration therapy, will clearly need to incorporate women as participants and beneficiaries, as well as agents.

We also know that efforts to use radio are still largely fragmented, and radio still reaches only a fraction of the population. Education and development-oriented uses of radio in the entire Third World represent only a small fraction of all broadcasting. UNESCO figures for the Third World indicate that less than five percent of all programming is directed towards education or development.¹⁸ Radio programming varies greatly from one country to another. There is a need to evaluate effectiveness and this must be done within the context of support from other institutional change agents.

Individual physicians and health institutions continue to question the role that communication can play, favoring a more traditional and high-technology approach to health care.

Gradually, however, as the methodology described above is itself diffusing to academicians, policymakers, and practitioners, the concept of public health communication strategies is receiving wider recognition. Creating consumer demand leads to improving service distribution. Children's hospitals in the developed world now recognize oral rehydration therapy as safe and inexpensive. The U.S.-based International Child Health Foundation, established to apply child survival lessons learned in less developed countries, reports that oral rehydration therapy is now practiced at the

Children's Hospital in Boston and at The Johns Hopkins University Hospital's out-patient clinic.

CONCLUSIONS

Work done to date in public health communication has made a significant contribution to primary health care. We now know far more about communication and social marketing in primary health care than we did only ten years ago. Basic communication principles have proven effective. We know that communication requires more than mass media and that it isn't a quick fix. Effective communication is audience oriented, multi-channelled, and limits the number of actions the listener is expected to take as a result of the message. It is consistent over time and adaptable to change. Communication can work, not only to promote, but to teach, remind, and reinforce.

A number of other lessons have also been learned. For example, if the goal is to produce widespread use of oral rehydration therapy in unsupervised settings, three factors become critical: coverage, timeliness, and credibility. To bring these three elements together, a comprehensive plan is needed. It must include an adequate supply and distribution system; an explicit link between what health providers, radio, and print media tell the public; training programs for health workers; a radio broadcast scheduled to reach specific audiences; and a series of simple print reminders for key skills. A plan must be based on field research of existing audience practices and beliefs, and the plan must be corrected as required. Finally, the plan must be simple and concise, avoiding any temptation towards unnecessary complexity.

Diffusion theory, social marketing, primary health care, and development communication have significantly contributed to shaping our understanding of what works best in promoting new health behavior. Despite residual provider resistance, continuing funding con-

straints, and the occasional misunderstanding of a sound methodology, it now seems clear that in both the developed and developing worlds, we are on a new and exciting threshold. As Robert Hornik so aptly put it, "It is a tale of caution and of a field maturing."¹⁹ Surely it is a field ripe with possibility.

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