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**THE USE OF INTEGRATED MEDIA  
FOR VITAMIN A CAPSULE SOCIAL MARKETING ACTIVITIES  
IN CENTRAL JAVA, INDONESIA**

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Vitamin A deficiency remains a serious child survival challenge for specific geographic pockets in developing regions such as West Africa, Bangladesh, the Philippines, and Indonesia. Each year in Indonesia, for example, approximately 50,000 to 60,000 preschool aged children suffer blinding corneal lesions (xerophthalmia) from this deficiency. The prevalence of milder eye diseases associated with this problem is at least ten times higher. Vitamin A may also have a much larger role to play in lowering childhood morbidity beyond reducing the prevalence of nutritional blindness. Field trials by Alfred Sommer<sup>1</sup> and his associates suggest that sufficient intake of vitamin A can lower diarrhea morbidity rates.

In its fourth five-year plan (1984-1989), the Government of Indonesia (GOI) committed itself to lowering morbidity and mortality of children under five from various causes, including vitamin A deficiency. The Indonesian Department of Health has a national three-pronged strategy to decrease the prevalence of this problem among children between one and five years old. The plan calls for:

- increasing target audience consumption of vitamin A rich foods, including dark green leafy vegetables, fruits, and fish;
- distributing megadose (200,000 IU) vitamin A capsules twice annually through village health posts;
- fortifying selected foodstuffs with vitamin A.

The Department of Health is conducting various operations research projects regarding all three aspects of the strategy, with the assistance of the World Health Organization, USAID, and other international and local nongovernmental organizations.

#### **THE ROVITA PROJECT—VITAMIN A WITHIN THE CHILD SURVIVAL CONTEXT**

The Government of Indonesia requested assistance from USAID in carrying out one operations research project aimed at the second prong of this strategy: namely distribution of megadose vitamin A capsules to children on a semi-annual basis. The three-year project, known as ROVITA,<sup>2</sup> was initiated in late 1986 in the province of Central Java. One of ROVITA's goals is to apply social marketing techniques to increase the distribution and demand for megadose vitamin A capsules among mothers of children

between one and five. The project aims to achieve a coverage of 90 percent of those children in its target areas.

ROVITA also has two objectives related to diarrheal disease: 1) to improve case management of diarrheal disease among children under five years old through oral rehydration therapy and improved supply of oral rehydration salts (ORS), and 2) to measure the change in incidence and severity of diarrhea before and after vitamin A supplementation in a small cohort of children. This joining of themes is reflected in the project's name, ROVITA, which is an acronym for "Rehidrasi Oral" and "Vitamin A." This field note focuses on ROVITA's experiences in promoting vitamin A capsules.

Within the Indonesia Department of Health, ROVITA is a cooperative effort of the Directorates of Diarrheal Disease Control, Family Nutrition Improvement, and the Directorate of Community Health Education. The project office is located in the Department of Health provincial headquarters in Semarang. With the Indonesian Department of Health as implementor, ROVITA draws additionally upon the expertise of its collaborating organizations: Helen Keller International (HKI) as management facilitator and Diponegoro University (Central Java) as coordinator of evaluation activities. In the area of social marketing, ROVITA receives technical assistance from the HEALTHCOM Project.<sup>3</sup>

## **SOCIAL MARKETING GOALS AND THE CONSUMER FOCUS**

Social marketing focuses on the consumers--in this case the child and his or her caretakers--as the measure of whether a product is desirable, appropriate, affordable, and conveniently available. The initial step of social marketing activities is, therefore, usually audience segmentation. Important groups include not only the primary target audience (generally mothers in a child survival effort) but also secondary audiences such as husbands, health care workers, village leaders, community organizations, and religious groups. These people can have a strong influence upon what mothers value, what they know, and what they do. The goals of a communication program are defined in terms of the different target groups.

The ROVITA Project's target areas are the two regencies (or counties), of Demak and Jepara, located approximately one hour and 2.5 hours respectively from the Central Java capital of Semarang. The total population includes approximately 1.5 million people. Among these are an estimated 230,000 children under the age of five and an estimated 290,000 mothers of child bearing age. The project's primary audience is caretakers (mostly mothers) of children between one and five years of age.

Approximately 65 to 80 percent of this audience are from low income groups and live in rural or semi-urban areas. Only about one-third of the mothers have completed six years of schooling.

The "first tier" secondary audience--those who deal most directly with mothers--includes kader, or community health volunteers (usually local mothers), and district health center staff, or puskesmas workers. Kader interact with mothers in two major ways.<sup>4</sup> They are responsible for holding posyandu, or temporary village health posts, once each month. Each village has from three to five posyandu. Mothers come to have their babies registered and weighed, to have their children's growth monitored on a monthly basis, to have their children vaccinated, to obtain ORS, and to receive health counseling--including family planning information.

Twice a year (in February and August) kader also distribute free megadose vitamin A capsules to children at the posyandu. In addition, these volunteers are responsible for going out into the community to contact mothers who have not come to the monthly posyandu session. The Department of Health decided to rely upon the kader for distribution of vitamin A, because mothers tend to view the posyandu as a place for healthy babies and for prevention and counseling, whereas they view the much more distant district health center, or puskesmas, as a treatment center and generally go there only when their children are sick.

The "second tier" secondary audience for the vitamin A capsule intervention--those people who may influence mothers to seek out the capsules--includes husbands and formal and informal community leaders such as the village chief, village elders, religious leaders, and teachers. The tertiary audience includes local government officials and key policy- and decision-makers within the Ministry of Health.

Given these target audiences, the ROVITA Project determined that its social marketing program should concentrate on the following objectives:

- to develop a communication strategy aimed at increasing intake of vitamin A among children one to five;
- to improve kader skills in registering members of the target population;
- to increase kader skills in delivering vitamin A capsules and information to the target group.

- to increase kader skill in recording and reporting vitamin A distribution;
- to strengthen the nutrition education component of posyandu sessions in relation to vitamin A.

The strategy for achieving the first of these goals focused on designing and conducting a series of integrated print and radio communication interventions to reach mothers and those who influence them on a daily basis. The strategy for achieving the remainder of these goals focused on effective face-to-face training of village health volunteers (targeted towards their dual roles as educators and distributors of vitamin A capsules). The overall vitamin A capsule program therefore balanced promotion, or "demand creation" activities, with distribution, or "supply side" activities.

## **MARKETING RESEARCH AND MESSAGE DEVELOPMENT**

The collaborative nature of the ROVITA Project gave it strong resources to draw on in carrying out both the communication and training aspects of the program. Technical input into message design came from experts in several sections of the Department of Health. The head of the Health Education Section led the mass media communication effort, with assistance from the HEALTHCOM resident advisor. The Vitamin A program manager (Nutrition Section) designed the face-to-face training strategy, and the training modules were elaborated with help from the Health Education Section head, HEALTHCOM, and HKI.

This cooperative process began with the formulation of an integrated marketing design. The two major goals of this design were: 1) to develop simple, memorable, and action-oriented messages which would be consistent from medium to medium, as well as integrated into the face-to-face training; and 2) to use the results of audience research to select media, develop materials, and broadcast or distribute these to the target audience. The development of messages and the selection of media went hand in hand. Market research with the target audiences provided the foundation for both refining messages and planning communication activities.

The ROVITA team began by considering several medical and logistical aspects of the vitamin A capsule intervention as a basis for selecting a broad number of possible communication messages. The most important of these concerned attributes of the

product, vitamin A capsules, including the facts that they are: free, for children, available twice a year (during February and August), and distributed at the posyandu. Other messages concerned the importance of vitamin A for healthy eyes (the danger of corneal lesions, night blindness, and xerophthalmia) and the reasons for taking capsules twice a year.

In collaboration with a small private Indonesian research firm, the ROVITA team then carried out a series of studies to investigate the target audiences' perspectives, preferences, and practices. The major studies were:

- a literature review of available information related to vitamin A deficiency;
- an ethnographic survey, including in-depth interviews regarding knowledge, attitudes, and practices of mothers (N=64), kader, (N=16), formal and informal village leaders (N=16), retailers (N=8), traditional birth attendants (N=8), and puskesmas physicians and nurses (N=4);
- audience research, to determine literacy, media usage, radio and television ownership, popular listening hours and stations, and so forth.

These studies revealed interesting information about the target audiences' understanding of the product and the advantages of different communication channels. The team learned that mothers had little awareness of the prevalence of night blindness or the value of vitamin A. Nevertheless, the product held certain inherently desirable qualities. A pill, per se, is valued among both mothers and health care providers because it represents a tangible, painless key to good health. Mothers put great faith in pills and are interested in obtaining them for their children. Health care workers therefore find it rewarding to distribute pills. Having something to give away affords the volunteers status. Pill-dispensing therefore held potential as a rallying point for the posyandu. Although those mothers surveyed had little understanding of the value of vitamin A, they were familiar with the capsule's distinctive look and had a local name for it (which translates as "fish oil"). Their familiarity with the product therefore had both positive and negative aspects. The product could be easily identified by its large tear drop shape, but one would not want to stress its common name.

Radio appeared to be the "winning" medium for promoting the product. Local radio stations reach the majority of even the most rural areas in Jepara and Demak. Studies indicated approximately 40 percent of target mothers own radios and 70 percent listen to the radio. The most popular programs were minidramas and mystery shows. Print materials appeared less promising. Mothers in the target areas do not routinely read newspapers or periodicals. On the other hand, cloth banners are a very popular mass medium in Central Java. On a given day, five to ten banners may be draped across streets or buildings in a town center, advertising commercial products (such as cigarettes and foodstuffs) or events (such as films, sports, or music and drama events). The appearance of a new banner is widely noticed in a village.

Choices of mass media therefore centered on radio as a primary channel to announce and explain the intervention and banners as a supporting medium to be displayed at the posyandu, puskesmas, village halls, and other prominent places. Print materials such as posters were deemed inappropriate for a semiannual promotion since they would be too expensive for one-time use but not durable enough for multiple use. The banners, however, could be made durable enough to be reused and were valued enough by village chiefs that they would be stored during the intervening months and brought out for succeeding interventions.

The choice of media in turn helped influence communication messages. Obviously, the same amount of information cannot be conveyed through radio, on a banner, or through personal contact. What information would bring mothers to the health center? Pretesting of draft materials with the target audience showed which of the numerous communication messages mentioned in the beginning of this section were most essential to the target audience and most appropriate to a radio script, to a banner, and to face-to-face communication.

## **THE CREATIVE STRATEGY AND MATERIALS DEVELOPMENT**

Research convinced the ROVITA team that communication messages should be targeted to capitalize on the product's inherent advantages and on the simple "where" and "when" of distribution. In-depth interviews revealed that mothers' attitudes towards pills were sufficiently positive that they would seek them out knowing merely that they were free and good for their children's health. Pretesting showed that extensive information about the importance of vitamin A, about night blindness and xerophthalmia, was not appropriate for the radio spots and even less so for banners. However, such information was included in the health volunteers' training so that mothers could learn

more about the product when they made contact with the health care system. The message "core" then consisted of six points:

- The product is vitamin A capsules;
- It is distributed every February and August;
- It is available at the posyandu;
- It is free;
- It is for children between the ages of one and five;
- Vitamin A is for healthy eyes.

Although project leaders were concerned about the negative connotation associated with vitamin A--that it is "fish oil"--they decided not to draw attention to the name, or to complicate the message. The common name for the capsules was simply never to be used.

The ROVITA vitamin A capsule communication strategy was integrated in two important respects. Messages were to be consistent from medium to medium, so that each channel would reinforce the other with essential, action-oriented information, and messages would be timed to reach mothers simultaneously ten days before, and then throughout each intervention month.

## **RADIO SPOTS AND SCRIPTS**

The ROVITA team contracted a private sector FM radio station with production capabilities to assist in creating three 60-second radio spots. These spots were targeted at mothers, both to inform and create demand. (See attachment A.) Each consisted of a minidrama followed by the voice of an announcer briefly summarizing the message and concluding with the national health slogan: "Let's go to the posyandu to keep our children really healthy."

The three spots emphasized slightly different "core" messages. The first is an amusing conversation between a wife and her somewhat cost-conscious husband. She wants to go to the posyandu to get her child the vitamin A capsule. The foolish husband

tries to discourage her because they don't have any money, and besides the child is healthy. The wise mother then informs him of the core messages: that vitamin A capsules are free, that they're also for healthy children, and that they're available every February and August--and now it's August (or February depending on the monthly promotion). The husband then becomes very supportive. The second spot takes place between two mothers. It is a variation on the first but emphasizes that vitamin A is for healthy children as well as sick children, and that someone can always tell you where the posyandu is: "Just ask a neighbor." The third spot also takes place between two women. One woman has just remembered that it's the time to take her son for his vitamin A capsule. She runs out with her son to ask a neighbor where the posyandu is.

Audience research had revealed mothers' preferences for dramas. And the radio station suggested finishing up each spot with a "voice of authority." Ninety percent of commercials end with an announcer summarizing the message and audiences expect to hear this didactic appeal. Pretesting also helped select the background music. A traditional style known as Dangdut [note spelling varies in different versions] is popular in the target areas and would catch mothers' attention at the minidrama's outset.

The drama format provided an opportunity to convey several non-core messages which the team felt would help mothers to act. As always, a communication program tries to enlist the family and the neighborhood in support of its goals. It uses characters and creates an atmosphere which the target audience can identify with. It also looks for hidden concerns (for example that a sick child might not be given a pill) and hidden obstacles (for example that someone might not know what a posyandu is). Given the nature of the vitamin A product, the team found such social and logistical considerations more important than an elaboration on the technical aspects of vitamin A deficiency.

Each spot was created in both the national language, Bahasa Indonesia, and the local language, Javanese. Budget as well as minimum reach and frequency requirements helped determine six local radio stations that would effectively reach mothers. Each station was contracted to broadcast the six spots ten times a day for 40 days during dramas and mystery shows--the most popular radio programs among mothers. Negotiations with the private radio station helped keep the cost of production down to approximately U.S. \$100 per radio spot. Broadcast costs averaged just over U.S. \$1 per minute. Radio production and broadcast costs for the first vitamin A monthly promotion thus came to less than \$3,000 U.S. for a total of 2,400 one-minute spots.

## **BANNERS**

While radio spots could expand on the campaign messages, banners could convey only the minimum information. They were designed to communicate the basics: the product, the recipient, the timing, the place, and the price. In order to grab the attention of both literate and nonliterate mothers, the banner was highly graphic. One side featured a large bottle of capsules labeled "vitamin A" and surrounded by a few distinctive megadose capsules. "Free" appeared in a prominent red starburst. "Every February and August" appeared on the other side of the banner. Very bold yellow letters on a kelly green background read "Vitamin A Capsules -- For Your Children. Get them at the Posyandu."

In order to create a banner which could be seen from a distance, the ROVITA team decided on a brightly silkscreened polyester banner four meters long and one meter high. They were fitted with grommets at the top and bottom and had wrap-around edges so they could be strung from a rope or hung on two posts. The banner went through numerous pretests with rural mothers. The picture of the bottle and pills had to be revised several times to make them clearly recognizable to mothers. The colors for different parts of the banner also were of great importance to them.

The ROVITA Project sent the 450 banners for the first monthly campaign to county health offices for distribution to village chiefs ten days before the first of the month. The head of the Central Java Health Department sent a cover letter with the banners, asking village chiefs to mount them in priority places by August 1st. Additionally, 40 seven-meter banners were sent to all the puskesmas to be hung at their entrances.

## **FACE-TO-FACE (TRAINING OF HEALTH VOLUNTEERS)**

Face-to-face communication between health volunteers and mothers was vital to the intervention. Volunteers played a dual role, first as distributors of the capsules and secondly as educators and promoters of vitamin A. They also had the opportunity to explain the campaign messages in more detail to mothers. Face-to-face contact was the only interactive, or "responsive" medium used.

In preparation for the August intervention, the ROVITA team designed a training program for health volunteers which was carried out during the months of May and June. The training consisted of two days devoted to proper diarrhea case management and one day devoted to vitamin A. The vitamin A training emphasized the same core

messages delivered through the other media. In addition, trainees were encouraged to conduct registration of children and were instructed in the logistical details of distributing the vitamin A capsules. They also received basic information on how to diagnose eye problems.

A tiered system of training had been used successfully in Indonesia for other programs such as family planning and diarrheal disease case management and thus was also used by ROVITA.<sup>5</sup> The first step consisted of training two groups of 40 puskesmas workers from throughout the project area. The following month, small groups of trained puskesmas staff then trained groups of 20 kader each, reaching a total of 2,200 kader with the vitamin A program. Ultimately, the volunteers were to informally "train" mothers about vitamin A deficiency. The central training principle was that one learns by doing, and the central method was role playing. Each trainee played the role of a kader and a mother, and had the opportunity to learn from the suggestions of the other trainees.

The project team also designed a manual to be used by kader with mothers. The manual includes detailed illustrations and was carefully pretested with mothers. The training program explained to the kader the content and use of the manual and trainees then used the manual in their role playing. Each kader received a certificate upon completion of training.

After the training the volunteers were encouraged to conduct an intensive canvas of their respective areas to register all mothers with children between the ages of one and five in preparation for the next capsule distribution.

## EFFECTIVENESS OF THE SOCIAL MARKETING ACTIVITIES

It is too early to conduct a meaningful evaluation of ROVITA's vitamin A capsule program. This will be possible only after several semiannual interventions. However some simple indicators of process effectiveness are available. To date, monitoring efforts have consisted of a qualitative study of 78 mothers, 33 kader, and 15 puskesmas workers. Questions were simple and focused on whether the audience had heard or seen our messages and whether they had acted on them.

The results after the first monthly promotion were as follows:

- Approximately half of mothers interviewed said they heard the radio spots. Of these, three-quarters took their children to the posyandu to obtain vitamin A capsules.

- Approximately one-third of mothers interviewed recalled seeing the vitamin A banners.
- About one-third of mothers reported receiving general advice from the health volunteers during their August visit, but only about half of these received advice related to vitamin A.

The results of the radio broadcasting were welcome news. Although banners seemed less effective, they apparently had a hidden value. Some village leaders who did see the banners informed mothers that they should go to the posyandu. Face-to-face communication (volunteer to mother) seems to have been the least effective channel. For this reason the team is presently conducting a behavioral study to observe health volunteers practices in order to determine better ways to motivate them. These results are being used to modify plans for future vitamin A promotional effort in the project area.

## CONCLUSION

The ROVITA Project's experiences promoting vitamin A capsules demonstrated a number of simple but important lessons. First and foremost is that a communication campaign must be based upon careful audience research and materials pretesting. Secondly, every product has unique aspects which must be fully investigated from the target audiences' perspectives. Thirdly, if the basic communication program message is simple, memorable, and action oriented, it can be conveyed through a number of different media. If these media are culturally appropriate, they can effectively reinforce each other even if a single channel has a limited reach. Lastly, different media can communicate core messages in unique ways. Radio can convey a more complicated message than a banner, and face-to-face communication can convey yet more detailed information. Consistency of message and timing of delivery are at the heart of an integrated social marketing activity.

## NOTES

1. Sommer, A., Tarwotjo I., Djunaedi, E., et. al., "Impact of Vitamin A Supplementation on Childhood Mortality: A Randomised Controlled Community Trial. Lancet. 1986: 1:1169-73.

2. ROVITA is funded through the A.I.D. FVA/PVC Office (PDC-02840A-00-6131) with support from the HEALTHCOM Project.
3. See also field note entitled "One Organizational Model for Collaborative Technical Assistance."
4. See field note entitled "The Development of Counseling Cards for Community Health Workers as an Aid to Teaching Mothers Proper Diarrheal Case Management in West Java Province, Indonesia" for a detailed description of the kader system.
5. See also field note entitled "Training Community Health Volunteers to be Effective Communicators: A New Training System for Diarrheal Case Management in Indonesia."