

PA-ABK-101
ISN 74957

FIELD NOTE

REPORTING RESEARCH RESULTS AS INFORMATION EXCHANGE:

A VIEW FROM NIGER STATE, NIGERIA

P. Stanley Yoder



Sponsored by the
Office of Health and Office of Education
Bureau for Science and Technology
United States Agency for International Development
Academy for Educational Development

University of Pennsylvania, Applied Communications Technology, Needham Porter Novelli, and PATH

HEALTHCOM IN NIGERIA

The HEALTHCOM Project was established in Nigeria in December 1986 to provide technical assistance to the Health Education Unit (HEU) of the Ministry of Health for strengthening both federal and state communication capabilities in disseminating messages regarding child health issues. The goal of HEALTHCOM in Nigeria is to reduce morbidity and mortality in children under five years of age. Other major participants in this program include the Combatting Childhood Communicable Diseases Project (CCCD) and the Technologies for Primary Health Care Project (PRITECH).

The Nigerian national government has given high priority to preventing dehydration in children through oral rehydration therapy (ORT) and to increasing participation in the vaccination program, the Expanded Program on Immunization (EPI). Niger State was designated as the initial site for HEALTHCOM at the state level. Thus HEALTHCOM has begun to give technical assistance aimed at improving the promotion of ORT and EPI in Niger State. As part of these activities, the HEALTHCOM Project collaborated with the Federal Ministry of Health, the Federal Radio Corporation of Nigeria, UNICEF, and CCCD in organizing a two-part training workshop over a period of three weeks in July of 1988 to improve health education.

The workshop, which was held for "Zone C" states (including Kwara, Niger, Kaduna, Katsina, Sokoto, and Abuja), emphasized the use of research data to plan health education activities and to formulate communication strategies. Each of the states in Zone C was invited to send one health educator, one radio producer, and one program manager to attend the workshop. Also, one health representative from each of the ten Local Government Areas (LGAs), or districts, from Niger State was invited to participate during the first week. Many special guests from the Niger State government attended the opening ceremonies. They included the Commissioner for Information, the Commissioner for Education, and members of the Niger State Community Health Mobilizing Committee. The presence of these high level officials added greatly to the status of the workshop in the eyes of both participants and the general public.

The author wishes to acknowledge the contribution of Annie Voigt of the CCCD Project, who cooperated in designing and presenting the workshop activities described in this field note.

The goal of the workshop was a formidable one, in view of the fact that minimal data have been collected previously in Nigeria regarding child survival, and planners have had little experience designing programs based upon research. The first week of the workshop took place in Minna, Niger State, and focused on health education management and supervision. The second two weeks took place in Minna and Kaduna, and focused on mass media and communication planning and production. The workshop planners thought that having health educators, managers, and radio personnel work together would provide the foundation for better cooperation in planning and producing radio messages about health. More than 40 people were invited to attend the workshop.

The first week was dedicated to discussing results of research in Niger State, so that the participants would have the experience of considering the implications of that data when designing a communication plan for health education. This field note describes the strategy that was used to present technical data to workshop participants and the implications of the information exchange. The sessions were organized by technical consultants from the HEALTHCOM evaluation subcontractor (Annenberg School of Communications), and the CCCD Project, which had collaborated with the Ministry of Health in carrying out most of the formative research. The objective of this report is to describe the format we chose: a process of having people talk about what they know of their own districts with regard to ORT and vaccinations; of having people consider the implications of research data in light of their own ideas; and having people make choices about priorities for an EPI program. In general, the success of workshops linked to development projects depends more on the process participants go through than on the product produced on paper at the end. In planning and implementing their myriad training sessions and workshops, however, projects can easily pay too much attention to products on paper and not enough to participants' interactions during sessions.

THE WORKSHOP SETTING

In planning the workshop, we sought a format that would permit an exchange of information. We were striving for serious and realistic discussions of what people know and do about diarrhea and vaccinations in Niger State. We wanted to know what image the participants had of their own health services and of community knowledge of ORT and EPI so that we could present the research data in meaningful terms. By comparing what was taken as common knowledge with research results, we thought we would learn from one another. We had three days to discuss findings obtained through the following research activities:

- a study of health facilities by a team from the CCCD Project I;¹
- a community survey of knowledge and use of sugar-salt-solution (SSS) and vaccinations conducted by an evaluation team from the University of Pennsylvania and personnel from HEU;²
- an ethnomedical study of local knowledge of vaccinations, diarrhea and dehydration, and the use of SSS, by Dr. Adewale Oke from the University of Ibadan.³

Participants were divided into two groups. In one group were the managers of the health programs for each LGA, several members of the Health Education Unit in Minna, plus the chief health educators from four surrounding states. Most of the discussions presented in this field note occurred within this first group. The radio producers and managers made up the other group.

While we believed it would be a useful exercise to give these health and radio personnel the experience of discussing the implications of data to their own work, we did have a problem. How could we discuss results of research about vaccinations and SSS with people who had little experience with surveys? Who had little or no experience collecting information about health care delivery? Who had never collected information about the communities they serve? Who had never been given data for use in planning activities? We decided to focus on the participants' beliefs regarding levels of community knowledge about SSS and vaccinations and the source of those beliefs. That is, we wanted to introduce them to the idea of being skeptical, of looking for evidence for conclusions presented, and to provide them with a little practice in considering evidence and drawing conclusions.

We planned the sessions with three types of interactions in mind. First, we wanted the participants to discuss what they knew about women's knowledge and practices related to SSS and vaccinations in their own districts. Second, we wanted to present a few simple research results in a way that would give each of them the chance to consider the implications of the data. And third, we wanted the group to make certain judgments about what would be the best communication strategy for vaccination promotion in Niger State in light of the data presented and their own knowledge of Niger State.

WORKSHOP SESSIONS AND THEMES

Session Organization

We arranged the sessions in pairs around a single theme. The first session of each pair (45 minutes) was used for presentations about levels of knowledge and use of SSS and vaccinations and of the research results, and the second session (also 45 minutes) was used for smaller group discussions. Participants talked about what they knew about their districts, and then we presented what we had learned from the research. There were two pairs of sessions in the morning and one in the afternoon. In addition, we had one session (30 minutes) of summing up in the morning and another in the afternoon. This gave each small group a chance to report on its responses to the questions assigned for discussion.

The topics discussed during the sessions on diarrhea and SSS included mothers' knowledge of SSS, their use of SSS for diarrhea, and knowledge of correct preparation. The major topics discussed relating to vaccination included the number of mothers who had heard of vaccinations before, the number who knew the purpose of vaccinations, the number who knew at what age the first vaccination should be given, and the number who knew how many visits were required for complete immunization.

The Process of Discussion

Knowledge and Use of SSS. A discussion of the participants' ideas about knowledge and use of SSS in their LGAs will illustrate how this information exchange worked. In one of the pairs of sessions we talked about mothers' knowledge and use of SSS, the water/sugar/salt solution recommended for preventing dehydration in children with diarrhea. We discussed the differences to be expected in mothers' answers to questions about whether they had ever heard of SSS, about whether they knew how to mix SSS, and about whether they had used SSS at least once. All but one participant believed that everyone, or nearly everyone, in their respective area had already heard of SSS. We then explained that our survey found that in Niger State, 64 percent of women had heard of SSS and 46 percent said they knew how to mix SSS.

Participants then divided into three groups and discussed how people hear about SSS. We also asked that they come up with an estimate for how many women in their area have already used SSS at least once. Participants' figures ranged from 33 to 90 percent, with most people saying from 70 to 80 percent. In short, most people thought the large majority of women have used SSS. Almost everyone thought that people hear about SSS only in clinics.

We then presented data from the community survey showing that only 40 percent of women have used SSS at least once. We discussed this result and reflected on why so many participants had given high figures for SSS use. It was difficult for participants to explain the basis for their impressions. There was some evidence that the level of knowledge of SSS and its use by LGA (district) varies widely. Thus for one or two LGA managers, an estimate of 70 percent SSS use among local women was not far off. Most of the participants, however, had a greatly inflated view of the percentage of people in Niger State who had prepared SSS at least once.

Vaccination Information. The sessions on mothers' knowledge about vaccinations showed that data can be used in a group discussion to change people's ideas of their own situation and that the group can then decide on specific priorities based on these research results. Because reliable population figures are not available in Nigeria and the system of reporting vaccinations is not precise, the MOH currently does not have the capacity to calculate coverage rates. Thus it is not surprising that the participants did not have clear ideas about what coverage rates to expect in their areas. Our discussions and presentations of vaccination information began with data that was easy to present graphically; that is, what had been found from the community survey about coverage rates for different vaccines.

Several of the persons from Minna expressed surprise that total coverage rates in the state for children 12 to 23 months old were from 30 to 35 percent and that coverage rates were higher in areas served by clinics than in those served by mobile teams. We spent one session having participants explain why they thought coverage rates were low (or high) in their district and why overall coverage for Niger State was so much higher in areas served by clinics as opposed to mobile teams. The single factor most often cited as a barrier to higher vaccination rates in areas served by mobile teams was road conditions. Sand, floods, mud, and long distances make the task of reaching the population very difficult. By the same token, one or two LGAs support their mobile teams by providing petrol for trips to announce the next immunization visit and for the visit itself, while the rest of the LGAs do not. The participants all thought that was significant. According to the group, the road conditions, the distances to travel, and the support given by the LGA determined how well mobile teams could reach the population.

In other sessions we asked what people thought women in their respective geographic areas knew about the vaccination process. We examined the results of the survey and compared that data with what the participants had presented. Finally, we identified the various elements of the vaccination process and chose four elements that

we considered indispensable in motivating women to take action. That was the ultimate question for these sessions: if we expect women to bring their children for vaccinations, what is it they must know?

We began with a group discussion of how to study knowledge about vaccinations, noting that this research included examining mothers' knowledge about the EPI diseases, the logistics of getting vaccinated (when, where, how often, the cost), and the purpose of vaccination. In fact we wrote out a list of more than a dozen elements the group thought constituted important information about vaccinations. We then explained the kinds of questions used in the community survey that provided measures of these elements for Niger State.

The group as a whole believed that women in general know about the EPI diseases, about the scheduling of vaccinations, and about the purpose of immunizations. We then divided into three groups, asking that each group discuss the three questions below and report back to the full group:

- 1) In your district, what do women currently know about vaccinations?
- 2) In your district, what are women told at health centers or clinics about vaccinations?
- 3) What must women know so they are likely to bring their children to a clinic or health center for vaccinations?

All three groups reported that women know where to get vaccinations, know the vaccination schedule, and know the names of the EPI diseases. Two of the three groups were certain that most women know the purpose of vaccinations. All three groups reported that at health centers, women are told about the immunization schedule and when to return, as well as about possible side effects of the vaccinations. Two groups said the purpose of immunization was explained as well.

Regarding what women must know so they are more likely to bring children to health centers for vaccination, the conclusion of the three groups varied greatly. One group decided that women must know:

- 1) the purpose of immunization;
- 2) where to get the vaccinations;
- 3) the cost of the service (free).

A second group decided that women must know:

- 1) the importance of completing the doses;
- 2) the exact time interval between vaccinations;
- 3) the management of side effects.

A third group decided that women must know:

- 1) the names of diseases and the associated dangers;
- 2) the fact that vaccination can prevent these diseases;
- 3) the age limit (i.e., that children should be vaccinated before they are two years old);
- 4) side effects and how to respond to them.

In their previous discussions, participants had indicated they thought mothers know most of the elements listed above--that is, what women must know. Once each group had given its report, our discussions focused on what the data showed about women's knowledge about the EPI diseases, the vaccination schedule, the purpose, and the cost of vaccinations. The survey results had shown that almost all women already knew where vaccinations could be obtained, so that was not a problem. However, the survey also showed that 15 percent of women had never heard of vaccinations and that only 34 percent knew that vaccination prevents disease. Clearly there was room for improvement here. We found that 27 percent of mothers interviewed said that the first vaccination should be given at birth or within ten days. No questions were asked about costs.

When questioned further, the participants recognized that women do know about measles and some know about whooping cough, but they could not say what women know about the other EPI diseases. They also recognized that while some women know when to come for vaccinations, the majority do not. As for the purpose of vaccination, we agreed that many women have learned why children should be immunized yet many also get their children immunized without knowing why it is beneficial.

We discussed the elements people must know to be likely to bring their children in to be immunized. After extended debate, the group chose the following critical elements:

- 1) where to go for vaccinations;
- 2) the cost of vaccinations;
- 3) the purpose of vaccinations;
- 4) the right ages for vaccinations.

By identifying certain elements as most crucial, we were not saying that other elements (disease names, side effects, and so forth) were unimportant. Rather, we proposed that given the current knowledge about vaccinations and the present system of service delivery, it would be best to begin an EPI communication effort by choosing a few items for general diffusion. That choice, however, could only be made if information about current levels of knowledge were available.

Finally, participants engaged in a long discussion about the cost of services. Some insisted that vaccinations are free and that women know that already. Others said that women do not think they are free because they have to pay for the health card and any medication they may be asked to buy to treat side effects. The MOH officially states that vaccinations are free. Eventually we agreed that while no fees are charged for vaccinations as such, many people believe vaccinations are not free because of the associated costs at the health centers. Therefore, the MOH should not assume that cost is not a factor, but rather develop a way to address this concern.

Outcome of the Group Discussions

On the final afternoon the group discussed what kind of strategy might be used to develop a child survival program in Niger State, in view of the research results. The participants used their new understanding of the relevant data to suggest the following basic outline for a Niger State program:

Overall goal: to increase immunization coverage;

Objectives:

- increase the number of people coming to clinics for immunization,
- reduce the rate of defaulting,
- improve communication between mothers and health workers;

Strategy:

- reorient (train) health workers,
- conduct an inventory of where village health workers and village health committees are already established,
- improve relations between health and radio personnel,

- supply research materials on EPI, ORT, family planning, and nutrition to radio personnel,
- prepare a series of radio programs and a health magazine, under the direction of one person designated to address health issues,
- enlist the support of women's associations in meeting the goals of EPI, and have the LGA managers teach the leaders about those goals,
- arrange brief seminars for traditional and religious leaders to discuss the situation in their territories regarding EPI and suggest ways to improve coverage.

The next two-week session of the workshop was to be devoted to choosing specific radio messages and actually producing them. The messages would then be pretested in Hausa in Kaduna.

COMMENTS

This exercise gave us the chance to hear about local conditions from local personnel in a context in which we could offer research results. The workshop was especially valuable because of this two-way exchange of information and ideas. Both the research participants on the one hand, and the Niger State personnel on the other, had important things say to one another about SSS and vaccinations.

While the outcome of our discussions of immunizations seems clear and sensible and the recommendations may prove useful to the MOH, the experience participants had in discussing their impressions and comparing these with research results may in the long run be the most important "outcome" of the workshop. The participants shared in the process of considering the implications of research results for their own programs. And they took part in a debate to select items of highest priority from a long list of facts related to the EPI program. They benefited from practice in presenting their own opinions, justifying their own choices, and then deciding together what makes the most sense. If people are to plan health programs from information, they must first be given the chance to think about data and consider various priorities. They must have practice in making judgments about their programs. Very few health personnel in Niger State have had that experience.

Development agencies often provide training and workshops for health personnel as part of health care programs. The goal of a typical session is frequently to produce a

product--implementation plan, set of ORS priorities, plans for radio programs, and so forth--a product that will structure and guide communication and/or service activities for some time. That is sensible and expected by all participants. However, there are two ways participants' experiences in the average workshop could be improved. An effort should be made before the training begins to ascertain the level of knowledge and interest that prospective participants have about the main issues of the training. And the training periods should be designed to focus on the process of the training rather than simply the end "product." If the process of participation is productive, then the program has a chance of making an impact. If the only result is a written product and the participants have been involved in little else, then chances are nothing of long-term benefit has been accomplished.

Notes:

1. The results of the health facilities study are presented in "Health Facilities Needs Assessment Study" by A. Voigt, M. Toole, and D. Puckett.
2. The results of the community survey are presented in the field note, "Immunization Coverage in Niger State."
3. See also the field note entitled, "Ethnomedical Research for Formative Purposes: An Example From Nigeria."