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1 Nov 1990

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MANUALS FOR ETHNOGRAPHIC DATA COLLECTION: EXPERIENCE AND ISSUES

Elizabeth Herman, M.D., M.P.H.  
Margaret E. Bentley, Ph.D.

The Johns Hopkins University  
School of Hygiene and Public Health  
Department of International Health  
615 North Wolfe Street  
Baltimore, Maryland 21205  
U.S.A.

Address correspondence to Dr. Margaret Bentley, Division of Human  
Nutrition, Department of International Health.

Short title: Ethnographic Manuals

Key words: ethnography, methodology, manual, diarrhea

202.1-90MA-11924

## ABSTRACT

The authors' experience in developing a manual based on ethnographic methods for collecting, analyzing and using information about the "cultural context of diarrhea" is presented. The goal of the process outlined in the manual is to recommend programmatic strategies and educational messages that are likely to be effective in achieving the adoption of appropriate diarrhea case management behaviors by mothers. The implications of manuals of this type for the role of anthropologists, and for social science capacity building in developing country programs are discussed. While recognizing that this approach risks limiting the anthropologist's role to a technical one, the authors suggest that appropriate application of program specific manuals can encourage anthropological input into formulating program policies and strategies.

UNIVERSITY MICROFILMS  
SERIALS ACQUISITION  
300 NORTH ZEEB RD  
ANN ARBOR MI 48106  
TEL: 734 769 0700  
FAX: 734 769 1300  
E-MAIL: umi@umich.edu  
WWW: www.umi.com

ISBN 11929  
202.1 90MA

It is assumed by most medical doctors with whom I have worked that knowledge of research techniques is all that is needed to do behavioral research. Concomitant with this assumption is the frequently-expressed belief that, if provided with an appropriate research manual, a "how to do it" guide, almost all middle-to low level health personnel ought to be capable of carrying out all the behavioral research that a program or project needs. I have sometimes smiled inwardly at the thought of the predictable reaction of medical personnel if I were to suggest that the organization sponsor preparation of a "how to do it" guide for medical research!!

#### A. INTRODUCTION AND BACKGROUND

Within the last decade there has been an increasing demand for applied social science research to provide information for public health program interventions and evaluation. The demand for this information is in part due to recognition by planners and policy makers that program success requires an understanding of human behavior and knowledge of what will motivate people to do what programs prescribe. Conversely, there is a demand to understand why programs aren't working and what is required to "fix" them.

These demands for applied social science research evolve from a variety of international public health efforts, including programs for expanded immunization (e.g. to know how to ensure complete coverage, or to understand why some children receive only the first dose); diarrheal diseases control programs (e.g.

to know how to encourage caretakers to become effective and sustained users of ORT, or to understand why appropriate oral rehydration therapy use rates are so low); and nutrition interventions (e.g. to know how to improve weanling diets, or understand why mothers introduce solid foods too early or too late).

Program information has been collected through different methodologies, including "KAP" (knowledge, attitude, and practice") surveys, focus group discussions, intercept interviews and other social marketing research methods, and more recently, through "rapid" ethnographic techniques that utilize a mix of data collection procedures adapted from the fields of applied and medical anthropology.<sup>2 3</sup> Of these methodologies, the most commonly used has been the knowledge attitudes and practices (KAP) survey. The problems and limitations of this approach, especially when used alone, are well documented,<sup>4 5</sup> and many programs have recognized the advantages of methods that yield a deeper understanding of the factors that determine behavior. Subsequently, anthropologists skilled in ethnographic techniques have been increasingly sought to participate in applied research and program activities.

Programs often encounter difficulty identifying local anthropologists with appropriate skills. There is increasing competition among agencies and programs for their involvement,

particularly for those who have some previous experience. Moreover, because the model of an interdisciplinary "team" approach for public health research is not common, it is sometimes difficult to recruit anthropologists scientists to venture beyond their usual disciplinary bounds to participate in programmatic activities. When they do, they often find themselves marginalized by their medical colleagues. Applied work requires not only knowledge and skills in applied anthropology, but also a sophisticated understanding of the objectives, resources, dynamics and limitations of programmatic interventions. It is difficult for inexperienced anthropologists to develop this kind of understanding in the brief time and with the limited orientation and assistance that is budgeted for them.

These issues have created a demand for training manuals to guide and facilitate the process of collecting detailed, ethnographic information for program purposes. The manuals developed in response to that need should not be viewed as "how to do it" guides for conducting ethnographic research, but as guides for gathering programmatically relevant information using ethnographic methods. The program specific ethnographic manual is to ethnographic research, as a manual on conducting household surveys is to epidemiologic research. One does not replace or compete with the other.

This paper will compare the design and characteristic of manuals for conducting surveys, with existing manuals for ethnographic data collection. The authors' experience in developing a manual for ethnographic data collection related to diarrheal diseases control programs is described. The final section of the paper explores how the availability and use of manuals for ethnographic data collection might affect the perceived and actual role of anthropologists, and discusses the potential of such manuals to enhance or marginalize social science research capacity.

**B. THE USE OF MANUALS IN DISEASE CONTROL PROGRAMS**

International organizations facing the task of establishing national health promotion or disease control programs in a variety of country settings have found it helpful to develop guidelines for the use of standard, streamlined methodologies for collecting essential program information. The emphasis of these guidelines is on data gathering for planning and evaluation purposes. They draw heavily on epidemiologic survey methods and tend to be task specific -- for example, limited to the collection of discrete bits of information such as the prevalence of malnutrition or immunization coverage rates.<sup>6 7</sup>

A widely used example is the Household Survey Manual: Diarrhea Case Management, Morbidity and Mortality<sup>8</sup> developed by the Diarrhoeal Diseases Control Program of the World Health

Organization (CDD/WHO). The manual presents a step-by-step description of a survey methodology to assess diarrhea case management at the household level, as well as diarrhea-related morbidity and mortality. It includes data collection forms, formulae and work sheets for calculating sample size, instructions and forms for compiling and analyzing the data, and training exercises for surveyors and supervisors. Both the methodology and the study content are presented so that the user need not possess either epidemiologic skills or programmatic expertise in order to effectively use the manual. "Adapting" the household survey manual to the local setting involves choosing between two different types of surveys (a "case management survey" or a "morbidity and treatment survey"), deciding whether or not to include questions on mortality, and translating the data collection forms. In translating the forms into the local language, the emphasis is on assuring that the questions are appropriately worded to ask what the designers of the manual intended them to ask. Field workers are trained to adhere to the protocol and to ask the questions in a standard way. Decision making in the field is limited to logistical issues such as how to select the survey households.

There are several fundamental differences between the type of information collected with the household survey methodology and the kind of information sought from ethnographic data collection. The output of the household survey manual

methodology is an estimation of rates: the prevalence of diarrheal diseases, the rate of use of oral rehydration salts (ORS) solutions during diarrheal episodes, the rate of continued feeding during diarrhea, etc. In contrast, the program-specific ethnographic study seeks to understand a belief system from the insider's or believer's point of view, and to use that understanding to recommend effective educational strategies and messages. For example, an ethnographic study may seek to understand local perceptions of how the body works and of what "happens differently" during diarrhea in order to explain oral rehydration therapy in a way the "makes sense" and increases the attractiveness of oral rehydration therapy in a given cultural context.

In the household survey manual, questions and procedures are finalized before the actual data collection begins. For example, the case management part of the survey seeks to identify fluids that are given during diarrhea and the frequency of their administration. Because ethnographic data collection implies learning from as well as obtaining information from respondents, it requires the field worker to probe beyond initial answers, to formulate and ask additional questions as data become available, and to develop and explore mini-hypotheses about how the belief system "works" throughout the course of data collection. The ethnographer may learn that only small amounts of fluids are given to children with diarrhea, then probe to discover why



certain fluids are preferable to others, and explore a mini-hypothesis that there is a relationship between the perceived cause of the illness and the type and volume of fluid given.

A final critical distinction between survey and ethnographic methodologies concerns the analysis phase. The CDD Household Survey Manual guides the user in summarizing the data, and in calculating rates and limits of precision. Whereas the survey may identify and measure problems, it does not address solutions. In contrast, before its findings are usable, ethnographic data collection requires an additional interpretive and creative step to identify linkages between local beliefs and program goals. For example, it is not sufficient for the ethnographer to provide descriptive data about why oral rehydration solutions are only used for certain types of diarrhea. He/she must also use knowledge of the belief system to recommend ways to improve effective and sustained ORS use.

These fundamental differences preclude the direct adoption of the household survey manual format to guide ethnographic studies of the household management of diarrhea. Clearly, ethnographic data collection cannot follow the linear steps of planning, preparation, data collection and analysis as they are outlined in the household survey manual. The fact that ethnographic studies require an ongoing analysis of results, continuous identification and reformulation of questions, and a

creative linkage of findings with program objectives, raises the question of whether manuals are a feasible training tool.

**C. THE DEVELOPMENT OF MANUALS BASED ON ETHNOGRAPHIC METHODS**

A number of manuals based on ethnographic methods have been developed for program use in developing countries. Some of the earliest efforts to conduct focused studies using ethnographic techniques evolved out of a recognized need for timely information relevant to agriculture and development initiatives:

Decision makers need information that is relevant, timely, accurate, and usable. In rural development, a great deal of the information that is generated is, in various combinations, irrelevant, late, wrong, or unusable anyway. It is also often costly to obtain, process, analyze, and digest....we seem to be trapped by two sets of inappropriate methods for generating social information. These can be described as the "quick and dirty" and the "long and dirty", where "dirty means not cost-effective.<sup>9</sup>

The "rapid rural appraisal" methodologies developed in response to this need refer to a very flexible process in which the investigators choose from a wide range of techniques and methods that include direct observation, key informant interviews, focus group discussions, as well as semi-quantitative techniques. Guidelines for the use of "rapid rural appraisal" methods include brief descriptions of different techniques and methods as well as examples of how they were applied in a given setting.<sup>10</sup>

More recently, the "rapid appraisal" concept has been applied to the fields of health and nutrition. For example, the "Rapid Assessment Procedures for Nutrition and Primary Health

Care" (RAP) field guide is a training manual for nutrition and primary health care programs. It presents a brief overview of basic anthropological methods, guidelines on data management, recommendations regarding the selection, training and supervision of field workers, examples of different formats for data presentation, and an outline for writing the final report. The appendix includes data collection guides (brief lists of topics) for different primary health care issues.<sup>2</sup>

The "RAP" was originally developed to train social scientists to collect health-related anthropological information useful for disease control and nutrition programs. Through funding by the United Nations University and UNICEF, social scientists from 16 countries participated in a training workshop, then returned to their home countries to use the manual in the collection of data.<sup>11</sup> Subsequently, UNICEF distributed the "RAP" widely, and it generated a great deal of interest among physicians and others with training in primary health care and public health. This interest in use by non-social scientists created a need for a different level of training in basic interviewing skills and data collection techniques. In response to this demand, a training manual in basic anthropological techniques<sup>12</sup> and a "RAP" video have been developed to complement the manual. In addition to the original manual, program-specific manuals have been completed for AIDS<sup>13</sup> and epilepsy<sup>14</sup>

The Nutrition Communication Project has developed a comprehensive "rapid ethnographic assessment" (REA) training manual for the collection of data on infant feeding practices and child nutrition.<sup>15</sup> Like the "RAP", the "REA" requires the supervision of an anthropologist (or an individual trained in anthropological field methods) who has worked in the region. The actual data collection, however, is done by employees of governmental or non-governmental organizations. The "REA" manual, therefore, places a heavy emphasis on training exercises. One of the training exercises uses the model of predisposing, enabling and reinforcing factors to lead the data collectors to develop hypotheses about what factors will help or hinder desired behavior changes. The exercise also requires the users to collect additional information to test the hypotheses.

The idea of structuring a data collection manual to facilitate the development and testing of hypotheses related to desired behavior change is more fully developed in a manual on "Improving young child feeding during diarrhea".<sup>16</sup> The manual instructs the user to compile a worksheet listing ideal and actual practices for children of different age groups. The ethnographic data collected is then used to identify the reasons or resistances that prevent the population from following ideal practices, and to estimate the strength with which impeding factors are adhered to. This process results in the development of realistic recommendations for improving dietary intake during

and following diarrheal diseases. The recommendations can then be tested in household trials.

As the preceding examples illustrate, existing manuals vary in the degree to which the user is guided in setting data collection priorities, and linking the information collected to programmatic recommendations. A general format that presents data collection methods and suggests a list of topics to guide discussions increases the flexibility of the manual, and allows for creativity and judgement on the part of the user. However, this unstructured format incurs the costs of inefficiency, particularly in the hands of inexperienced users. Unfortunately, many developing country anthropologists have not received adequate training and experience in applied work, making it difficult for them to effectively integrate the methodology and content. Lists of suggested issues to be explored are too often translated into tediously long questionnaires that cover a "laundry list" of topics. The output can be a formidable mass of data that fails to focus on programmatically useful information and on factors that are within the program's control.

For this reason, there is a need for program-specific manuals that systematically guide the user through a series of clearly defined steps that specify the ethnographic methods to be used and the content of data to be collected. In order to limit the data collection process to a practical period of time,

program specific manuals must employ the principle of "optimal ignorance":

Optimal ignorance refers to the importance of knowing what facts are not worth knowing. It requires courage to implement. It is far, far easier to demand more and more information than it is to abstain from demanding it. Yet in information gathering there is often a monstrous overkill.(9:403)

While it may not be possible or appropriate to reduce the subject matter of the ethnographic manuals as discretely as the WHO/CDD Household Survey Manual, it should be possible to focus data collection on the issues that are most essential and appropriate to the program's activities and resources. The challenge is to focus data collection while maintaining the user's role as a "learner" -- a role that requires critical thinking and question formulation. It is to stimulate mini-hypothesis testing and to facilitate the identification of linkages between the existing belief system and program objectives.

#### D. THE MANUAL FOR ADAPTING TO THE CULTURAL CONTEXT OF DIARRHEA

We developed a step-by-step manual to assist social scientists in collecting ethnographic data for CDD programs.<sup>1</sup> The task was approached with the hope of balancing the need to focus on a limited number of relevant factors (e.g. how the perceived etiology of diarrhea influences use of oral rehydration therapy), with the objective of stimulating the user to explore

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<sup>1</sup>The development and field testing of the methodology was funded by the Diarrheal Diseases Control Program of the World Health Organization.

unexpected findings and to develop new insights (e.g. following up on unanticipated clues about local perceptions of physiology and disease causation). It was considered appropriate to develop a manual for CDD programs because there already existed a wealth of ethnographic data on beliefs and practices related to diarrheal diseases. Furthermore, ten years of experience in implementing CDD programs throughout the world had defined the most common and recurrent problems related to the adoption of CDD program recommendations. For example, the identification of several different local types of diarrhea, the reluctance of caretakers to give extra fluids for fear of increasing the diarrhea, and the tendency of caretakers to give oral rehydration fluids in small, medicinal amounts with the expectation that they "stop" the diarrhea, are common issues throughout the world. This combination of extensive ethnographic data and program experience permitted the streamlining of a data collection methodology.

The manual is based on the assumption that people are more likely to comply with program recommendations if those recommendations are consistent with and reinforced by existing perceptions and beliefs. It uses ethnographic techniques to collect and analyze information about the local cultural system of classifying diarrheal illnesses, existing beliefs about diarrhea causation, assumptions behind household management practices, and concepts about how the body works and what goes

wrong during diarrhea. The purpose of the data collection is to identify culturally meaningful and effective approaches to promoting appropriate diarrhea case management as defined by the CDD program. The intention is to use familiar local terms and concepts to encourage sound household case management practice such as the administration of adequate volumes of recommended fluids, the continuation of breast-feeding and feeding during diarrhea, and timely referral of severe cases.

Figure 1 provides an overview of the 12 sections (A through L) of the manual. The introductory section reminds the user of the differences between ethnographic methods and survey methods of data collection, and briefly summarizes both the technical aspects of diarrheal diseases control and existing data regarding the cultural context of diarrhea in different settings. A list of key points at the end of each section (see Figure 2 for an example) facilitates recall and review of the material.

To direct the collection of information so that it addresses programmatic needs and to encourage "ownership" of the information by the CDD program, the manual guides the ethnographer's interaction with CDD program personnel. Meetings between the ethnographer and program personnel are prescribed at strategic points in the study protocol. The first point of interaction is prior to the onset of data collection. The manual recommends that the ethnographer present a brief explanation of



ethnographic data collection to CDD program personnel. It also provides a summary of the rationale behind the CDD case management strategy, and suggests questions the ethnographer might ask regarding the country program's stage of development, and relevant decisions or activities that could be addressed by ethnographic data. The intent of this section of the manual (Section C) is to insure that the program's household management strategy and information needs are clearly understood by the ethnographer. The expected output of the first meeting is a mutually agreed upon list of priority questions for the ethnographer to address in conducting the study.

The initial phase of data collection (Section E) focuses on identifying the "parts" of the belief system (categories of childhood illnesses, local types of diarrhea, perceived causes of diarrhea, recommended treatments/actions, and associated symptoms/characteristics of different local types). It relies predominantly on open-ended interviews with key informants. The ethnographer is instructed to develop an interview guide that includes the general topics to be covered during the interviews. The guide is brief to prevent its use as a questionnaire. The sample interview guide is illustrated in figure 3.

Section E tries to reinforce good interviewing skills by illustrating the following four rules for conducting open-ended interviews:

1. Avoid leading questions
2. Probe beyond the expected answer
3. Look for and explore apparent inconsistencies
4. Record the informant's own words

The user is encouraged to monitor his/her own performance when re-writing the field notes, and to correct any deficiencies during follow-up interviews with the same informants. Therefore, each interview is not only a data gathering exercise, but also an opportunity to develop and refine skills.

The first analysis step (Step F) guides the user to construct a chart that summarizes the perceived causes and recommended treatments for the local types of diarrhea identified through key informant interviews, and to outline a preliminary description of the illness belief system. Part of the summary chart developed during the manual's initial field test in Baluchistan, Pakistan is reproduced in figure 4. The purpose of the preliminary summary/analysis is to consolidate the findings, to generate a list of unanswered questions, and to develop data collection materials in preparation for the next steps.

The second phase of data collection (Step G) explores the relationship of the parts of the belief system to each other (e.g. How are symptoms related to the perceived etiology?) and to behavior (e.g. Does the perceived type or etiology of the diarrhea influence management decisions?). Detailed case

histories of recent diarrheal episodes are recorded and analyzed to gain insight into cases management decisions. The ethnographer is encouraged to make sketches of case histories to identify important decision points and factors that appear to determine behavior at those decision points, These factors may include household decision making patterns, and constraints to seeking help outside the home. The decision sketch illustrated in figure 5 was drawn during the first field test in Baluchistan.

The manual introduces the technique of "card sorting". During the Pakistan field test, one set of cards was made to represent the 13 different types of diarrhea identified by key informants (figure 6), and another set to include all the different traditional and commercial products that were identified as useful for treating diarrhea. Respondents were asked to sort the cards of diarrhea types into piles of "similar" types. In Baluchistan, this exercise did not reveal any consistent patterns or broader categories of classification. Sorting of the treatment cards, however, revealed a distinction that had not previously been appreciated among curative remedies for the diarrhea, remedies for vomiting, and remedies for various symptoms such as weakness and thirst. During a second field test of the manual in Indonesia, informants were asked to sort cards representing different types of childhood illness. In this case, the cards were a useful tool to introduce abstract concepts such

as "What is an 'illness'?" and to obtain a ranking of illnesses according to their perceived severity.

The parts of the manual that most clearly distinguish it from other ethnographic manuals are the sections that describe analysis and use of the information collected. In section H, the user is instructed to review all the data collected and to make lists of all beliefs and practices related to 4 key household behaviors: giving extra fluids, giving recommended fluids (such as ORS or SSS), continued feeding during and after diarrhea, and bringing children to health providers. The lists are then used to identify possible approaches to promote key behaviors. For example, in Baluchistan, the following 6 approaches were initially identified to promote oral rehydration therapy (ORT):

- ORT prevents and treats "thirst"
- ORT prevents and treats "weakness" due to diarrhea
- ORT replaces the water lost during diarrhea
- ORT is a strong medicine like intravenous drips. It goes directly into the veins
- ORT "cleans out the stomach"
- ORT "cools the stomach"

The manual instructs the user to assess the advantages and disadvantages, or the "PRO's" and "CON's", of each of these approaches based on his/her knowledge of the belief system, and to identify additional questions that must be answered in order to fully assess the possible approaches. The list of "PRO's",

"CON's" and questions developed for the "ORS prevents and treats thirst" approach is reproduced in figure 7. The approach was advantageous in that there were certain traditional medicines (TM's) identified as "treating thirst". In this setting, ORS could be promoted as acting in a similar but more effective way. Furthermore, promoting ORS to treat a symptom of diarrhea avoided the problem that different types of diarrhea may be perceived to require different types of treatment. The disadvantages of the "ORS prevents and treats thirst" approach included, among others, its failure to address concerns that giving fluids causes more diarrhea and vomiting, and the perception that thirst is caused by heat and not by fluid loss. In assessing the "ORT prevents and treats thirst" approach, field workers also formulated additional questions about the perceived association of thirst with different local types of diarrhea and about the volume of a fluid that is administered when it is given to treat thirst.

After assessing the advantages and disadvantages of each possible approach, the user meets with program personnel to continue "brainstorming" and to identify additional questions (Section I). The user then returns to the field to gather additional information by talking with previously identified key informants and by interviewing an expanded sample of mothers with a set of structured questions (Section J). The information is then used to revise the assessment of the possible approaches. For example, figure 8 illustrates how additional information

obtained from key informants and an expanded sample of mothers was used to reassess the "ORT replaces water lost during diarrhea" approach.

Section K guides the user to:

- address the program questions identified in Section C.
- identify the most appropriate strategy (ies) to promote appropriate case management practices
- identify potential problems with current CDD case management policy
- suggest images that might be useful in promoting appropriate case management

The user is encouraged to compare the final lists of "PRO's" and "CON's" for each possible approach to promote appropriate case management, and to use his/her knowledge of the culture to suggest ways of "getting around" or addressing the remaining "CON's". For example, researchers in Baluchistan recognized that they could "get around" a number of "CON's" by combining two of the possible approaches. They combined the "ORT replaces the water lost during diarrhea" and the "ORT is a strong medicine like intravenous drips. It goes directly into the veins" to create an improved approach: "ORT goes into the veins and puts back the water lost during diarrhea". This approach refers to existing beliefs that veins connect and carry nutrients to the different organs of the body and that the loss

water from the veins during diarrhea is undesirable. The "PRO's" and "CON's" of this new approach are summarized in Figure 9.

In the Baluchistan field test, the analogy of planting a tree in a hole to maximize the scanty rainfall was used to explain the function of ORT. The analogy explains that the veins of the body are like the roots of a tree. Water gets into the body through the veins, just as water gets into a tree through its roots. In dry climates, trees are planted in holes to help direct the water into the roots. Similarly, when a child has diarrhea, salt and sugar are added to water to help direct the water into the child's veins.

This "roots of a tree" analogy was not tested or further developed during the Baluchistan field test. The manual suggests, however, that the user take the recommended approach and any analogies developed back to the community. Key informant and other member of the community may recommend alternative images or may offer suggestions for improving the approach.

#### **E. IMPLICATIONS FOR SOCIAL SCIENCE CAPACITY BUILDING AND FOR THE ROLE OF THE ANTHROPOLOGIST**

As noted in the introduction to this paper, the demand for the involvement of anthropologists and other social scientists in public health related, program-specific research has markedly increased in the last decade. Western trained social scientists,

particularly medical anthropologists, have personally responded to this demand. Several training manuals have been developed to facilitate and improve the use of ethnographic methods by developing country anthropologists for gathering information related to primary health care programs. It is appropriate at this juncture to raise several issues about the implications of manual development for social science capacity building, and about how manuals for ethnographic data collection affect the role of anthropologists and other social scientists.

Few would disagree that the involvement of local anthropologists in public health program design and implementation is essential, and that "parachuting" international consultants into developing countries to collect data is inappropriate and unnecessary. At the same time, it is clear that some sort of technical assistance and collaboration must occur, at least until there exists a cadre of trained, applied anthropologists who are available within each region. To date, the pattern most commonly used is to pair an ex-patriot anthropologist with an in-country colleague, who supervises the research. Often the consultant will assist in designing the data collection instruments and implementing the first phase of the project.

It can be argued, however, that by providing a "quick-fix" for a program's behavioral science information needs, the use of



ex-patriot consultants and program specific manuals decreases the program's (and perhaps the country's) incentive and motivation to invest in building anthropology research capacity (i.e. the training of developing country anthropologists in theory, methods and research at the doctoral level). The advantages of investing in general capacity building are self-evident. Developing a core of well-trained nationals decreases a country's dependence on ex-patriot consultants, and increases local capacity to sustain research and programmatic efforts when donor enthusiasm wanes. Hopefully, the involvement of anthropologists will also encourage research agendas and designs that are more appropriate to local needs and priorities.

Unfortunately, many factors operate to discourage investment in the training of anthropologists and other social scientists. General capacity building requires a significant allocation of time and resources and demands an expression of faith that the investment will eventually pay off. Also, given the multiplicity of projects requesting anthropological input, and the tendency of trained social scientist to leave government and academic jobs for more lucrative private positions, the problem of personpower shortage in the applied social sciences is likely to remain an issue for some time in spite of large expenditures to support training.

We argue that general capacity building and program specific guides are complementary investments, each necessary to the other's success. The main advantage of program specific guides is that they answer immediate needs for the efficient collection of culture specific information that can be applied to programmatic efforts. They provide a way of demonstrating the usefulness of applied anthropology and may therefore increase the motivation for building local capacity in the social sciences.

In a complementary way, general capacity building in the social sciences is necessary to assure the validity and appropriate use of program specific manuals. The development of manuals for rapid ethnographic data collection should be based on ethnographic research conducted by skilled anthropologists. The participation of well trained and experienced anthropologists in the development of the manuals will insure that the manuals use sound methods and maintain an appropriate focus.

Without adequate attention to anthropology capacity building, there is a danger that the widespread introduction of manual-based research may lead to a very narrow definition of the anthropologists's role within public health projects. Unfortunately, the anthropologist is too often viewed as a technician whose role is limited to identifying ways of implementing existing policy. For example, anthropologists working with CDD programs are frequently asked to identify ways

to convince mothers that "diarrhea is dangerous" so that they will be motivated to use oral rehydration therapy for each diarrhea episode. Program managers may not be receptive to the suggestion that this approach and message may not be optimal. The consultant anthropologist may well have a much greater impact on the program's effectiveness by demonstrating that mothers are unlikely to believe that diarrhea is dangerous because, in their experience, most cases are self-limiting and of short duration. In addition, anthropological data may show that mothers cannot take time out of their busy schedules to pay special attention to every episode of diarrhea. The availability of a core of well-trained anthropologists will to assist in formulating policy and setting priorities will guard against the use of ethnographic manuals as tools for justifying and imposing poorly conceived program policies.

We argue that program specific ethnographic manuals have the potential to enhance both the role of the anthropologist and the commitment to social science capacity building in disease control programs. Our optimism is embedded in the reality that a great deal of behavioral research is, and will continue to be, conducted (and paid for) through disease control and public health programs. The challenge, therefore, is to improve the quality of data collection on cultural and behavioral issues in a particular setting and for a specific topic. The development and use of manuals, then, should strive to maximize this opportunity.

We also believe that such manuals can be designed to encourage recognition of the multiple determinants of health behavior. For example, the CDD methodology instructs the user to explore the relationship between sociocultural beliefs about diarrhea and actual household management behavior, based on detailed case histories and the construction of decision tree models. Such an exploration can reveal why people don't always do as they say they do and why they may deviate from the expressed cultural norms of behavior. For example, the second field test of the ethnographic manual for CDD programs in South Sumatra, Indonesia determined that most mothers prefer to use government health services for episodes of diarrhea associated with multiple stools and vomiting. Case histories, however, indicated that the poorest mothers were least likely to use these "free" services. Further exploration revealed that the poorest mothers needed to work in the fields from sunrise (about 6 am) to just before sunset. Since government health service clinics were scheduled from 9 am to 1 pm, mothers could not take advantage of the services without forfeiting at least half a day of field work. Thus, families living on the edge of subsistence were discouraged from seeking health care for their children by means of a clinic schedule designed to accommodate the health workers rather than the population in greatest need.

Manual-based data collection can promote a dialogue between anthropologists and program personnel. Although biomedical

scientist and social scientists may "speak two different languages", program specific manuals can help to translate the methods and perspectives of each. Guided collaboration for specific tasks can also be incorporated into the methodology, as in the example of the CDD manual. Although this effort may be small, it will foster an interdisciplinary team work approach, which we believe is essential to address public health issues at the community level.

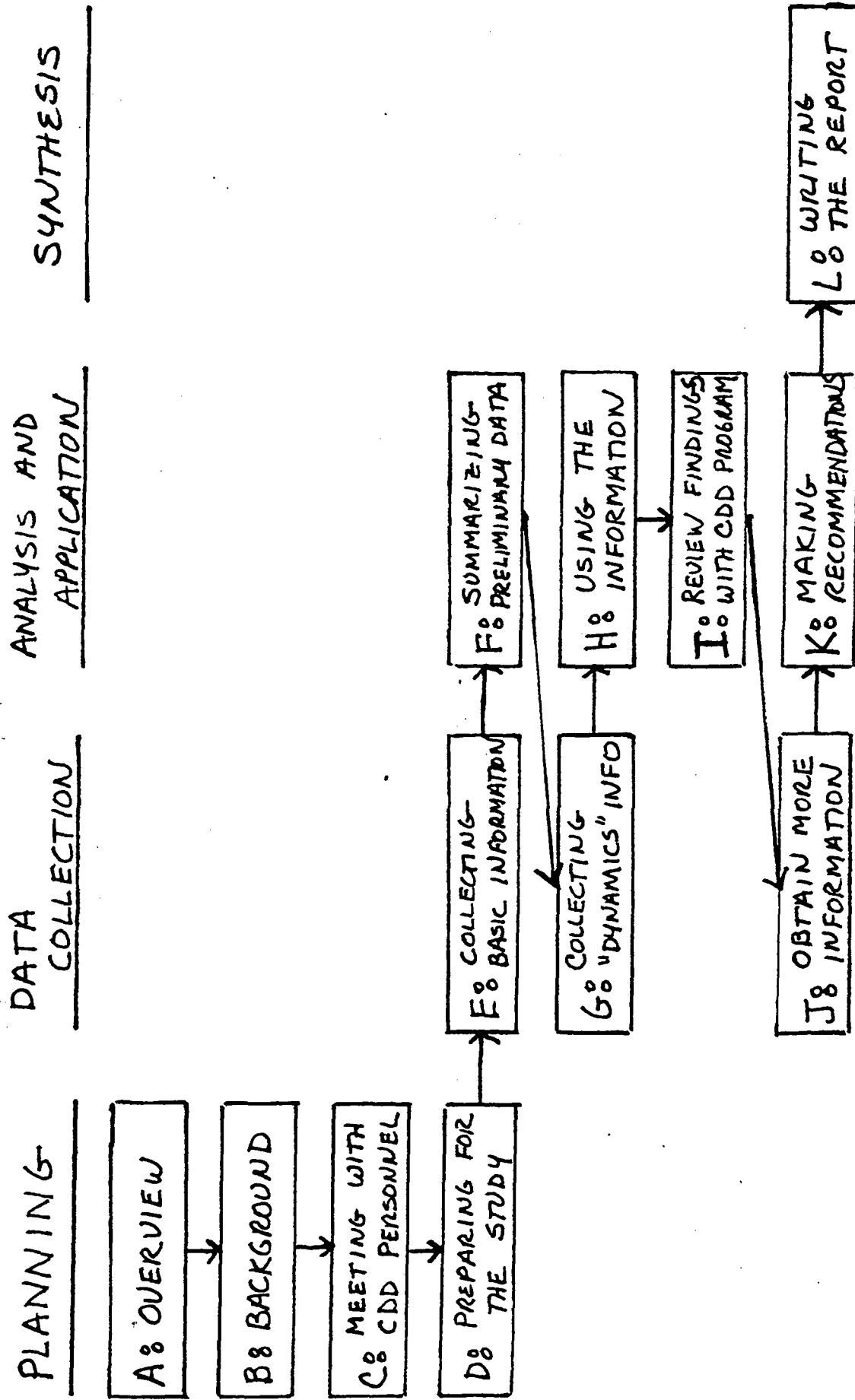
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FIGURE 1

# FLOWCHART: ETHNOGRAPHIC DATA COLLECTION





## FIGURE 2

### The Cultural Context of Diarrhoeal Diseases

#### KEY POINTS:

- \* A knowledge of the different words used locally to refer to "stools that are looser or watery than usual" (and the meaning of those words) is important in designing communication messages
- \* People tend to distinguish several local types of diarrhoea that may or may not correspond to biomedical types of diarrhoea. The types may be distinguished from each other by the appearance of the stool, by the presence or absence of associated symptoms, by characteristics of the person with the illness, or other criteria.
- \* The perceived cause of a diarrhoeal episode often determines the action taken in response to it
- \* It is important to determine what actions are usually taken during diarrhoeal episodes in order to integrate messages promoting oral hydration and feeding with existing patterns of diarrhoea management
- \* Some local illness types characterized by loose stools may not be considered a type of diarrhoea (non-diarrhoea diarrhoeas)
- \* Within each culture, there are locally defined symptoms and characteristics of diarrhoeal episodes that motivate mothers to take action (significant characteristics)
- \* A description of the different local beliefs about types of diarrhoea, perceived causes and usual actions taken does not provide a complete picture of the cultural context of diarrhoea. It is important to understand how the different beliefs "fit together" to influence behaviour.

FIGURE 3

Example: Key Informant Interview Guide

- A. Childhood illnesses
  - Names and symptoms
- B. Words used for conditions or illnesses with "stools that are looser or more frequent than usual"
- C. Local types of diarrhoea
  - Symptoms, perceived causes, treatment
- D. Household Management of Diarrhoea
  - Signs or symptoms that cause concern
  - Signs or symptoms that lead to intervention
  - Kinds and amounts of fluids given
  - Kinds and amounts of food offered during and after diarrhoea
  - Indications for seeking help
- E. Women's Work and Child Care
  - Nature and frequency of work outside the home
  - Child care patterns
  - Decision making regarding the management of sick children
- F. Concepts related to the management of diarrhoea
  - What happens to food and water when they are taken into the body?
  - What goes "wrong" inside during diarrhoea?
- G. Beliefs and practices related to prevention
  - Is it possible to prevent diarrhoea?
  - How are infants' stools disposed of?
  - When and how are hands washed?

FIGURE 4

Sample Summary Chart *					
Folk type of diarrhoea					
	'Heat dast-ulti'	Teething diarrhoea	Constipation diarrhoea	"Peach" (dysentery)	"Spirit" diarrhoea
Symptoms	<ul style="list-style-type: none"> <li>- yellow or green watery diarrhoea</li> <li>- vomiting is common</li> </ul>	<ul style="list-style-type: none"> <li>- yellow, green or "bits and pieces" diarrhoea</li> <li>- less watery than other types</li> <li>- not associated with vomiting</li> </ul>	<ul style="list-style-type: none"> <li>- stomach is hard or swollen</li> <li>- stool is only water</li> </ul>	<ul style="list-style-type: none"> <li>- small frequent stools with foam or blood</li> <li>- "stomach" pain</li> </ul>	<ul style="list-style-type: none"> <li>- green watery diarrhoea</li> <li>- vomiting</li> <li>- cries all the time</li> <li>- baby is very "skinny"</li> </ul>
Perceived Causes	<ul style="list-style-type: none"> <li>- hot weather</li> </ul>	<ul style="list-style-type: none"> <li>- "heat" from teething goes to the stomach</li> </ul>	<ul style="list-style-type: none"> <li>- overeating or mixing foods causes a blockage in the stomach</li> </ul>	<ul style="list-style-type: none"> <li>- too much diarrhoea</li> <li>- follows constipation</li> <li>- stomach injured from mixing foods</li> </ul>	<ul style="list-style-type: none"> <li>- spirit is passed from the mother</li> </ul>
Actions	<ul style="list-style-type: none"> <li>- give medicines that "cool" the stomach</li> </ul>	<ul style="list-style-type: none"> <li>- massage the gums</li> </ul>	<ul style="list-style-type: none"> <li>- "koksher", "buckum" or castor oil to "clean out" the stomach</li> </ul>	<ul style="list-style-type: none"> <li>- allopathic medicines are best</li> </ul>	<ul style="list-style-type: none"> <li>- prayers and amulets from religious healer</li> </ul>

\* Data are from Baluchistan, Pakistan

FIGURE 5

SAMPLE CASE HISTORY SKETCH

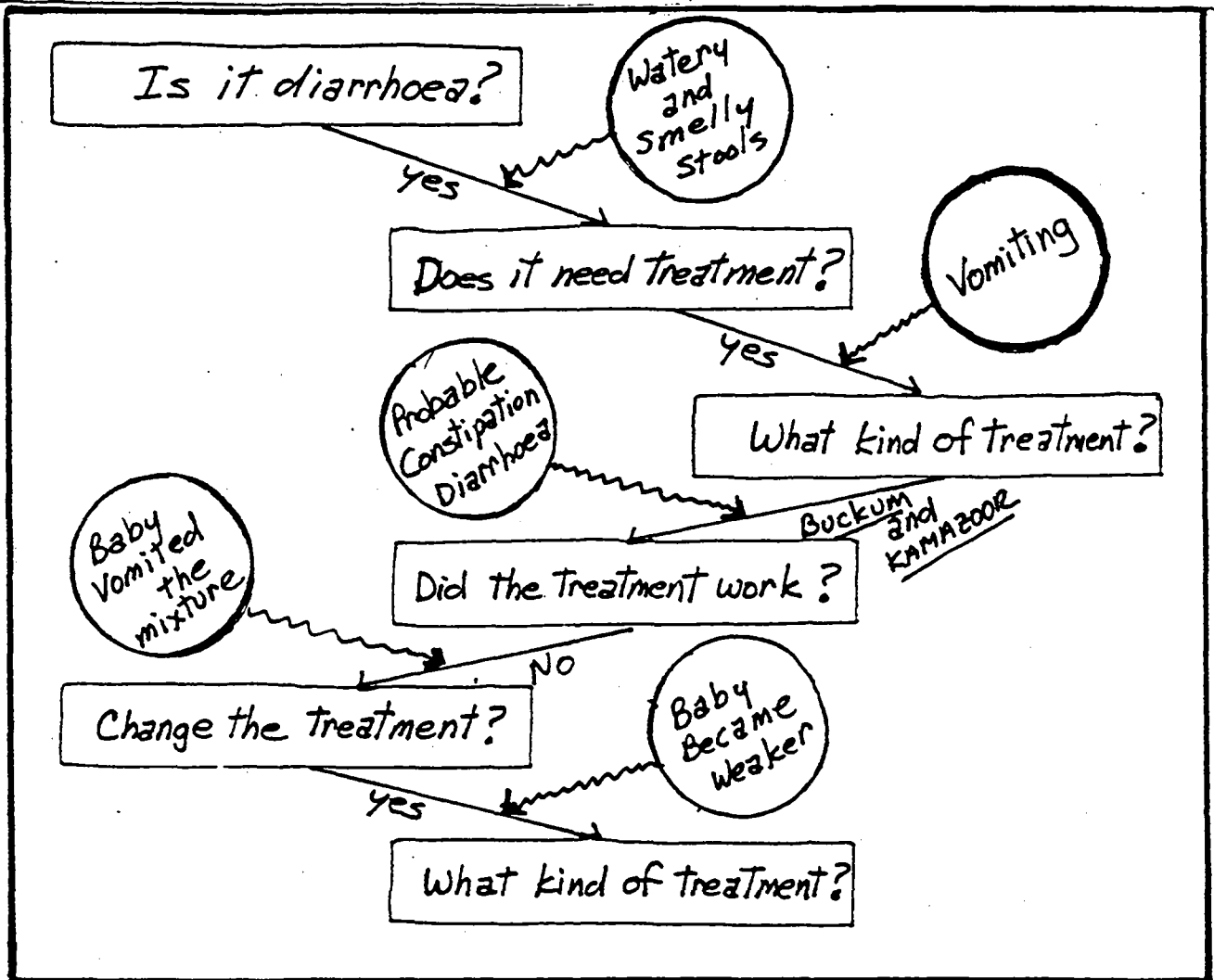
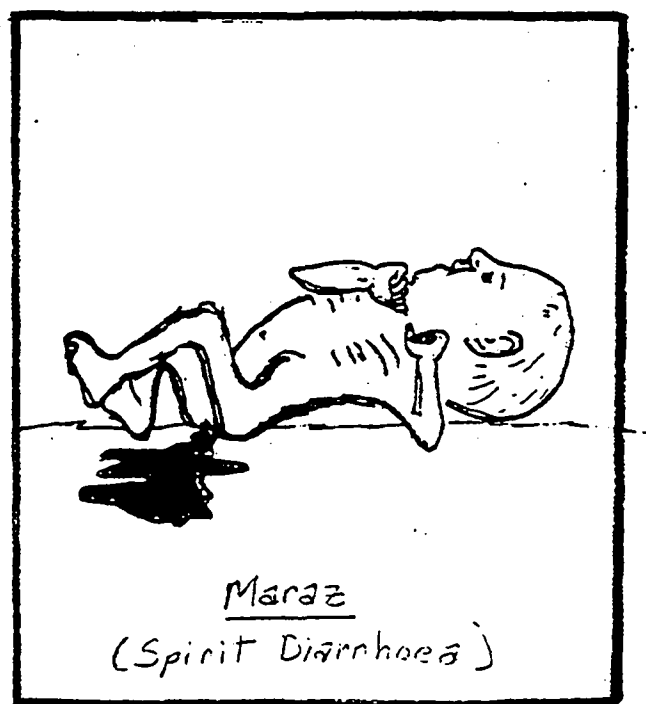
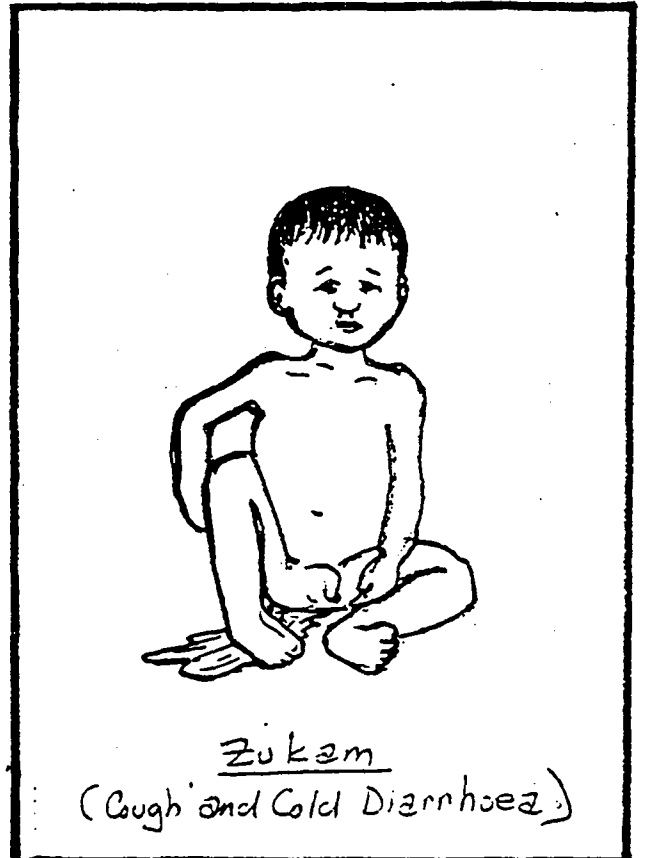


FIGURE 6

EXAMPLE: Drawings Used for Card Sorting  
Folk Types of Diarrhoea in Baluchistan



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## FIGURE 7

### An Assessment of Possible Approaches to Promoting ORT in Baluchistan

#### 1. ORT prevents and treats "thirst"

##### PROS:

- There are TMs which treat thirst
- Treating the symptom may avoid the problem of different actions for different folk types

##### CONS:

- Thirst is caused by "heat," not fluid loss
- Doesn't address giving liquids to babies
- Doesn't address issue of liquids causing more diarrhoea and vomiting
- Doesn't address problems about salt, taste and measuring

##### QUESTIONS:

- Do mothers perceive that all folk types of diarrhoea make children thirsty?
  - When traditional medicines are given for thirst, how much fluid is given?
  - How do mothers recognize thirst, especially in infants and young children who cannot "ask" for something to drink?
-

# FIGURE 8

## ORT REPLACES WATER LOST DURING DIARRHEA

### INITIAL TALLY

#### PROS:

- Mothers recognize water loss as "dangerous".
- Replacing water may avoid the problem of different actions for different folk types.
- Consistent with biomedical rational for using ORT.

#### CONS:

- There are no home remedies that act this way.
- Doesn't address giving liquids to babies.
- Doesn't address issues of liquids causing more diarrhea and vomiting.
- Doesn't address problems about salt, taste and measuring.

#### QUESTIONS:

- Where does the water in diarrhea come from?
- What happens when a child drinks fluids or eats something?
- Is there anything that can be done about water loss?

### TALLY AFTER FURTHER QUESTIONING

#### PROS:

- Mothers recognize water loss as "dangerous".
- Replacing water may avoid the problem of different actions for different folk types.
- Consistent with biomedical rational for using ORT.

- The water in diarrhea comes from the "veins" or from the "stomach".
- Normally when a child eats or drinks something it is "digested" and then goes through the "veins" to the rest of the body.

#### CONS:

- There are no home remedies that act this way.
- Doesn't address giving liquids to babies.
- Doesn't address issues of liquids causing more diarrhea and vomiting.
- Doesn't address problems about salt, taste and measuring.
- Mothers perceive that the only thing to do about water loss is to stop the diarrhea and vomiting.

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## FIGURE 9

APPROACH: "ORT goes into the veins and puts back the water lost during diarrhoea"

- PROS:
- Mothers recognize that there is water in diarrhoea, that loss is dangerous.
  - Mothers perceive that the water in diarrhoea comes from the veins.
  - Because the ORT goes into the veins, "hot" versus "cold" qualities might not be considered important. Furthermore, salt may be perceived as less of a problem if it goes into the veins.
  - There are no folk types of diarrhoea for which ORT (presented in this way) would be inappropriate.
  - Since IV drips are perceived as good for infants, fluid that goes into the veins should also be perceived as good for infants.
  - The argument can be made that even if some of the ORT comes out as vomit or comes out in the diarrhoea, some of it will go into the veins where it is needed.
  - This approach is very similar to the biomedical rationale for giving ORT.
  - It is possible to use the "roots of a tree" metaphor to demonstrate and reinforce the concept.
- CONS:
- There are no home remedies or actions which act this way.
  - This approach doesn't address problems of taste and measuring.
-