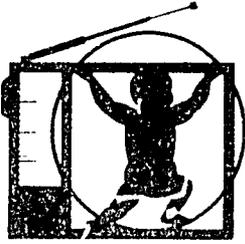


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Communication for Child Survival

HEALTHCOM

Office of Health and Office of Education • Bureau for Science & Technology • Agency for International Development

SUMMARY REPORT

Meeting of the Task Force on Research

December 18-19, 1989

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HEALTHCOM Project
TASK FORCE ON RESEARCH

December 18-19, 1989

Academy for Educational Development

SUMMARY REPORT

Prepared by the Annenberg School for Communication

University of Pennsylvania

The following is a summary report of the Task Force Meeting on Research for the HEALTHCOM Project, which was held at the Academy for Educational Development on December 18-19, 1989. The purpose of the meeting was to formulate and discuss a research agenda for the remainder of HEALTHCOM I and for HEALTHCOM II.

I. INTRODUCTION

Mr. Robert Clay
Chief, Health Services Division
Office of Health
Bureau for S&T

Mr. Clay discussed the history of HEALTHCOM I and where he envisioned the project to be going under HEALTHCOM II. He noted that the concept of using communication in child survival programs started ten years ago under the Mass Media and Health Practices Project (MMHP). Since then, the project has expanded into other countries. He recommended that the research team use the data collected under MMHP and HEALTHCOM I to define the future directions of the project. The research to date has been used to identify child survival interventions that should be undertaken and to apply the results to countries in an attempt to leave programs that will continue. Mr. Clay recommended that, in the next five years, the project must be concerned with sustainability. He suggested that new directions to follow under HEALTHCOM II should include attempts to influence policy concerns in countries in which the project works.

II. HEALTHCOM'S GLOBAL RESEARCH PROGRAM

Dr. Alan Andreasen
Senior Technical Director
HEALTHCOM Project

Dr. Andreasen set the goal of the global research component of HEALTHCOM II to address the question of legacy. What can the project leave behind to be a legacy to people working in the field (such as in-country policy makers, program implementors, the scholarly community, and the broader public)? He suggested that research undertaken for HEALTHCOM II should focus on sustainability and institutionalization. HEALTHCOM II research should look at what works to change the behavior of the target audiences--mothers, children, caretakers, and health workers--and policy makers who fund the projects, give the approvals, or, especially, not give the approvals. Other USAID programs (i.e., PRITECH, REACH, and others) can play a significant role in assisting HEALTHCOM to institutionalize its work. HEALTHCOM II should explore further the role of the private sector in carrying through the projects begun by donor agencies.

III. OVERVIEW OF KEY FINDINGS TO DATE AND DEVELOPMENT OF A RESEARCH AGENDA

Dr. Robert Hornik
Annenberg School for
Communication, University of
Pennsylvania

Dr. Hornik proposed a research agenda for the rest of HEALTHCOM I and for HEALTHCOM II. He illustrated the current state of the evaluation program (Supplement 3), and then discussed questions developed for the new research agenda (Supplement 4). Dr. Hornik proposed that the following evaluation questions be addressed for each site for the remainder of the HEALTHCOM I analysis:

- What was the program? (narrative history)
- What were the program's effects on the public health practices of interest?
- If there were effects, how did they come about? If there were no effects, why not (evidence about the process and constraints--awareness, knowledge, attitude change; limits associated with individual or community characteristics; limits associated with the particular way the program operated or with the nature of the practice being diffused)?
- How equitably were the effects realized (differences between the poor and the less poor, the urban and the rural, the better educated and the less well educated, those with better and worse access to health services)?
- What level of program activities can be sustained as HEALTHCOM withdraws?

The following are cross-site questions about the overall strategy and particular elements of its implementation suggested by Dr. Hornik as part of the global research program of HEALTHCOM II:

Process of behavior change questions (in overlapping categories):

- What types of knowledge--logistic and skill-focused versus underlying conceptual knowledge--affect behavior?
- How do perceived symptoms and severity affect treatment choices for CDD?
- Under what conditions--social influences, community structural influences, individual skills, material conditions, predisposing attitudes--do mothers turn knowledge into behavior?
- Is the new behavior performed adequately? How do new behaviors fit with old behaviors, i.e., do new "good" behaviors drive out old "good" behaviors?

- How well do social psychological theories of behavior change (i.e., Health Belief Model, Self Efficacy Model, Theory of Reasoned Action Models) serve to explain behavior and provide useful message approaches?
- What factors affect persistence of behavior in individuals and spread of behavior to others?
- What differentiation among segments locates practice differences and differences in responses to programs: lifestyle segments, household structure segments, type of community, perceived benefits, perceived case type, education?

Communication and health system questions:

- Channel questions: What is the reach and effectiveness of various channels? How many channels should be used? How central is mass media? When can mass media teach a complex skill in the absence of interpersonal channels?
- Message questions: Which message strategies produce short-term changes? Persistent changes? How many different themes can be incorporated in a single program?
- How do communication programs interact with health system changes? For example, will demand creation in the absence of adequate institutional supply enhance supply?
- Topic questions: Which behaviors are reasonable targets for particular public health communication programs (product categories)? How much change can you expect from a primary health care program in how much time?

Institutionalization questions:

- Under what conditions does serious health communication become part of what the ministry of health does?
- What skills--communication design, management, research--are most central in initiating and maintaining a program?
- What is the cost of doing health communication? Who pays for it?

Methodological questions:

- How can CDD and EPI behavior be measured?
- Can the effects of a particular sample design be measured in practice?
- How do researchers separate social/community influences from individual influences?
- How do researchers sort out channel effects?

- Can the project create qualitative and quantitative research strategies for developing programs?

Finally, Dr. Hornik outlined the topics that would be discussed in more detail during the rest of the meeting. Examples of types of questions that were to be addressed included:

- Persistence of effects in EPI programs: alternative implementations and alternative possible outcomes.
- Estimating the effects of health worker training programs.
- Testing the Health Belief Model, Theory of Reasoned Action Model, and Self-efficacy Model in an ORT packet promotion program.
- Examining the power of alternative segmentation dimensions in predicting response to interventions.

IV. OVERVIEW OF OTHER PROJECTS' RESEARCH

Project Representatives

Representatives from other projects were asked to present their research activities.

REACH and MotherCare: REACH is involved in ongoing research, especially evaluation of EPI programs and field testing of a solo shot syringe developed by PATH. Communication research is being done on an Indonesian urban EPI program. Research is being set up under this project to define urban populations and subpopulations to feed into urban areas in Jakarta and Surabaya. Mr. Michael Favin said that they found in Indonesia that qualitative research on immunization was difficult to do because the project is implementation rather than research oriented.

Health Financing and Sustainability Project (HFS): Dr. Martin Makinen said that there are nine major research projects occurring under this program, and 30 minor ones. He stressed the importance of consumer demand and other consumer considerations in the program, as well as the importance of working closely with HEALTHCOM. HFS is looking into issues such as cost recovery, social financing, public/private collaboration in financing, cost, and product financing.

WASH: Mr. Phil Rourke defined three research themes for the WASH Project: (1) sustainability, or looking at variables that will allow the systems to be maintained and operated in the long-term, as well as looking at cost recovery; (2) sanitation; and (3) environment--looking at such factors as hazardous waste, pesticides, garbage disposal, and the general village environment.

The Johns Hopkins University: Dr. Annemarie Wouters was interested in research on cost, integrated demand and supply, and cost recovery. She maintained that this problem reaches beyond the interests of economists; indeed, it is an interdisciplinary problem that involves anthropologists, epidemiologists, and others.

PRICOR: Mr. Stewart Blumenfeld described the PRICOR research that focuses on primary health care workers and the services they provide. The PRICOR Thesaurus and

its systems analysis model were developed to document what health workers do and what kinds of support they receive, and to show the variance in how health workers perform. General areas of similarities across countries include poor supervision and poor provision of face-to-face communication by health workers.

PRITECH: Dr. Martita Marx summarized four important issues in CDD which are the result of 60 small studies on program implementation issues planned by PRITECH. One issue deals with mothers' behavior: can mothers sustain the use of appropriate fluid? Another issue focuses on the effective use of fluids by practitioners. A third issue addresses the problem of how to integrate preventive activities in a curative environment. Finally, PRITECH researchers are looking at the problem of persistent diarrhea and how to define what actions a health worker can take.

Discussion

A discussion followed on the appropriate role for research in child survival projects. Participants stressed the importance of implementing what was learned from the research, looking at the research other projects have done, choosing the messages necessary for sustainability, and taking into account which research government officials want in order to encourage institutionalization. This last point stimulated further discussion about the importance of guiding government officials in using and interpreting data. Dr. William Smith (AED) pointed out that because countries do not often have money to do research, the focus of research should be on questions HEALTHCOM can answer. Dr. Hornik summed up this discussion by outlining the three types of research on the agenda: (1) that which serves the immediate program needs of the countries; (2) that which serves the policy needs of the countries; and (3) that which attempts to make a global statement about the HEALTHCOM approach.

V. COST EFFECTIVENESS

Ms. Veronica Elliott
Mr. John Raleigh
Birch and Davis International,
Inc. (BDI)

Ms. Elliott opened the cost effectiveness presentation by discussing cost as an implementation and management issue. If the goal is the sustainability and institutionalization of the HEALTHCOM methodology, then ministries of health must know about the cost of the project when they make their program choices. Furthermore, to make a systematic attempt to gather information on cost, Ms. Elliott recognized that BDI must work closely with the Annenberg School and AED. Mr. Raleigh of BDI then went on to outline:

The options for methodologies in costing and other financial studies:

- Financial feasibility
- Financial/economic analysis
 - break even analysis
 - net-present value analysis
 - return on investment
 - cost-benefit analysis
 - cost effectiveness analysis
 - resource/output analysis

- Financial planning

And the tradeoffs in the methodological options:

- Financial feasibility (compares sources and timing of fund flows with amount and timing of funds requirements)
 - risk and uncertainty in evaluation
 - go/no go decisions
 - consider range of options
- Financial or economic analysis (compare timing and amounts of inputs to the outputs)
 - prospective (provide scenarios, future-oriented) or retrospective (backward looking)
 - monetized or non-monetized
 - adjusted or unadjusted data
- Financial planning (compare sources and timing of fund flows with amount and timing of funds required)
 - assumes a "go" decision
 - risk management plan incorporated
 - uncertainties may still exist, but are minimized

Discussion

A question was raised about how the research agenda for HEALTHCOM II affects costs. Mr. Clay explained that components of HEALTHCOM II are to orient policy makers in making decisions and using resources after HEALTHCOM leaves. A discussion followed on what aspects of other child survival projects to consider. Cost-benefit analysis fits into decisions on allocating resources within a country and in a global debate. Dr. Hornik suggested that because HEALTHCOM is not the only actor in the equation, sorting out the HEALTHCOM effects seems problematic. A recent REACH cost report attempted to identify general costs (i.e., what is the cost of a fully immunized child?). The report looked at the type of program and what percent of GNP was needed to sustain a particular level of immunization. It examined such questions as: What is affordable? What are the implications for donor countries? REACH did not try to sort out individual efforts, but rather looked at immunization levels overall. Mr. Raleigh suggested that researchers must agree on a focus and on who the audience is, what their span of control is, and how they can be helped.

Summary Comments

Mr. Clay stated that the amount of effort put into research is striking. There was a fear that after ten years of project activities, old age would set in. However, HEALTHCOM has been successful because there has been a push to maintain the state-of-the-art in research activities. A tremendous amount of work remains to be done, and it will take a great deal of effort to make a difference.

VI. MEASURING CAMPAIGN EFFECTS

Dr. Susan Zimicki
Annenberg School for
Communication, University of
Pennsylvania

Dr. Zimicki presented a framework for considering the effects of different communication strategies on the vaccination campaign results. This framework is outlined in Supplement 5. There are four possible patterns of effects: (1) a simple stimulus-response pattern in which increased vaccination persists only as long as the stimulus does and then coverage level returns to baseline; (2) a rebound pattern in which increased vaccination persists as long as the stimulus does but after the stimulus stops coverage dips below baseline before returning to baseline; (3) a pattern of delayed return to baseline in which increased vaccination persists after the stimulus stops but coverage eventually returns to baseline; (4) a pattern of delayed return to a level of coverage that is higher than baseline. Five HEALTHCOM projects have focused on vaccination. These projects vary in use of the two major mechanisms through which effects can occur--demand creation through use of media and improvement of health worker practice through training and motivation. For example, the Metro Manila project used a high intensity of media (relative to other country projects) for three months, with a one-time strong motivation of health workers (through "sales conferences"). The Lesotho project, on the other hand, used only a moderate amount of media at fairly low frequency, but provided frequent health worker training. Through examining the patterns of effect across different projects and relating them to the type of program that was used, Annenberg hopes to be able to answer the question of how to design media campaigns to achieve the highest and most persistent levels of vaccination coverage.

Discussion

A discussion followed focusing on specific issues in the measurement of vaccination campaign effects including the question of missed opportunities (i.e., a child not receiving all the vaccinations for which he/she was eligible, place of vaccinations, vaccination cards, and so forth). Dr. Hornik reiterated the two models of vaccination effects: one model is a demand creation effort, and the other uses trained health workers who follow the correct procedures and give mothers correct information. Some programs use more of one method than the other, and the Annenberg School tries to sort out the effects. The discussion touched on topics relating to training health workers and how to measure those effects.

VII. EVALUATING HEALTH WORKER TRAINING

Dr. P. Stanley Yoder
Annenberg School for
Communication, University of
Pennsylvania

Dr. Yoder addressed two main questions in discussing a method for evaluating health worker training: what information do we need to judge how effective the training was? How do we judge if the training was appropriate? He pointed out that if the various stages of a training program are identified and isolated, the limits of its reach can be seen more easily. Supplement 6 illustrates stages in the training program in Zaire.

Discussion

Dr. Smith commented on the difficulty of measuring the effectiveness of a training program, because a training study must show not only that a person was trained but also how long it takes to apply the training. For example, if a health worker does not use the training for two or three months, then the effect of the training may be lost. Dr. Hornik confirmed these concerns and questioned whether this is a place where research money should be invested. Dr. Yoder further questioned whether training was an appropriate strategy for the Zaire project. The group then discussed issues surrounding the Zaire health worker training project.

VIII. HEALTHCOM'S FORMATIVE RESEARCH PROGRAM

**Dr. Cecile Johnston
Porter/Novelli**

Dr. Johnston provided an overview of the formative research agenda for HEALTHCOM II, using Honduras, Nigeria, and the Philippines as case studies. Supplement 7 is a copy of that presentation.

Discussion

Discussion focused on the use of formative research by in-country officials. Dr. Andreasen questioned whether HEALTHCOM might be overloading these people. Dr. Yoder replied that presenting the research in country can pose problems because many of these officials do not have experience with using research results about their own countries. Dr. Johnston asserted that training in research techniques is going to be a part of HEALTHCOM II. Dr. Zimicki summed up the problem by explaining that the missing link in an effective campaign is the transformation of the problem into ideas for research. Another problem discussed was that of training people in country to do the research themselves. Is research that will produce good results preferable to having people in country be able to do the research themselves? The latter choice produces other problems, such as who will decide what people in country really need to know, who will decide in which issues to train researchers, how to pretest data to make effective changes, and so forth.

Dr. Johnston suggested producing an "expert system," or a simple program offering guidance on what kind of research to do. Dr. Hornik questioned the efficiency of a standard formative research tool for use by in country officials. He reasoned that there are two different uses for formative research: one is for basic planning activities and the other is for all other activities conducted during the intervention. The methods used are different. On the other hand, Dr. Willard Shaw (HEALTHCOM) maintained that the overall strategy is to develop the research capability in country. Money is often not available for research, so he stressed the importance of using research for the maximum potential. The problem, according to Dr. Hornik, is not getting the research done, but getting it to affect the project.

IX. HEALTH BELIEF MODEL

**Dr. Judith McDivitt
Annenberg School for
Communication, University of
Pennsylvania**

Health education programs generally have been based on cognitive models. These models were developed and tested extensively in the United States. Should they also be

used to study health education programs in developing countries? The models under discussion--the Health Belief Model, the Theory of Reasoned Action, and Social Learning Theory--are illustrated in Supplement 8, along with examples of how they might be used to study ORS behavior change in Indonesia.

Discussion

Dr. McDivitt's primary question was how to test these models based on HEALTHCOM data. She suggested using appropriate pieces of each of the models and not necessarily using them the way they were designed. Dr. Smith proposed hiring someone familiar with the models to work out a scheme for HEALTHCOM evaluations. Dr. Yoder suggested hiring an in-country anthropologist to develop a cultural equivalent of the models. Dr. Hornik summed up the problem in three issues: (1) it is unclear if these models can be used effectively for HEALTHCOM II purposes; (2) HEALTHCOM programs have not used the Health Belief variables in the approach, so the project cannot be evaluated based on these models; and (3) HEALTHCOM's models have no heavy internal cognitive component, but are rather more social in character. Distance to clinic and availability of ORS packets are also important factors to the HEALTHCOM model. The problem is a practical one--what should be included in questionnaires? Discussion moved on to consider those variables that should be examined--community influence, rewards for correct behavior, self-reported activities, and so forth.

X. COST EFFECTIVENESS

**Birch and Davis
International, Inc.**

In this round of discussions on cost effectiveness studies, Dr. Smith set the objective for BDI to do studies on as many HEALTHCOM I countries as possible and to target the information to the public health community interested in child survival. He also proposed that costs of launching a program be compared with costs of sustaining one, and costs of a media program be compared with programs with no media. After some questions on what will be measured, Mr. Raleigh defined cost as: (1) cost of program compared to alternate choices; and (2) extra cost of communication campaigns. Dr. Smith raised the concern that once public health officials find out the cost, they may not want to do the program. From this, a discussion arose about the benefits and difficulties of doing financial analyses versus economic analyses. Dr. Smith stressed the importance of looking at cost issues from an economic perspective. Dr. Hornik warned that the numbers chosen to work with must be closely justified. Another concern raised was that decision makers could misinterpret numbers and need to be taught how to use the numbers in planning their communication strategies.

Mr. Raleigh proposed some initial questions to consider in planning the studies. What does it cost to invest in the media? Is there a way to show benefit? Do clients have skills to interpret the information? Are they motivated to interpret the information? Are the decisions within the realm of the client's environment that allows them to make the investment? Supplement 9 outlines issues to consider for cost effectiveness analyses including design, implementation, and interpretation issues, and options for costing and other financing studies.

XI. APPROACH TO SEGMENTATION ANALYSIS

Dr. Robert Hornik

Dr. Hornik discussed two purposes for segmentation analyses. One--which is most commonly used by the HEALTHCOM team at the Annenberg School--is the evaluation

purpose. That is, who responds to an intervention? The second--on which it may be desirable to spend more time--is the communication design purpose, or matching segments with differential response to communication research. There are many ways to organize segment classifications. The following structure is used to guide the search for relevant segments:

- community structural differences
- community social differences
- individual, structural differences
- individual, learned skills and experience differences
- individual, enduring characteristic differences

Supplement 10 is an outline of one way to view segmentation effects.

Discussion

The discussion began with considerations on how community influences behavior (as found in the Annenberg studies). Dr. Andreasen recommended putting more resources into the study of community social differences to find out why this appears to affect behavior. Dr. Dennis Foote (ACT) was concerned with making the results of the research accessible to program implementors for use in strategic planning. AED representatives generally agreed that it is important to make the findings from the global research agenda easy for program planners to use. Mr. Mark Rasmuson (HEALTHCOM) raised questions on how to link the research questions with the strategic planning component of HEALTHCOM. He questioned to what extent the institutionalization mandate of HEALTHCOM is being served by the research mandate. Should it be more so? Dr. Andreasen suggested that the priorities for the global research program should be: (1) cross-site analyses to be used in country; and (2) research to be used on the long run. He said that the program should leave behind a research legacy, i.e., questions to be asked, and so forth. He then questioned how the research activities will be coordinated with other HEALTHCOM activities. He asked that resident advisors have input on their informational needs. Dr. Hornik said that all the research questions on the list can be addressed by HEALTHCOM I data, and if other information is needed, Annenberg should be notified before more surveys are conducted.

SUPPLEMENT 1

PARTICIPANT LIST AND AGENDA

HEALTHCOM Project
Task Force on Research
Participant List
December 18-19, 1989

HEALTHCOM

Mark Rasmuson
Willard Shaw
William Smith
Cecile Johnston
Alan Andreasen
Judith Graeff
Other HEALTHCOM staff members

Annenberg School of Communications

Robert Hornik
P. Stanley Yoder
Judith McDivitt
Lorraine Ritacco
Susan Zimicki

Applied Communication Technology

Dennis Foote

Birch and Davis

Veronica Elliott
John Raleigh

A.I.D.

Robert Clay
Linda Lou Kelley
Nancy Pielemeier

Other Projects

PRITECH--Martita Marx
PRICOR--Stewart Blumenfeld
WASH--Phil Rourke
Mothercare/REACH--Mike Favin
Financing Sustainability Project--Martin Makinen
JHU--Annemarie Wouters

HEALTHCOM Project
Task Force on Research
December 18-19, 1989

AGENDA

December 18

10:00 a.m.	Introduction	Mr. Robert Clay
10:05 a.m.	Purpose of Task Force Meeting: HEALTHCOM's Global Research Program	Dr. Alan Andreasen
10:15 a.m.	Overview of Key Findings To Date: ORT, EPI, Behavior Change, Insitutionalization	Dr. Robert Hornik
10:30 a.m.	Overview of Other Projects' Research	Project Representatives
10:45 a.m.	Brainstorming on Additional Research: Questions	
	• Behavior Change	Dr. Robert Hornik
	• Cost-effectiveness	Dr. Veronica Elliott Mr. John Raleigh
1:00 p.m.	Lunch	
2:00 p.m.	Research Design Exercise:	
	• Health Behavior Group	Annenberg, ACT
	• Cost-Effectiveness Group	Birch and Davis
5:00 p.m.	Close	

December 19

9:00 a.m.	HEALTHCOM's Formative Research Program	Dr. Cecile Johnstor
9:30 a.m.	Continuation of Research Design Exercise	
12:00 p.m.	Lunch	
1:30 p.m.	Setting the HEALTHCOM II Research Agenda	
	<ul style="list-style-type: none">• Health Behavior• Cost-Effectiveness	Annenberg, ACT
4:30 p.m.	Summary	Birch & Davis
5:00 p.m.	Close	Dr. Alan Andreasen

SUPPLEMENT 2

POSITION PAPER:

**WHAT ARE WE LEARNING FROM THE EVALUATION OF THE
COMMUNICATION FOR CHILD SURVIVAL PROJECT?**

**What Are We Learning
from the Evaluation of the Communication for Child Survival Project?¹**

Presented by

Robert Hornik

Center for International, Health, and Development Communication

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¹ This overview is based largely on a variety of studies authored by the individuals listed below. From the Annenberg School of Communications at the University of Pennsylvania authors include R. Hornik, E. Contreras-Budge, J. McDivitt, J. McDowell, S. Yoder, S. Zimicki, R. Drew, N. Ferencic, C. Koepke, N. Morris, K. Wilkins, and Z. Zhong. The report also uses data reported by Applied Communication Technology from its evaluations of Honduras and The Gambia (authors D. Foote and C. Baume, as well as J. McDivitt.) Both the Academy for Educational Development (prime contractor on the HEALTHCOM program) in all sites and Porter-Novelli, particularly in the Philippines, participated in research design and data collection. The research was undertaken in collaboration with many national Ministries of Health and private research organizations named in each of the individual reports. All of the research was funded by U.S.A.I.D., through its Communication for Child Survival Program and other contracts.

What Are We Learning From The Evaluation of the Communication for Child Survival Project?

The Communication for Child Survival Project (HEALTHCOM) is a part of a long-term effort funded by the U.S. Agency for International Development through a contract with the Academy for Educational Development. The activity began in 1985 and will continue through 1994 and provides technical assistance to national governments and other agencies in fifteen Third World countries which are trying to use communication as part of their efforts to improve rates of child survival. The Center for International, Health, and Development Communication, Annenberg School for Communication at the University of Pennsylvania holds a subcontract to provide research and evaluation assistance as part of the overall HEALTHCOM program.

This brief paper emphasizes eleven major areas which the evaluation is addressing and for which tentative answers are now emerging. It is a sampling of the fuller range of research that has been and will be reported in extended versions of this discussion.

Under HEALTHCOM, two projects have completed data collection (Ecuador, a major site, and Paraguay, a site for a narrative case study evaluation); two sites have outcome data from first phase studies (Indonesia-Garut and the Philippines-Manila) and eight have had baseline studies which await after-intervention data collection (Indonesia-Central Java, Indonesia-West Java, Philippines-National, Jordan, Nigeria, Lesotho, Zaire and Guatemala.) The evaluations for two other sites in which major work was completed under MMHP were finalized during HEALTHCOM (Peru and Swaziland). In addition to this work, HEALTHCOM also sponsored additional data collection in Honduras and The Gambia, as a follow-on to the major evaluations of MMHP.

Under the HEALTHCOM I contract it was assumed that each site would operate for an average of two years, and that the evaluation would take place within that time frame. In practice, almost all sites have remained in operation for a longer period; as a result, the after-intervention data collections have been delayed. The remaining eight after-intervention studies are scheduled between August, 1989 and June, 1990, with evaluation reports due before end-of-contract in September, 1990.

At this stage, with limited cross-national final data, we can put forward tentative notions, inferences suggested by the data collected thus far, and outline work that will be done in the final year of the evaluation to confirm, deepen and expand those inferences. We have chosen eleven major emphases; some substantive and some methodological, which represent the work we are doing and what we expect to produce; some of the findings we report should be taken as exemplary or intriguing; further dissemination of them depends on formal peer review and publication. In some cases the results reflect only exploratory analyses. They are a sample of the types of questions being asked and results being found rather than a comprehensive statement of findings.

Immunization:

1. Communication programs have affected immunization levels. Clearly, communication programs, in combination with improvements in service delivery, can produce substantial increments in timely vaccination coverage. From all the sites from which data are currently available (Peru, Ecuador, and Manila), there is credible evidence of 12-20% or more increases in the absolute level of vaccination coverage and 33-100% increases in relative coverage compared to baselines (Table 1)². There is evidence from Ecuador that the improvement is equal or better among less advantaged people than among more advantaged ones.

Table 1
Communication programs have affected immunization levels

Peru: Single Immunization Day:	Before (Sept. 1984)	After (Nov. 1984)
Card verified 12-23 month complete coverage	25%	37%
Manila: 3 month measles campaign:	Before (Jan. 1988)	After (May 1988)
Card verified 12-23 month measles coverage	21%	45%
Ecuador: 4 campaigns over 18 months:	Before (Oct. 1985)	After (Apr. 1987)
Card verified 12 month old measles coverage	15%	35%
Verified 12-23 month coverage		57%

² These are based on reasonably conservative measures of coverage, but vary from site to site. Depending on the measure chosen: coverage by 12 months, measles coverage, coverage among children between 12-23 months, the exact estimates of absolute and relative change vary.

2. Access to good service and stimulation of timely consumer demand matter more than detailed knowledge about immuno-preventable diseases. There is little evidence that low vaccination rates reflect resistance to the idea of vaccination. From the data analyzed thus far, major problems appear to be in:

a) encouraging appropriate practices among staff at service sites including avoidance of missed opportunities for vaccination when children come to a clinic (e.g. in Manila more than half of the opportunities to give measles vaccination along with other antigens were missed), and easing physical access to services (e.g. in Nigeria, children served largely by infrequently appearing mobile teams were one-third as likely to have full age-appropriate coverage compared to children taken to clinics) (Table 2).

Table 2
Access to health services makes a difference

Manila		
	Before	After
Missed opportunities to give measles vaccination	77%	54%

Nigeria		
Source of Vaccinations:	Mobile teams	Clinic Attendance
Complete coverage at baseline	19%	61%

b) cueing timely behavior by parents; being sure that parents know where and when they need to go and know that their child still requires vaccination (e.g. in Manila, knowledge of when to start and when to finish the basic series was associated with timely practice; in Niger State, knowledge of how many vaccinations were required was associated with level of coverage) (Figures 1a and 1b).

Figure 1a

Manila pre-campaign

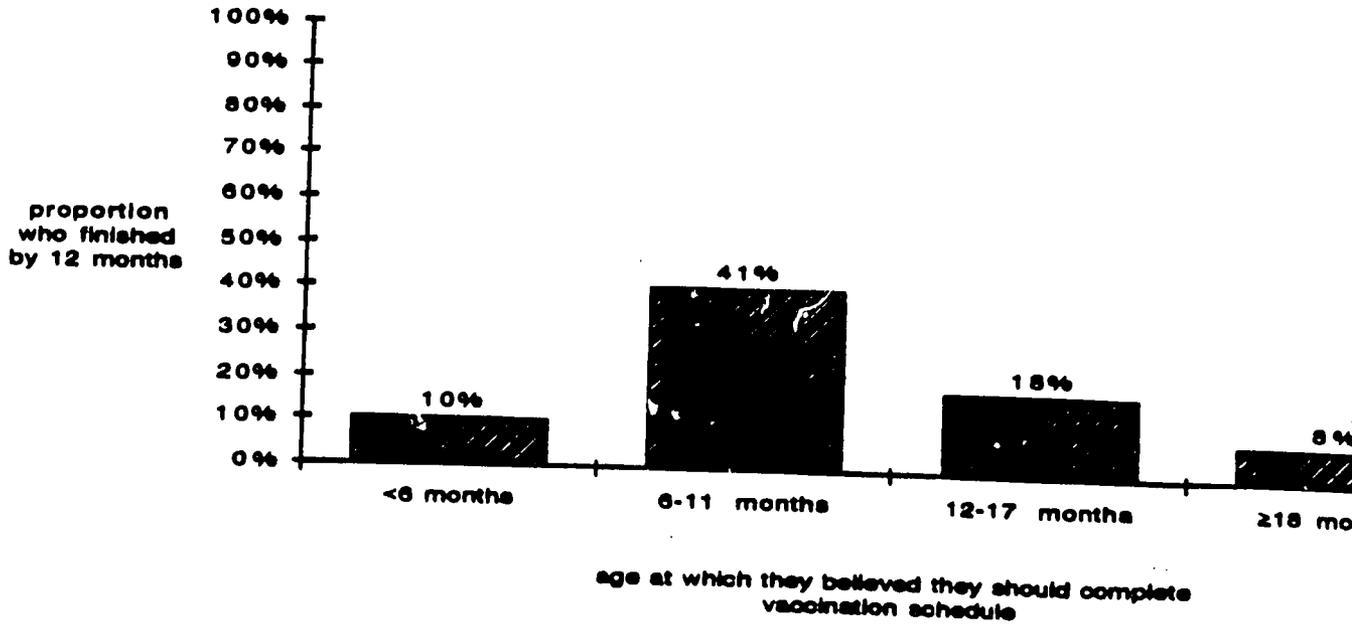
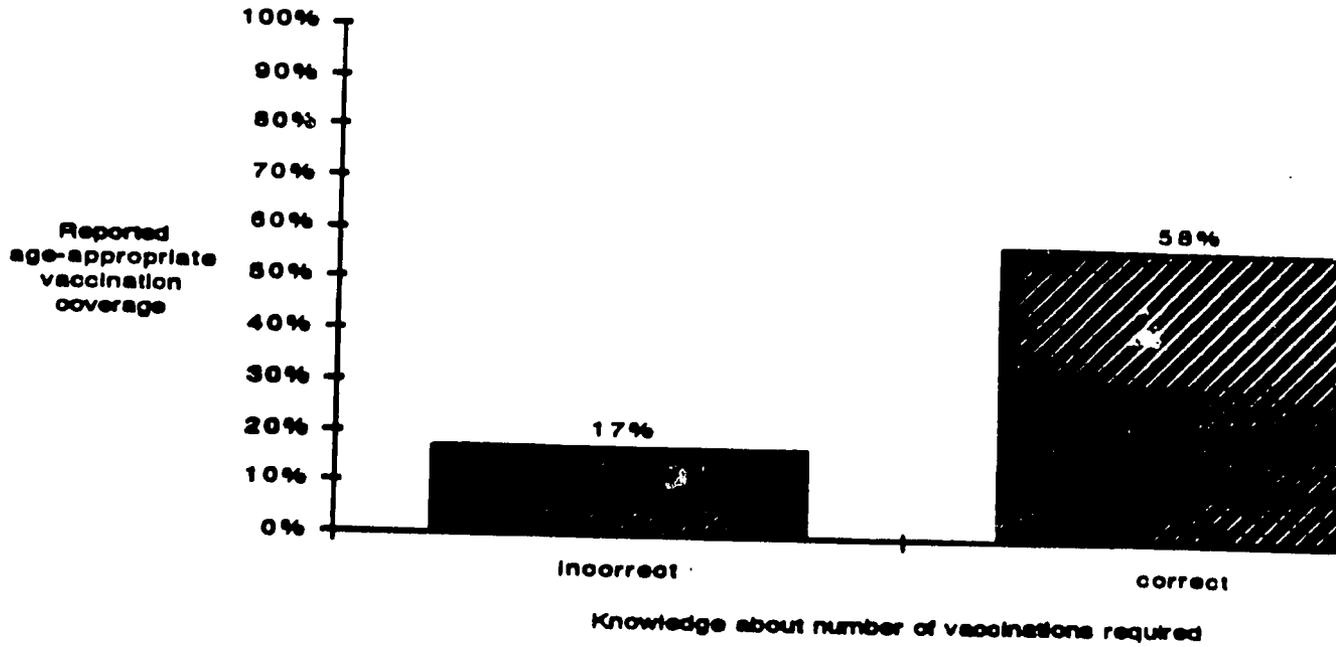


Figure 1b

Niger State pre-campaign



3. Although communication programs can succeed in immediately increasing vaccination rates, certain issues remain unresolved. Major questions as yet unresolved include:

a) Will it be feasible to move beyond relative improvements in rates and achieve absolutely high vaccination rates on a timely basis? Will card-verified complete vaccination coverage rates of 30-40% at 12 months³ (in Peru and Ecuador and the Philippines) reach 80% with refined versions of these programs?

b) Whatever improvements are achieved, will it be feasible to maintain them over succeeding cohorts of children? In some cases, the communication programs have been a central element in large-scale immunization day mobilizations, which make extraordinary demands on health and other infrastructures. It is unlikely that all countries will be willing to dedicate that level of resources on a continuing basis; the policy question is what strategy, including communication strategy, will support a long-term maintenance vaccination program – achieving objectives while spending resources at a level consistent with other financial and logistical obligations.

Diarrheal Disease

4. Communication Programs have affected diarrheal disease control practice but significant concerns remain. There is strong evidence for the effect of communication programs on shifts in treatment patterns for diarrheal disease. Both The Gambia (4 to 50%) and Swaziland (36 to 48%) evaluations showed increases in self-reported home use of sugar-salt solutions as the result of promotion through mass and face-to-face channels. Honduras (0 to 36%) and Ecuador (7 to 17%) results show shifts in use of packaged ORS, reflecting both communication efforts and changes in supply (Table 3).⁴

³ These low rates are surely conservative: In Ecuador, an estimated rate of 32% based on card-verified coverage among those exactly 12 months old compares to an alternative, more generous, rate estimated for 12-23 month olds, including card-verified and caretaker claimed vaccinations, of 65% .

⁴ Estimation procedures for each of these comparisons vary. Each estimate of change can be justified, and they reflect data collection limitations in each site, but they should be used only tentatively to make cross-country comparisons.

Table 3
Shifts in self-reported home use of sugar-salt solutions
and use of packaged ORS

Honduras			
	Before (Feb. 1981)	After (June 1983)	Follow-up (May 1987)
Packets of ORS -last case	0%	36%	45%

Ecuador		
	Before (Oct. 1985)	After (Apr. 1987)
Packets of ORS -last case	approx. 7%	17-20%

The Gambia 3 year program			
	1981	1984	1987
SSS last case use	4%	50%	10%

Swaziland 6 month program		
	Before (Sept. 1984)	After (Oct. 1985)
SSS last case use	34%	48%

However, there is evidence from The Gambia that new practices are short-lived without continued reinforcement, from Swaziland that confused practice may result from mistakes in message development, and from Indonesia-Garut that few practice changes will result if few messages are disseminated.

In Ecuador, an upper limit of 20% last case use for packaged ORS was achieved, even though knowledge and trial continued to increase after regular practice had plateaued. Supply limitations may have constrained use.

In a number of countries, reduced eating during episodes of diarrhea usually reflects a child's reluctance to eat rather than the caretaker's deliberate withholding of food. Also, breastfeeding is maintained during diarrhea according to most respondents.

5. Quality of ORS use remains a problem to be solved in some countries. There is substantial cross-national variation in the quality of ORS use, even after the communication interventions. Correct mixing of ORS packets has been widely achieved (e.g. 85% of caretakers who said they had mixed ORS before were able to mix it with a reasonable degree of accuracy in Ecuador), but volumes that caretakers claim to have administered to children vary greatly. A minority of mothers in Indonesia (31%) claimed to have given children more than a glassful of the liquid at the last episode, and one-third of the children who were given ORS in Ecuador in the last case were said to have rejected it altogether. Quality of use may be the appropriate focus of next stages – either to recognize that relatively few cases may require rehydration and thus not to expect a substantial volume to be ingested often, or to focus communication strategies which stimulate greater volumes, as well as other correct use practices.

6. Evidence about mother's perception of diarrheal disease suggests strategies for message design. Communication programs depend on the ability of message designers to identify cues which are recognized by the target audience as significant in their choice of treatments. Those cues then can be used to suggest treatment shifts. For example, research in the Philippines and Ecuador suggests that perception of weakness – a child tending to play less than usual – appears to be more often associated both with severity of the case and with a tendency to seek higher level of treatments (e.g. in Ecuador, in one study, 31% of caretakers who claimed a case wasn't serious said that their child was weaker [perdida de animo] than usual but 84% of those who saw a case as quite serious noted weakness.

In contrast, medical signs of dehydration (sunken fontanelle, etc.) are not always associated with perceived seriousness of diarrheal cases, or with treatment choices. They may not serve as a basis for cueing treatment (giving a child any treatment – or instigating a shift from home treatment to ORS packet treatment to clinic attendance.) In the Ecuador study, increased thirst was noted for 71% of the 'not serious' cases and 86% of the 'quite serious' cases – a much less substantial differential.

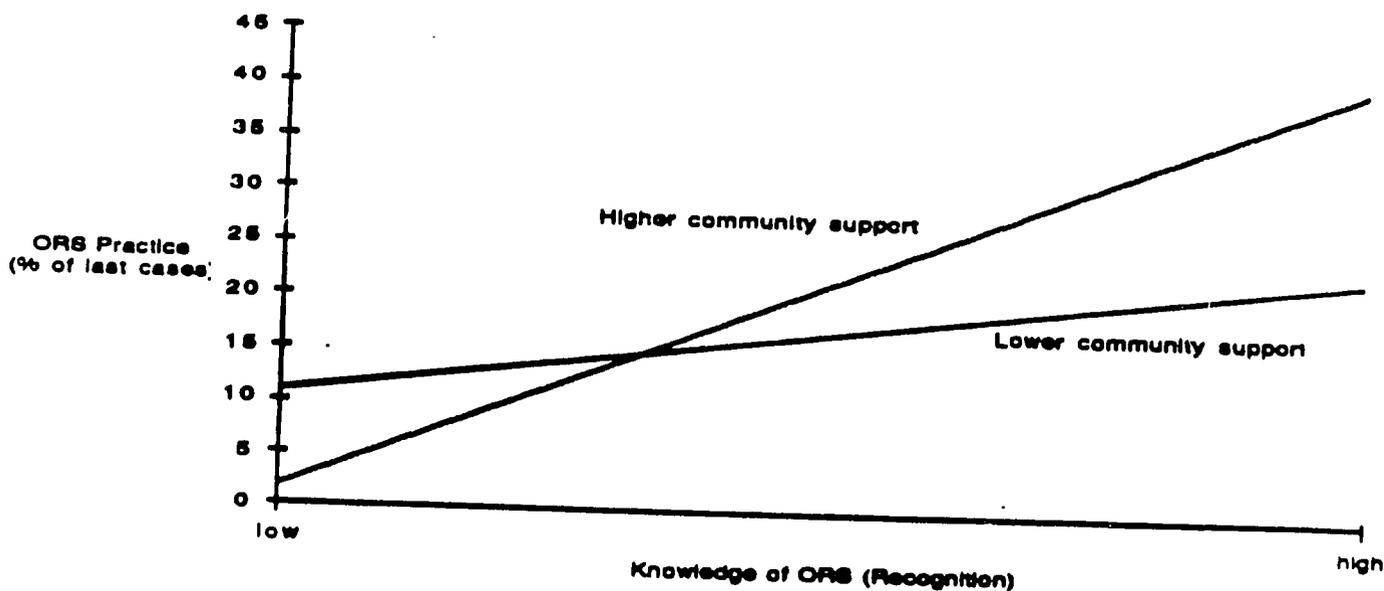
People's perception of diarrhea cases and the treatments they choose are reflected in the naming of the disease, at least in some contexts. In Zaire, for example, 52% chose ORS or

SSS if the case was considered 'kuhara' (ordinary diarrhea), but only 14% chose ORS or SSS if the case was called 'lukunga' (although 'lukunga' was the type of diarrhea most likely to exhibit symptoms of dehydration).

Applied Health Communication Theory.

7. Community influence matters both as a direct influence on individual practice and as a mediator of communication effects on individuals. Health practices may be appropriately seen as belonging to the community as well as to individuals. In Ecuador, in preliminary analyses, about two-thirds of the variation accounted for in individual immunization coverage (about 10%) was predictable from measures of overall community practice and characteristics (in wealth and levels of development). Only one-third of the variation in practice was associated with individual differences in knowledge and media exposure and other characteristics. Also, caretakers who had some knowledge about ORS were twice (40% versus 20%) as likely to have used it for a last case if they lived in a community where last case use was common rather than in a community where it was less common (Figure 2).

Figure 2
Social Network Support, Knowledge and ORS Practice in Ecuador



8. Efficacy of mass media and interpersonal channels is often presented as a theoretical battle, but is best viewed as a problem in practical feasibility. Face-to-face communication channels, despite a likely advantage in persuasive power, may be quite difficult to organize and maintain, and may reach only a small proportion of the target audience, particularly if volunteer field workers are a mainstay. Mass media channels, particularly radio, may sometimes both reach a larger portion of target audiences and serve to persuade. Thus, in Swaziland, yellow flag volunteers were quite effective when they were operating, but reached only one-sixth of the population; in contrast, radio was slightly less effective in stimulating practice change for any individual, perhaps, but reached more than three-fifths of the population (Table 4).

Table 4

Combined Effects of Reach and Effectiveness of Each Channel on Knowledgeable Use of SSS.				
Channel	% Exposed Channel	B-Coeff.	Points Shifted	Effectiveness
CLINIC	22%	.181	1.00	4.2%
OUTREACH	16%	.201	1.00	3.2
LISTEN	60%	.034	4.00*	8.2

* Point shift between non-listeners and the average score of those considered substantially exposed.

Methodological Development

9. Effects of vaccination programs are more clearly seen with newly developed coverage measures. Three highly sensitive measures of vaccination coverage developed by

HEALTHCOM have proved quite useful as alternatives to standard WHO 12-23 month coverage.

- a) The first, backdated coverage at 12 months of age for successive monthly birth cohorts, can be used to demonstrate program-induced changes soon after they occur.
- b) The second, vaccinations per week of eligibility in the population, offers a clear picture of how well a program is doing compared to the number of vaccinations which must be given per week if a program is to reach the level of coverage it seeks.
- c) The third, a standardized, age-residual vaccination score, provides a vaccination measure for each individual for use in analysis of vaccination practice as a function of other variables. It controls for some biases of raw, or simple age-appropriate coverage measures.

10. The measure of ORS practice that a study uses has a substantial effect on its estimation of use. Interview estimates of ORS practice are assumed to vary with the 'real' behavior. However they will also vary with what case is referred to ("ever use", "last case", "last case in previous two weeks") with the name given to the disease or symptom asked about, with whether the question is open or closed ended ("what did you do?" versus "Did you use ORS"), with the sample (children under one versus children under five) and with other characteristics of how and by whom the question is asked. While there may be no perfect solution to being sure a study is estimating 'real' behavior, it is important that within-project and across-project comparisons involve identical measures (Table 5).

Table 5
THE ORS USE MEASURE MATTERS

		<u>TIME PERIOD</u>			
		day of survey	last two weeks	3-4 weeks ago	over 1 month ago
% using ORS	16%	21%	24%	40%	
		<u>SAMPLE</u>			
		children less than one year old	children less than three years old		
% using ORS		24%	18%		
		<u>PHRASING</u>			
		last case unaided recall	aided recall		
% using ORS		36%	47%		

11. The effect of cluster sampling procedures on sampling error varies from country to country and variable to variable. Most sample surveys in developing countries make use of two-stage sampling procedures, choosing a specific number of clusters and a specific number of people within clusters to interview. The sample design effect, rather than being more or less constant across countries and across variables and across numbers of people interviewed in a single cluster, shows substantial variability in practice. In some places, for some variables, the design effect is essentially one; there is no loss of power for using a cluster sampling procedure rather than a simple random sampling procedure. In other places, for the same variable, the design effect can be four or even more. Estimates of project effects need to be adjusted for sample errors reflecting the implemented sample design.

27

SUPPLEMENT 3

Current State of the Evaluation Program

CURRENT STATE OF THE EVALUATION PROGRAM

Evaluation Complete:	The Gambia, Honduras, Peru, Swaziland
All Data Collected:	Ecuador, Paraguay (case study)
Pilot Area Evaluation Completed:	Garut (West Java), Manilla
Baseline Data Collected:	Guatemala, West Java, Central Java, Jordan, Lesotho, Nigeria, Philippines, Zaire

SUPPLEMENT 4

Research Questions Proposed by Dr. Robert Hornik

RESEARCH QUESTIONS

1. **Process of Behavior Change**
 - a. What types of knowledge make a difference in behavior (logistic and skill-focused versus "deeper" knowledge)?
 - b. What perceived symptoms and severity affect treatment choices for CDD?
 - c. Under what conditions do mothers turn knowledge into behavior (social influences, community structural influences, individual skills, material conditions, pre-disposing attitudes...)?
 - d. How do new behaviors fit with old behaviors--what are people doing: e.g., do new "good" behaviors drive out old "good" behaviors? Is the new behavior performed adequately?
 - e. How well do social psychological theories of behavior change (e.g., Health Belief Model, Self Efficacy, Fishbein models) serve to explain behavior and provide useful message approaches?
2. **Communication System**
 - a. What is the reach and effectiveness of various channels?
 - b. Which messages (skill versus educational versus ?) produce short-term changes, persistent changes?
 - c. Will demand creation in the absence of adequate institutional supply enhance supply?
3. **Institutionalization**
 - a. Under what conditions does serious health communication become part of what the MOH does?
 - b. What is the cost of doing health communication?
4. **Methodological**
 - a. Measurement of CDD and EPI behavior,
 - b. Sample design effects, in practice,
 - c. Separating social/community influences from individual influences,
 - d. Sorting out channel effects,
 - e. Qualitative and quantitative research strategies for developing programs.

SUPPLEMENT 5

**Ms. Susan Zimicki's presentation on
Measuring Campaign Effects**

THERE ARE 4 POSSIBLE EFFECTS OF A SINGLE-BURST CAMPAIGN:

TWO THAT DO NOT PERSIST:

- 1 SIMPLE STIMULUS-RESPONSE
- 2 REBOUND

TWO THAT PERSIST:

- 3 EVENTUAL RETURN TO BASELINE
- 4 RETURN TO HIGHER BASELINE

==> BOTH COVERAGE RATES AND ACTIVITY RATES SHOW SIMILAR PATTERNS,
BUT THE TIME SCALE IS DIFFERENT

QUESTION: DOES THE KIND OF EFFECT REFLECT

THE KIND OF PROGRAM
THE MECHANISM THROUGH WHICH THE EFFECT OCCURS
OTHER FACTORS

THE REAL QUESTION: HOW TO DESIGN MEDIA CAMPAIGNS TO ACHIEVE THE
HIGHEST PERSISTENT EFFECT?

KINDS OF PROGRAMS: CONSIDER 2 COMPONENTS OF INTERVENTION
ALONG 2 VECTORS:

COMPONENTS:

MEDIA PROGRAM
HEALTH WORKER TRAINING/MOTIVATION

VECTORS:

INTENSITY
FREQUENCY

THUS:

SINGLE BURST, SHORT DURATION -- JORNADA
SINGLE BURST, LONG DURATION -- CAMPAIGN
MULTIPLE BURSTS, SHORT DURATION, SHORT INTERVALS -- MINI-JORNADAS
MULTIPLE BURSTS, SHORT DURATION, LONG INTERVALS

OTHER PATTERNS ARE POSSIBLE

MECHANISMS THROUGH WHICH EFFECT CAN OCCUR:

DEMAND CREATION
IMPROVEMENT IN HEALTH WORKER PRACTICE
OTHER -
IMPROVEMENT IN VACCINE SUPPLY
IMPROVEMENT IN ACCESS TO HEALTH
FACILITIES (TRANSPORT, INCREASE IN NUMBER OF
FACILITIES...)

TO MAKE THIS CONCRETE:

AMONG THE HEALTHCOM PROJECTS, WE HAVE 5 THAT HAVE HAD
VACCINATION AS A MAJOR FOCUS:

GUATEMALA (PRE-HEALTHCOM DATA)
ECUADOR
PHILIPPINES (MANILA)
PHILIPPINES (NATIONWIDE)
LESOTHO

EACH ONE HAS A SLIGHTLY DIFFERENT MIX OF MEDIA AND HEALTH
WORKER TRAINING INTENSITY AND FREQUENCY:

	GUAT	MNLA	PHIL	ECUA	LESO
<u>MEDIA</u>					
INTENSITY	M	H	H	H	M
FREQUENCY	H	M	L	H	L
<u>HEALTH WORKER</u>					
INTENSITY	L	H	H	L	H
FREQUENCY	L	L	L	L	H

WHAT MEASURES DO WE HAVE THAT REFLECT THE MECHANISM:

MEDIA:

RECORDS OF BROADCASTS - FREQUENCY
INFORMATION ABOUT CHANNEL REACH

RECOGNITION OF MEDIA ELEMENTS BY POPULATION

HEALTH WORKER TRAINING/MOTIVATION:

BEFORE/AFTER OBSERVATIONS
MISSED OPPORTUNITIES MEASURES

TWO MEASURES OF THE EFFECT OF A VACCINATION CAMPAIGN:

THE ACTIVITY VACCINATIONS OF CHILDREN IN THE TARGET AGE GROUP PER WEEK OR PER MONTH

THE RESULT THE CUMULATIVE PROPORTION OF CHILDREN IN THE TARGET AGE GROUP WHO HAVE BEEN VACCINATED: THE TARGET-AGE COVERAGE RATE

IMPORTANT TO KNOW: COVERAGE RATES FALL OFF MORE SLOWLY THAN ACTIVITY RATES

CONSIDER: A 1-MONTH MEASLES VACCINATION CAMPAIGN IN A PREVIOUSLY UNVACCINATED POPULATION. ALL CHILDREN IN THE TARGET AGE GROUP -- 9 TO 12 MONTHS -- ARE VACCINATED, BUT VACCINATION STOPS AFTER THAT MONTH

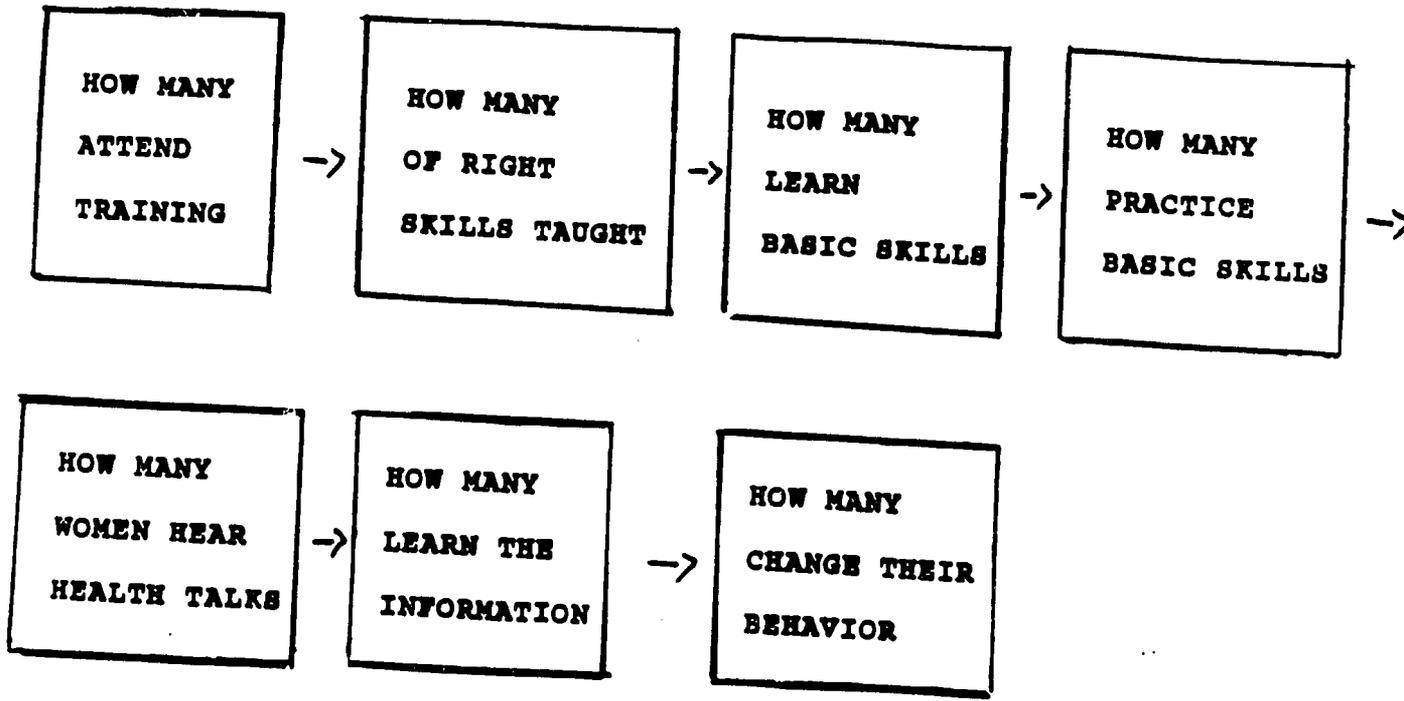
AGE	-1	CAMPAIGN	1	2	3	4
6	0					
7	0	0				
8	0	0	0			
9	0	100	0	0		
10	0	100	100	0	0	
11	0	100	100	100	0	0
12	0	0	100	100	100	0
13	0	0	0	100	100	100
14	0	0	0	0	100	100
15	0	0	0	0	0	100
9-12 C.R.	0	100	67	33	0	0

SUPPLEMENT 6

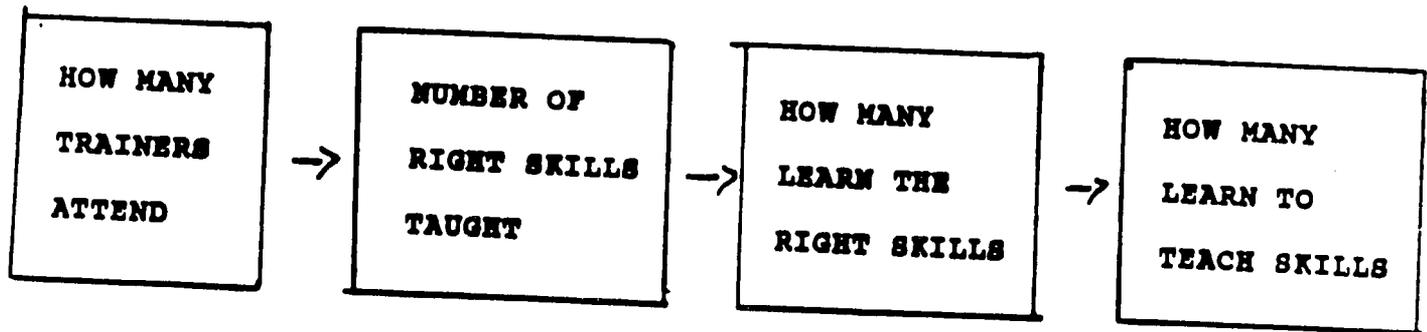
Stages in Training Programs

**Dr. P. Stanley Yoder's Presentation on
Evaluating HEALTHWORKER Training**

STAGES IN TRAINING PROGRAMS



STAGES IN TRAINING OF TRAINERS PROGRAM



RUASHI HEALTH ZONE
SUMMARY OF SITUATION IN HEALTH SERVICES

Population 80,000

Urban and semi-urban population

Reference Hospital Clinique Universitaire

Main Health Facilities

Health Center at reference hospital

Dispensary operated by health zone: One

Private Health Centers: Two

Company Health Centers: One

Points of MCH services and vaccinations: Five

Health facilities now doing regular health education: Two

MCH services now doing health education: Two

Health care facilities with regular supervision: none

Health care personnel to be trained in health education: 27

Training Schedule

Late November 14 persons

late February 13 persons

SUPPLEMENT 7

**Dr. Cecile Johnston's Presentation on
Formative Research and HEALTHCOM II**

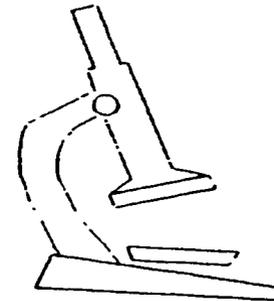


**FORMATIVE RESEARCH
& HEALTHCOM II**

OVERVIEW

I. HC I Formative Research

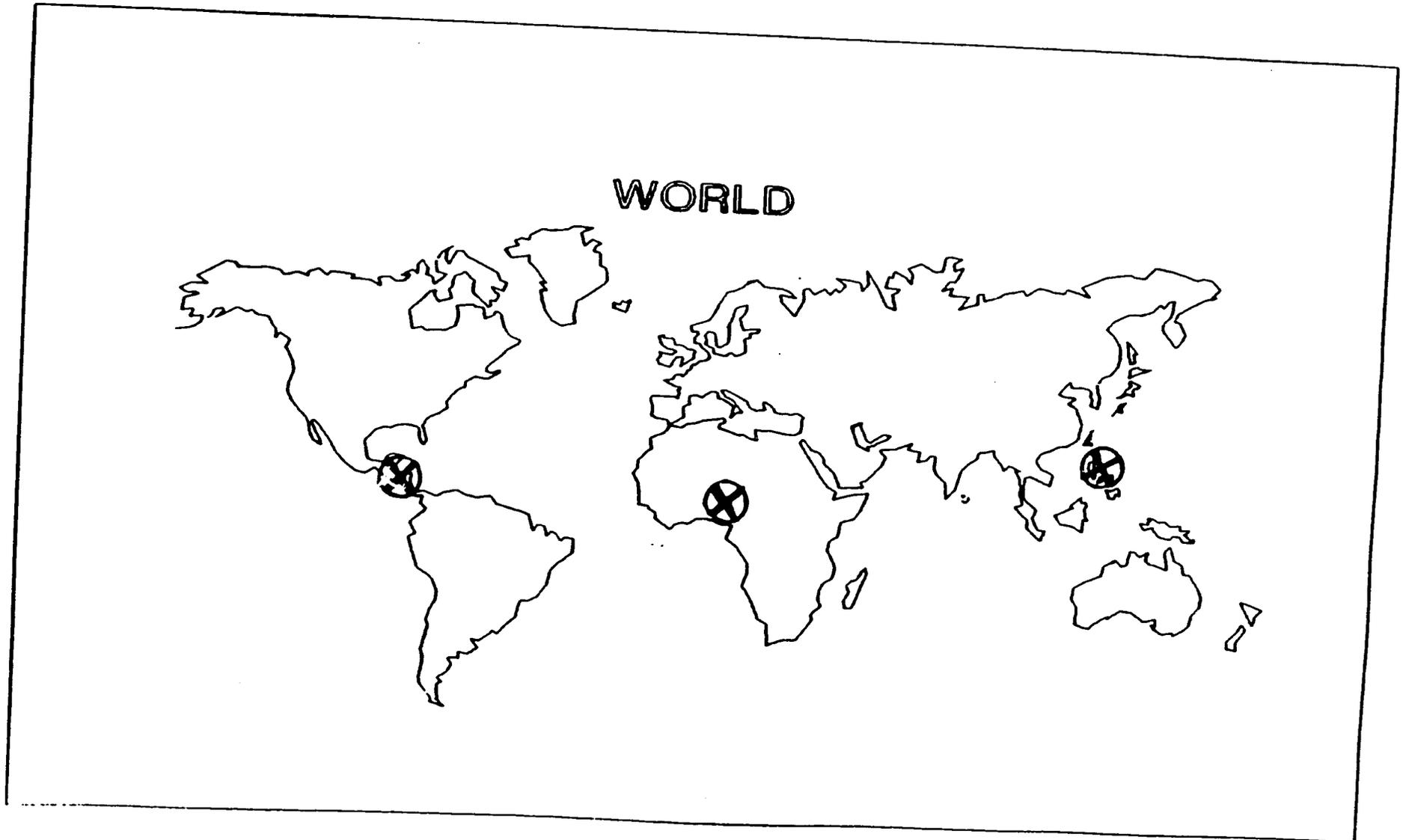
- A. Honduras
- B. Nigeria
- C. Philippines
- D. Conclusions



II. Strategies for HC II

- A. Train
- B. Modularize
- C. Computerize
- D. Rely on In-Country Research
- E. Do On-Going Formative

Why These Three?



Why These Three?

HONDURAS

- History Since MMHP
- ARI
- Monitoring

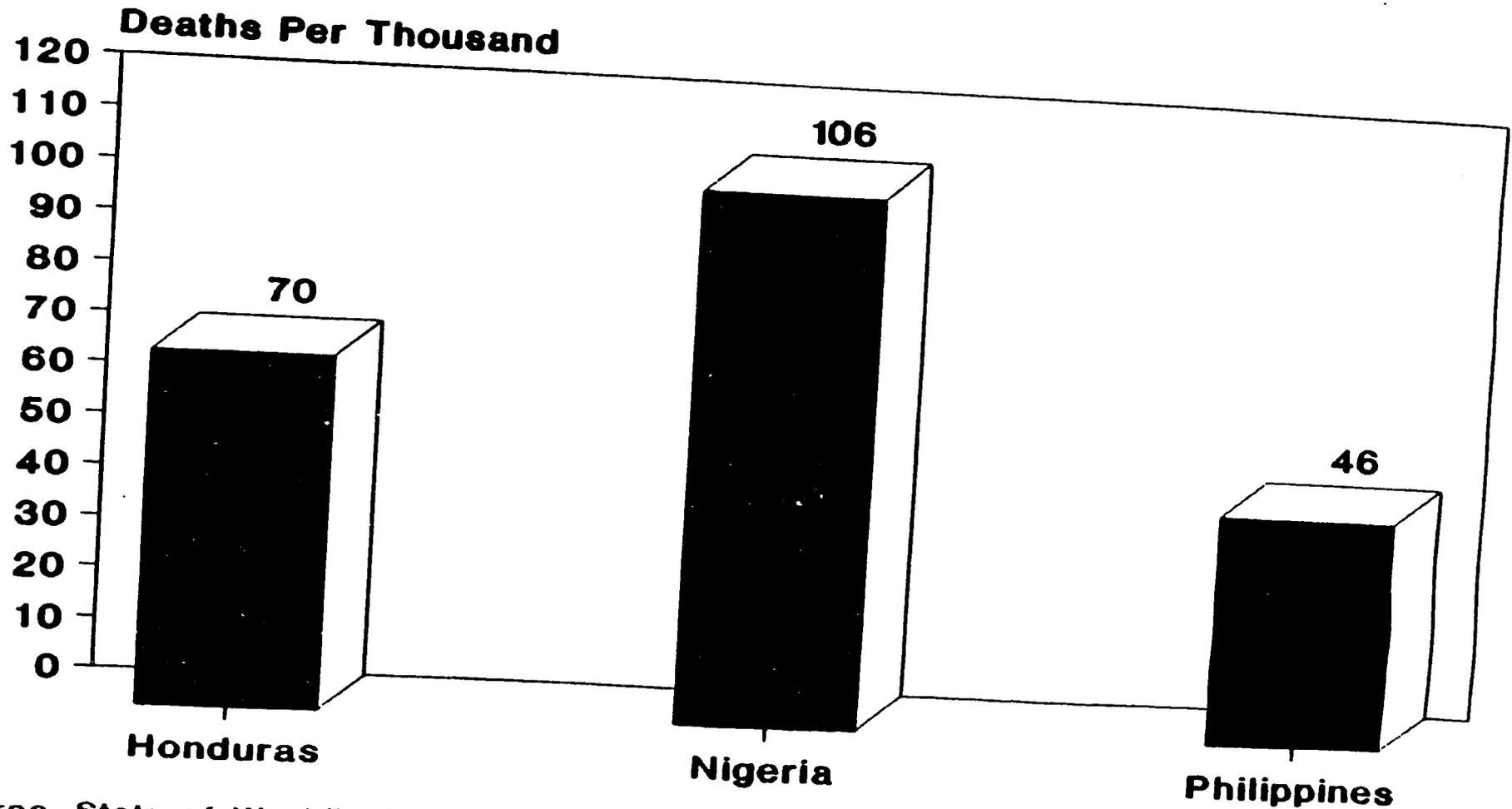
NIGERIA

- Behavioral Studies
- Ethnomedical Research
- Training

PHILIPPINES

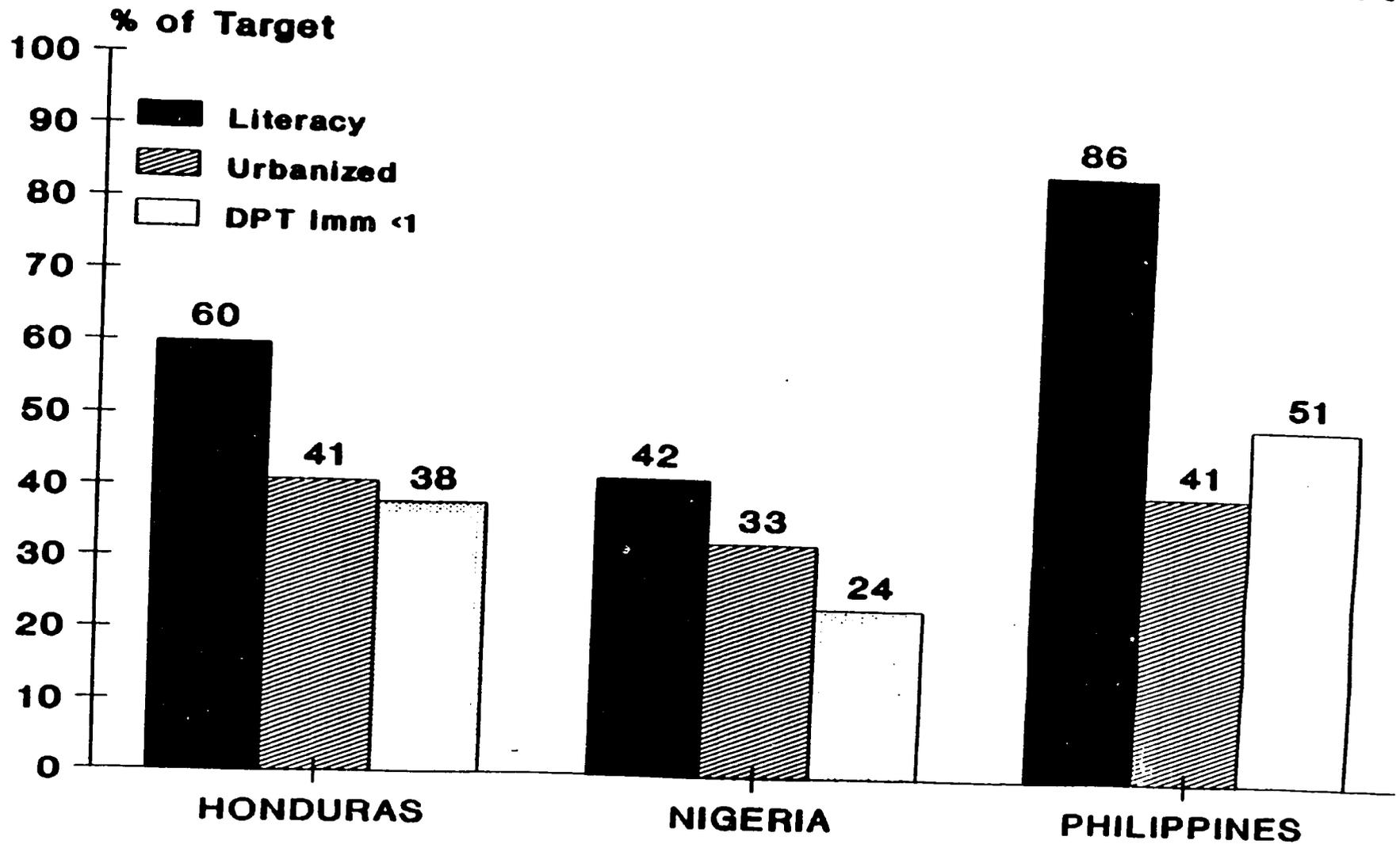
- Madison Ave Tact
- Social Marketing
- ARI

INFANT MORTALITY Under 1 Year



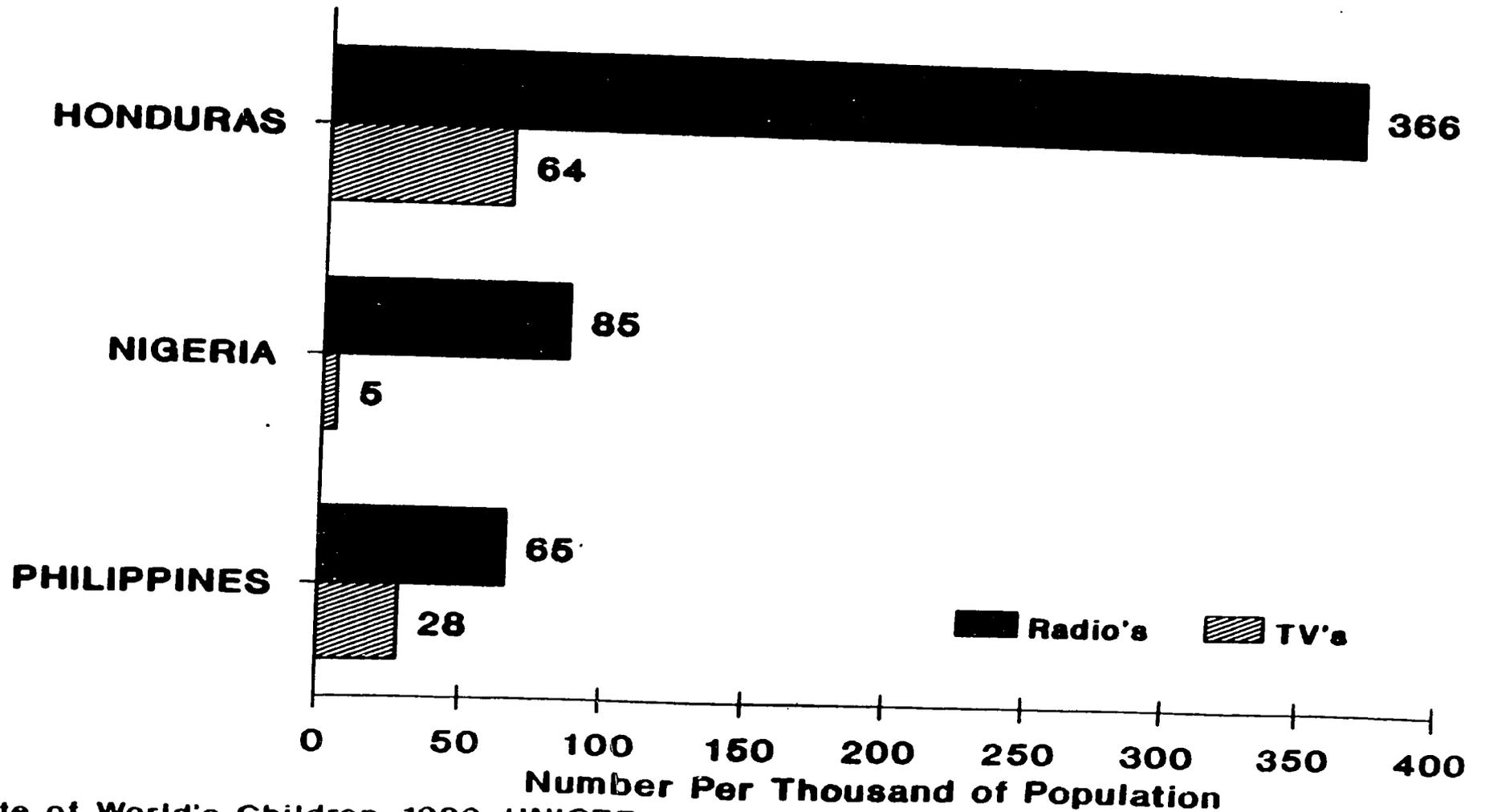
Source: State of World's Children, 1989

LITERACY, URBANIZATION & IMMUNIZATION



State of World's Children, 1989, UNICEF

MASS MEDIA



CHILD SURVIVAL THEMES

HONDURAS

EPI

CDD

ARI

Growth Mon.

NIGERIA

EPI

CDD

Malaria

Birth Spacing

PHILIPPINES

EPI

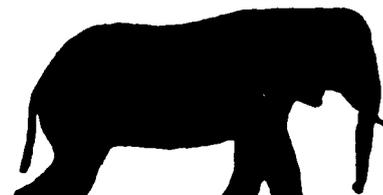
CDD

ARI



FORMATIVE RESEARCH IN NIGERIA

May 87	Behavioral Obs FG's w/Moms & H Wkrs Ethnomedical
Oct 87	Pretest FlipChart/Flyer Annenberg Baseline
Apr 88	
Oct 88	Formative Res Seminar Focus Groups Small-Scale Clinic Study
Apr 89	



FORMATIVE RESEARCH IN PHILIPPINES

Jul 87

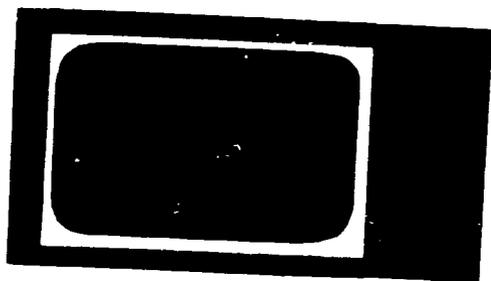
**FG on EPI Sponsor
Annenberg Baseline**

Oct 87

**Pretest Oresol Labels
ORS \$/Prescript Audit
Measles TV DAR
Clinic Mini-Survey w/
Moms/Workers**

Apr 88

**Home Fluids Study
KAP Survey of Docs
C&R Radio Test
FG on ORT Concepts
Visualization Concept
Test - D/D Characters**



FORMATIVE RESEARCH IN PHILIPPINES



Oct 88

**C&R Test TV Spot
Pretest Signs Poster
Pretest Mix Poster
Radio Tracking
Mini-Survey EPI
Coordinators
ARI Behavioral**

Apr 89

Revised Radio SDR

Oct 89

**TV & Radio Tracking
Pretest Module B**



FORMATIVE RESEARCH IN HONDURAS

Oct 85

Nutrition KAP Study

Apr 86

**Ethnographic Study on
ARI, CDD, & EPI**

Oct 86

**ARI Developmental
Ethnographic
FG (31!)**

**Health Provider Inter.
Mom Survey**

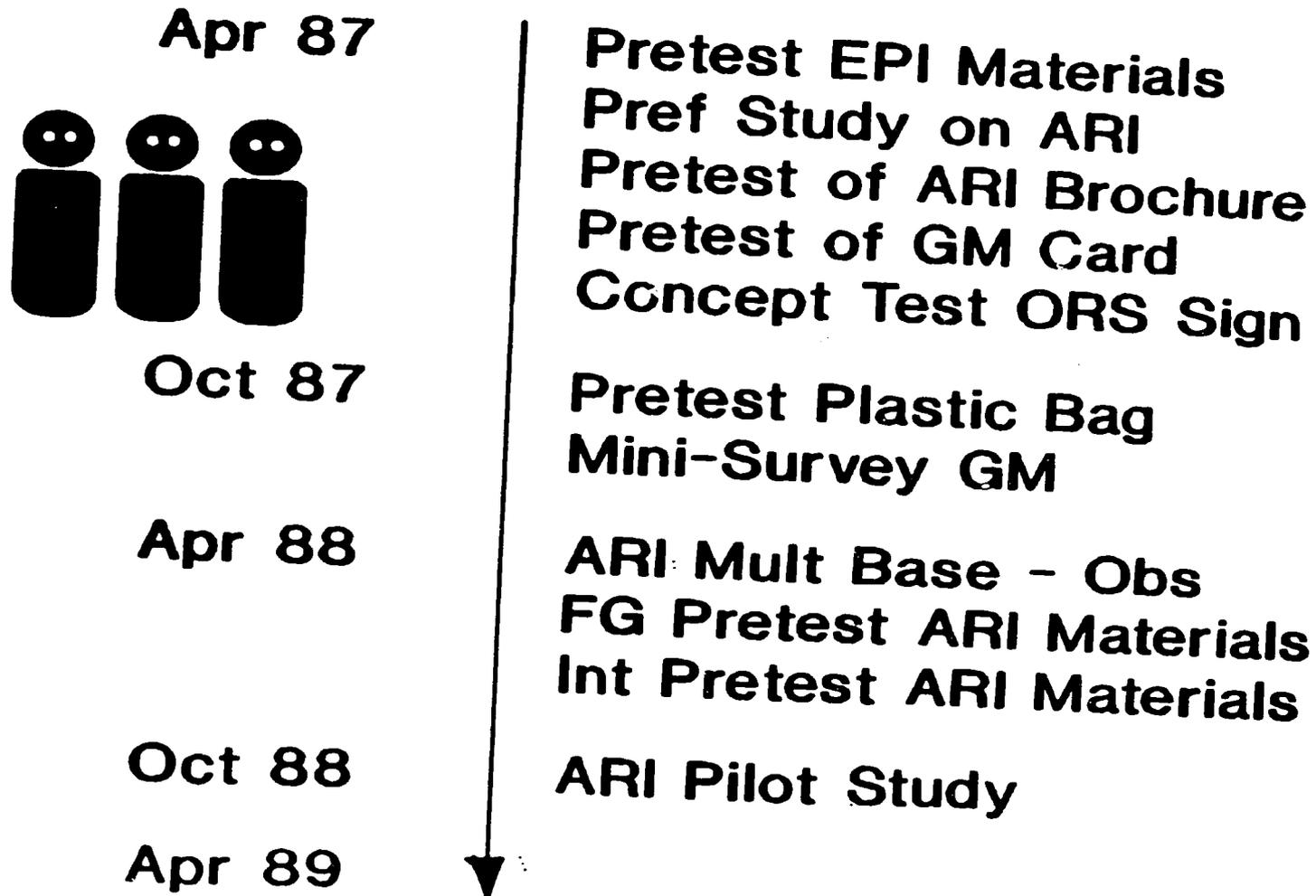
**ORS Social Marketing
Trade Overview**

Doc Study

**FG w/ORS Users & Nons
Panel-Home Product Test**



FORMATIVE RESEARCH IN HONDURAS



RESEARCH RESOURCES

HONDURAS

Govt Research
Pros

Research Co
-Aragon

NIGERIA

Academics

Train Interv
Staff

PHILIPPINES

Research Co

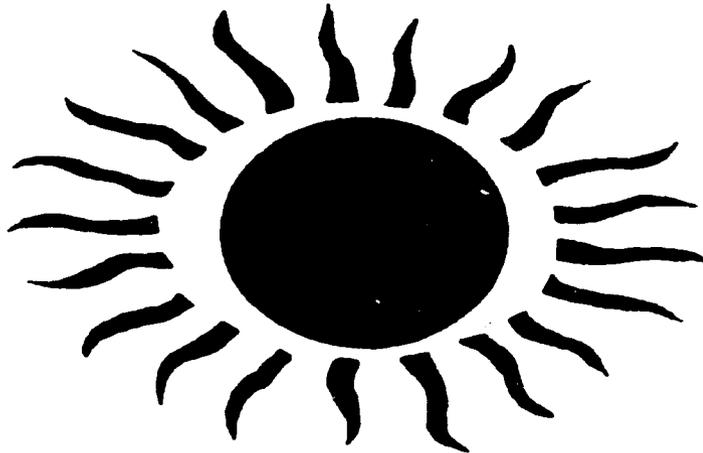
- CPI
- Kabalikat
- IMS -
- Trends



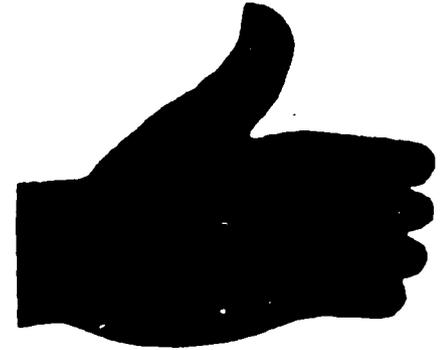
CONCLUSIONS

Broad-Based Assessment:

**HC I is a Model Program in its Use of
Formative Research.**



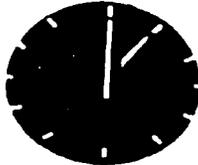
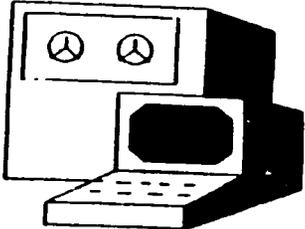
“+” SIDE



- **Research-Based Program**
- **Uses Wide Range of Techniques**
- **Each Technique Is Usually Relevant to the Research Issue**
- **Work Performed, Especially By Outside Firms and Consultants, is Excellent ***

• **Work Done by In-Country Univ & Staff Is Less So**

?’S RAISED

1. Is the research timely? 
2. Can you ever have too much information? 
3. Do we use focus groups when another less “consensus-oriented” pretest will do?



?’S RAISED

7. Do we pay attention to cultural nuances
- the didactic health worker who interviews & moderates
 - consensus cultures where a “private” conversation doesn’t exist
 - socially desirable responses?



8. Have we used a scatter-shot approach, keyed to discipline of researcher, rather than focused consistency?



5

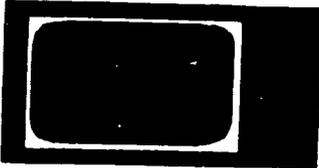
? 'S RAISED

4. Should we limit focus groups by # in a given study?
5. Do we capitalize on our formative findings across countries?
6. Have we relied on research to postpone a decision ... to make a decision?



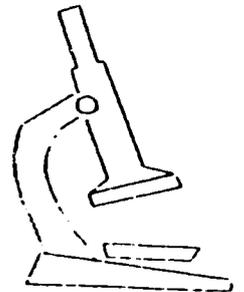
? 'S RAISED

9. Can we ban the word in-depth?
10. Should we focus more on target subgroups?

11. Do we use monitoring as formative input?

12. Can we better use pictorial, projective approaches?

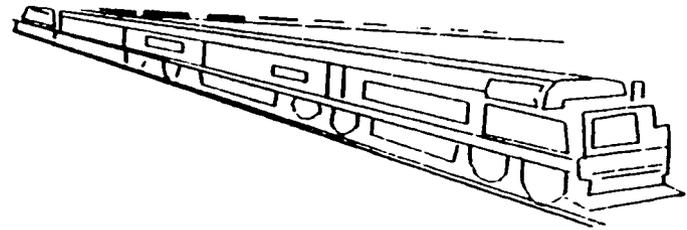
?’S RAISED

- 13. Do we consider 2ndary research?**
- 14. HC II needs to institutionalize. Can we reconcile that with fact that our “less than stellar” research has been done in-country?**
- 15. Is broader issue, not to train in-country staff to do research, but to understand, interpret and apply the results?**



Objectives for Formative Research HealthCom II

1. Streamline Methods

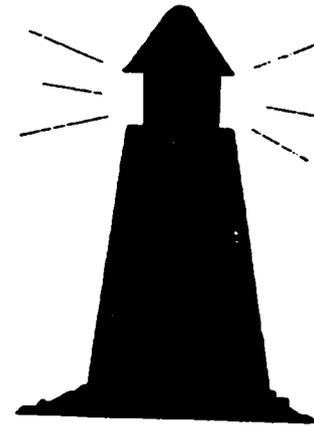


2. Institutionalize



5 Strategies

1. **Train**
2. **Modularize**
3. **Computerize**
4. **Rely on In-Country Resources**
5. **Do Ongoing Formative**



1. TRAIN!

**TRUISM... Local Public Health Workers
Will NOT Become Researchers**

RATHER... Will Learn To ...



**Value Research F
Hire Suppliers
Recognize Good Research
Interpret the #'s
Make Research Actionable**

1. TRAIN!

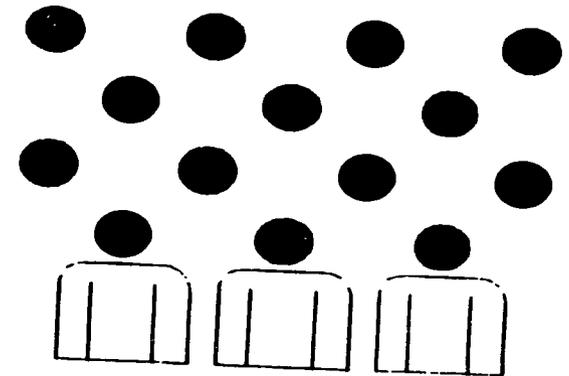
FORMAT

Seminar/Workshop

Taught By U.S. Staff

3 Days to 2 Weeks

**Presentations By In-Country
Academics & Suppliers**



1. TRAIN!



PRECEDENT

Oct '88 Seminar In Nigeria
Form Research Methods

Jan '90 Workshop In Philippines
Social Marketing

INTERNSHIP

Place Nationals in U.S. Agencies &
Research Firms for 6 Months

MODULARIZE!

From Seminars & Past Studies...

Create a Manual or Library of

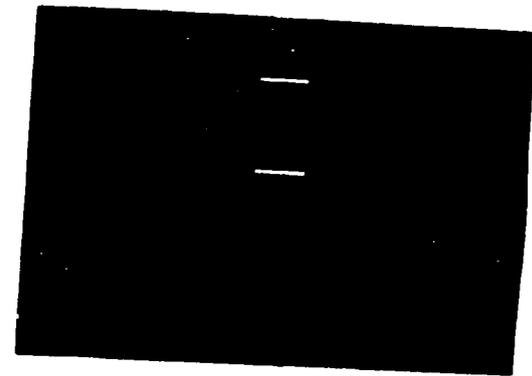
FG Outlines

Questionnaires

Cross-Tab Plans

Summary Reports

Case Histories

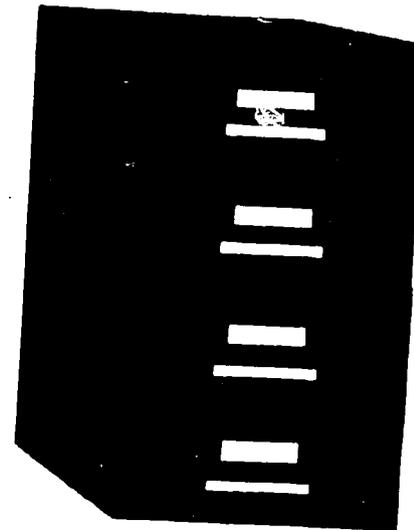


2. MODULARIZE!

Modules Serve as...

Suggestions
Guidelines
Prototypes

McD Example



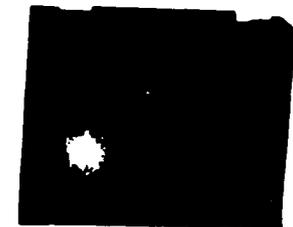
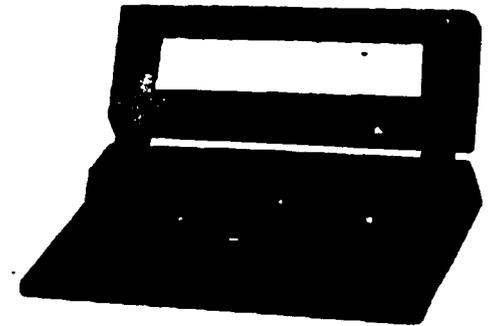
3. COMPUTERIZE!

**Laptops Hold Great Promise
for LDC's**

**Clerical Staff Can Handle
Data Entry & Coding**

**Facile Way to Communicate #'s
& Methods (U.S. to Country)**

"Expert Systems"



Rely On In-Country Research

WHO

Research Suppliers
Ad Agencies
Academics
Consultants



WHY

Advantages in Language & Culture
Conduit for Institutionalization

4. Rely on In-Country Research

HOW

Have Nationals Participate in ...

- 1. Training**
- 2. Modularization**
- 3. Computerization**

5. Ongoing Formative

**No Plans to Abandon U.S Participation
in HC II Formative**

More Selective

For New Countries

Short-Term T.A.

Projects that Push State-of-the-Art



5. Ongoing Formative

Greater Use of Monitoring

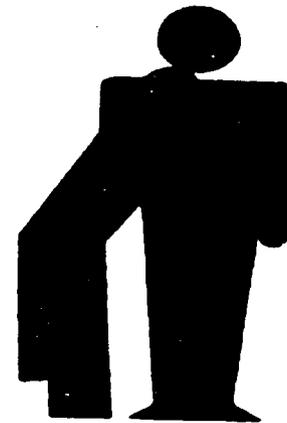
Of Extant Records

Small Scale Surveys

Dual F

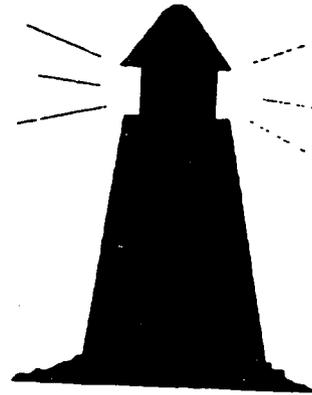
Check Progress

Use as Formative R for Next Phase



Recap of HealthCom II Strategies

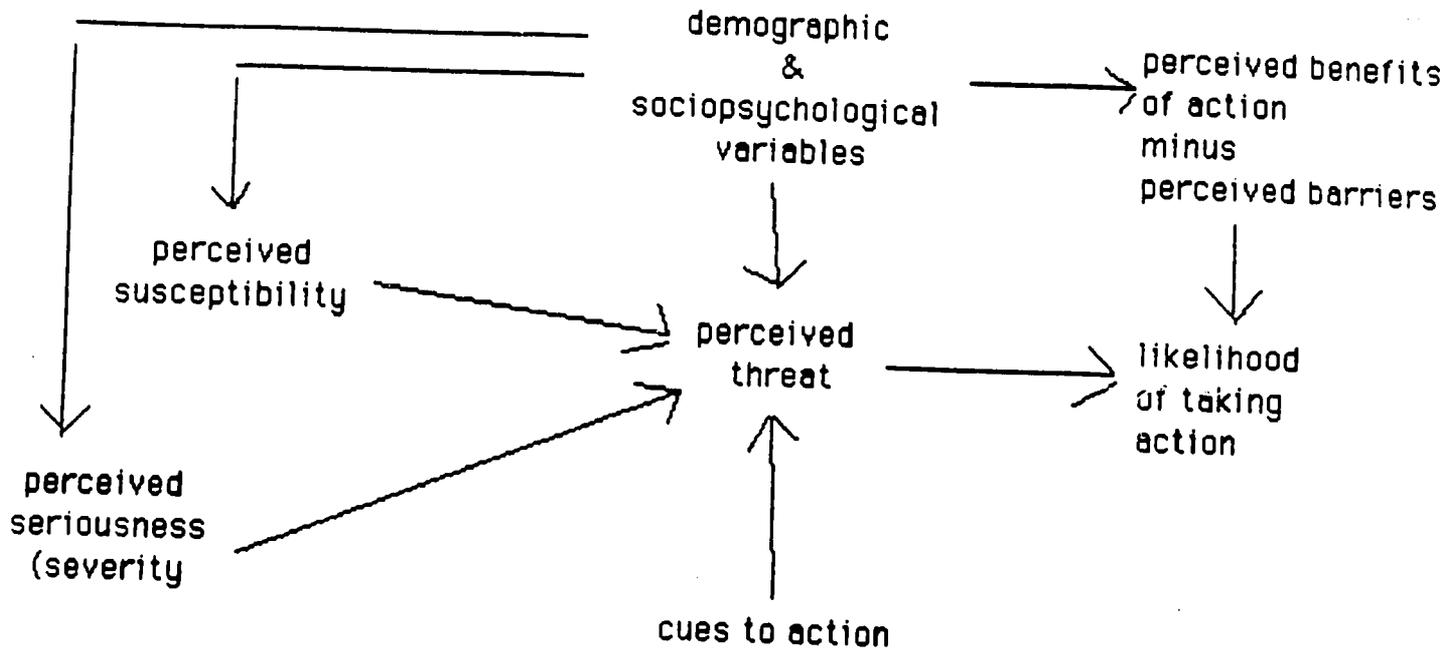
1. Train
2. Modularize
3. Computerize
4. Rely on In-Country Research
5. Do Ongoing Formative



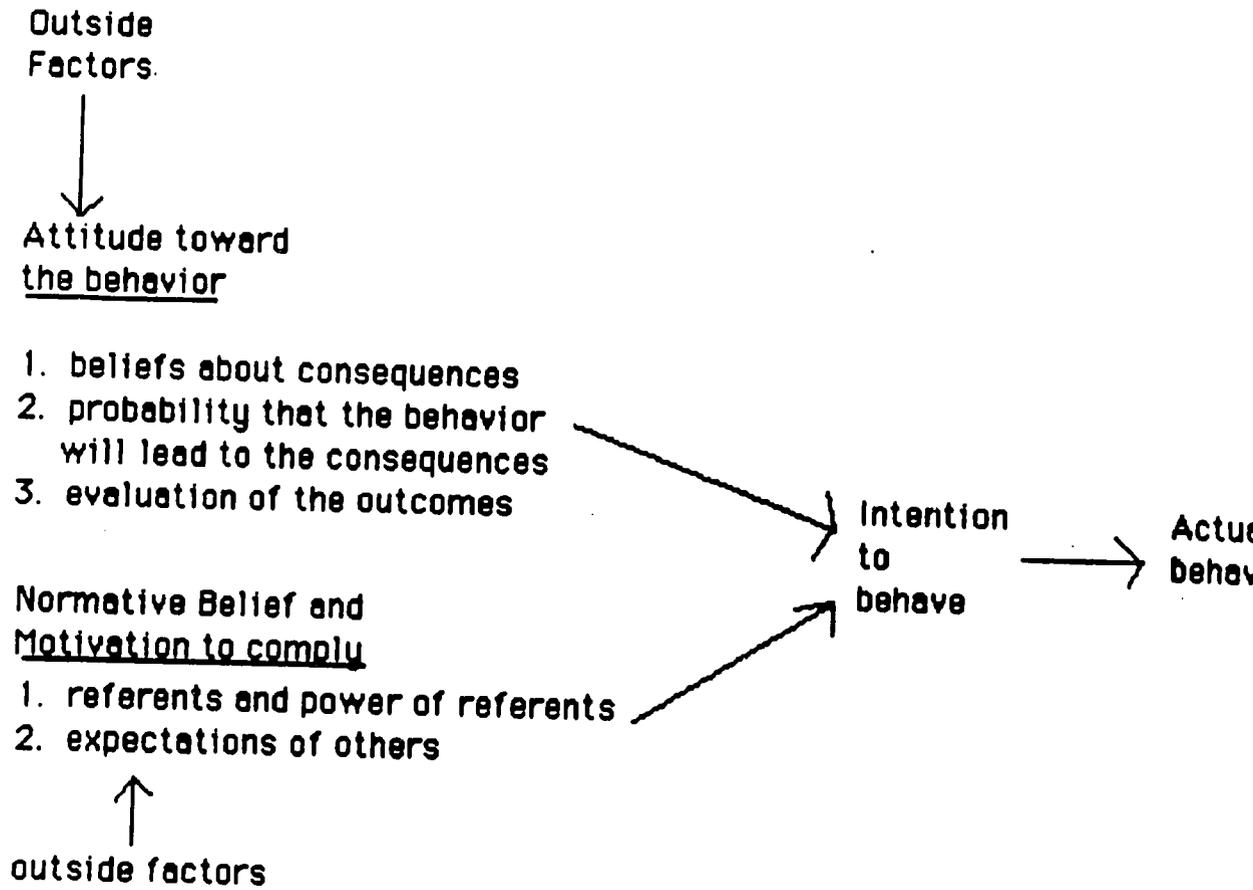
SUPPLEMENT 8

**Dr. Judith McDivitt's Presentation on
The Health Belief Model**

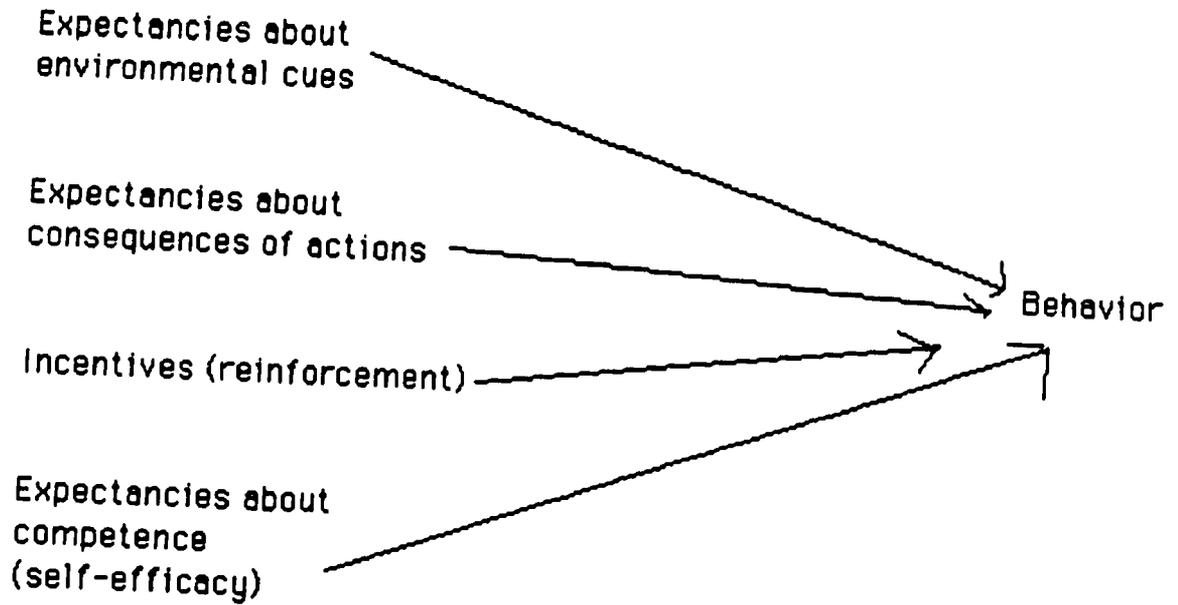
HEALTH BELIEF MODEL (1984)



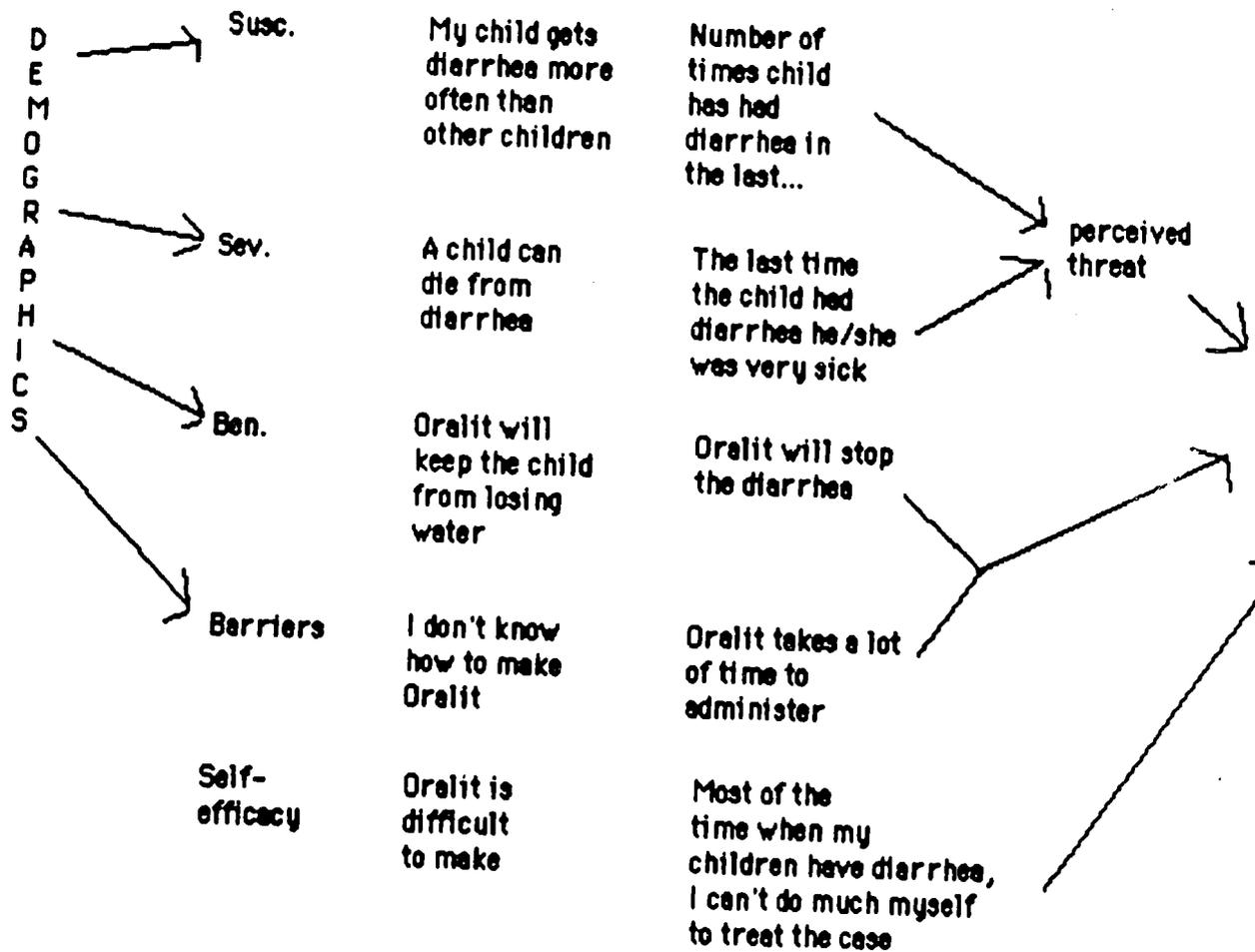
THEORY OF REASONED ACTION



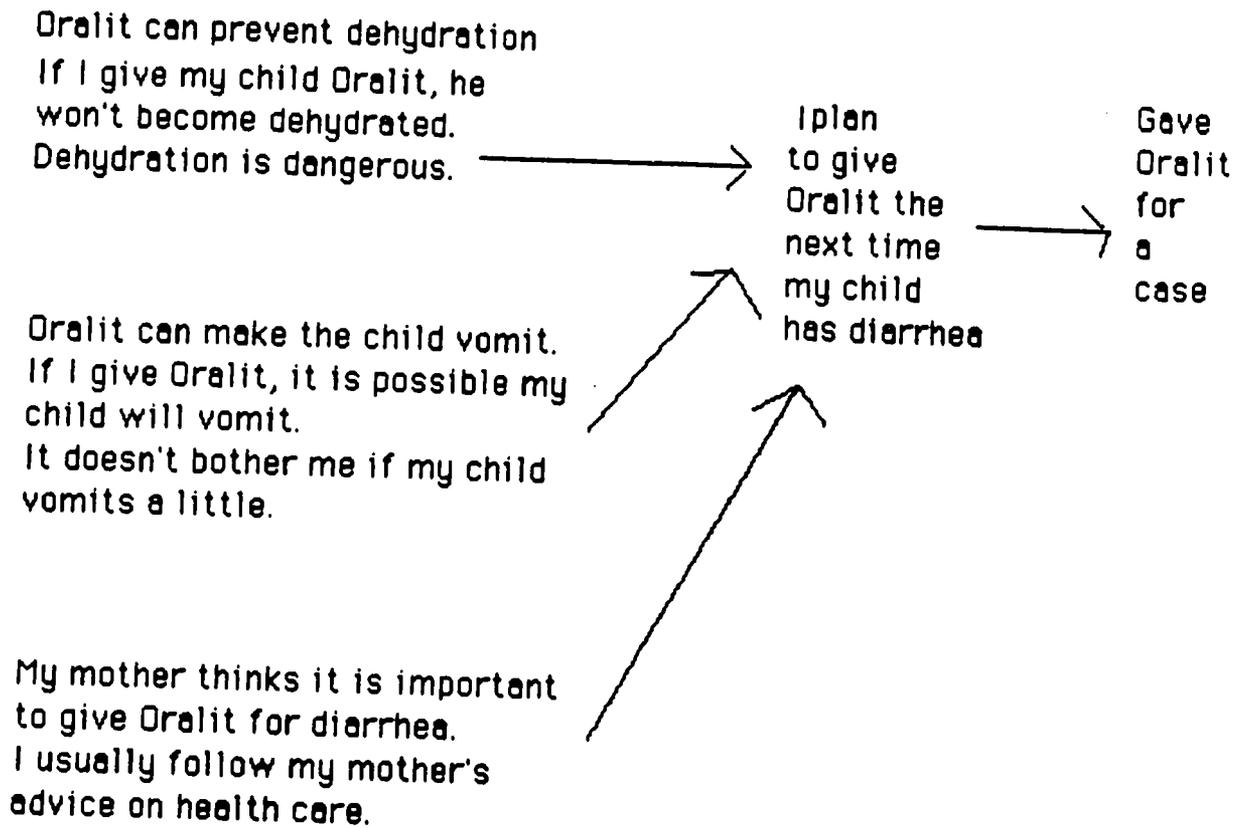
SOCIAL LEARNING THEORY



OPERATIONALIZATION OF VARIABLES
IN THE HEALTH BELIEF
AND SELF-EFFICACY
MODELS



OPERATIONALIZATION OF VARIABLES
FROM THEORY OF REASONED ACTION



CLASSES OF VARIABLES

Susceptibility
Severity/Seriousness
Benefits
Barriers/Costs
Self-efficacy
Perceived social norms
Outside or Antecedent Variables
Intention to Act
Behavior

SUPPLEMENT 9

**Mr. John Raleigh's Presentation on
Issues on Cost Effectiveness Analyses**

Design, Implementation, and Interpretation Issues

Focus on Time Frame:

Prospective Analysis

- future oriented
- cheaper and faster than pilot projects in choosing between alternative operational methods

Retrospective Analysis

- backward looking
- the most common method
- difficult to do and interpret properly to determine comparability of replicability

Focus on the Objective Function:

**Whose Benefits/Profits are maximized?
Whose Inputs/Costs are being minimized?**

Focus on Comparability:

- across investment alternatives
- across countries
- across time periods

Focus on Data Requirements:

- economic vs. accounting data
- confidence in the data (timeliness, accuracy, and completeness)
- adjusting the data
 - inflation, currency devaluation, and uncertainty re: resources required/outputs possible
 - real economic worth, shadow pricing and non-monetized costs and benefits
- surrogate data
- level of aggregation

Options for Costing and Other Financing Studies

- 1. Financial Feasibility**
- 2. Financial/Economic Analyses**
 - A. break-even analysis**
 - B. net-present value**
 - C. return on investment**
 - D. cost/benefit analysis**
 - E. cost effectiveness analysis**
 - F. resource/output analysis**
- 3. Financial Planning**

SUPPLEMENT 10

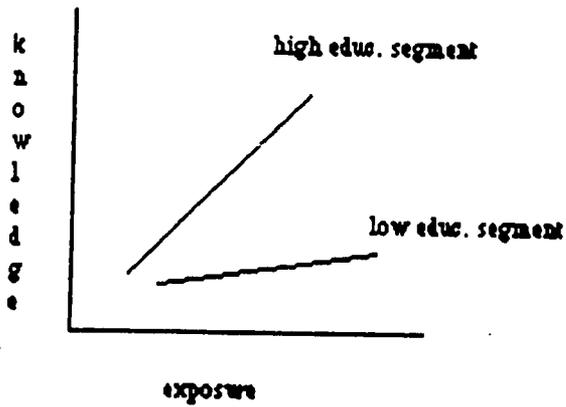
**Dr. Robert Hornik's Presentation on
Segmentation Effects**

HOW DO WE LOOK AT SEGMENTATION EFFECTS?

A. Effects on exposure to messages

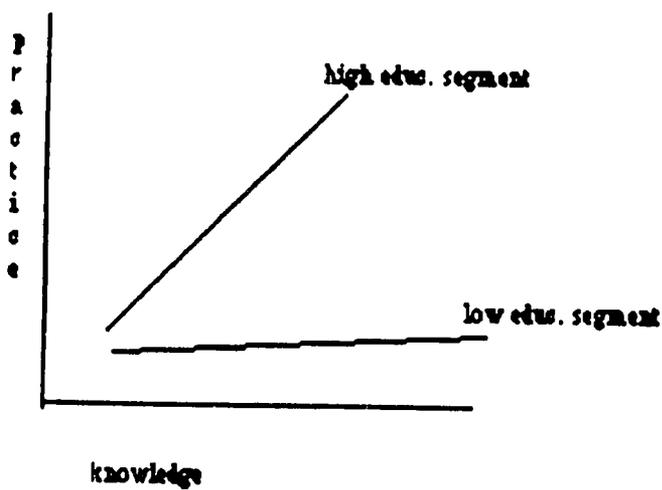
$$\text{Exp} = b_1 \text{Educ} + b_2 \text{Comm. Wealth} + \dots +$$

B. Effects on knowledge: Interaction on exposure and segment characteristics



$$k = b_1 \text{exp} + b_2 \text{educ} + b_3 \text{exp} \times \text{educ} + b_0$$

C. Effects on practice: interaction of knowledge and segment characteristics (after data)



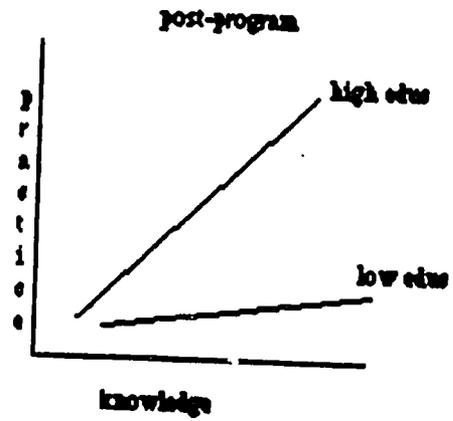
$$p = b_1 k + b_2 \text{educ} + b_3 k \times \text{educ} + b_0$$

D. Effects of practice: Interaction of knowledge, segment characteristics and access to program



$$p = b_1k + b_2educ + b_3k \times educ + b_0$$

$$b'_3 > b_3$$



$$p' = b'_1k + b'_2educ + b'_3k \times educ + b_0$$