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AN EVALUATION OF MIDWIFE TRAINING IN HONDURAS:  
REPORTS ON THE INITIAL PLANNING SESSION  
AND TECHNICAL ASSISTANCE

A Report Prepared By:  
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AN EVALUATION OF MIDWIFE TRAINING IN HONDURAS:  
A REPORT ON THE INITIAL PLANNING SESSION  
(APRIL 7 - 12, 1980)

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## PREFACE

The author would like to thank Ms. Anita Siegel and Dr. Thomas Hyslop for their efforts in preparing the groundwork for this evaluation and in making the necessary contractual arrangements.

The protocol described in this report was drafted at the end of the first week of joint meetings between personnel of the Ministry of Health (Dr. Danilo Velasquez, Dr. Januarío Garcia, Lic. Maria Teresa Cerella, Lic. Maricela Zuniga, Lic. Rosa Maria Bonano, and Dr. Jose Antonio Solis, PAHO advisor to the MOH); Anita Siegel of USAID/Honduras; Susan Hearn, special consultant on this project; and the author of this report, Jane T. Bertrand).

Special thanks are extended to these persons for their help in preparing the plan for this research study.

Jane T. Bertrand  
Assistant Professor  
Department of Applied Health Sciences  
Tulane School of Public Health  
1430 Tulane Avenue  
New Orleans, Louisiana 70112

## A REPORT ON THE INITIAL PLANNING SESSION

### Introduction: Scope of Work

The purpose of this assignment was to help the Ministry of Health (MOH) and the USAID mission in Honduras write a survey protocol to assess the adequacy of MOH training of empirical midwives.

On her first one-week trip (April 6 - 12, 1980), technical consultant Jane Bertrand met personnel from the MOH and USAID/Honduras and others to:

- determine the objectives of the study.
- Prepare a research plan specifying the methodology to be used, the sampling plan, personnel to be involved, and timetable for data collection;
- design a preliminary questionnaire (for subsequent field-testing; and,
- outline procedures for drawing the sample.

The team effort involved personnel from the Ministry of Health; USAID/Honduras; Asesores para el Desarrollo (ASEPADE) a local organization contracted to train interviewers; Susan Hearn, a technical consultant to the project (paid with USAID/Honduras funds); Jane Bertrand, also a technical advisor and author of this report. (Ms. Bertrand is working under the auspices of the American Public Health Association (APHA).

### Background

In the mid-1970s, the Ministry of Health of Honduras began a new program to extend health services to remote rural areas not covered by existing health facilities. The new system used three categories of community volunteers: the empirical midwife, a health representative (concerned primarily with environmental health), and a guardian de salud (trained to treat simple illnesses and to provide health education).

An important component of the program was the training of the personnel throughout Honduras. The training of the midwives (parteras) was especially important, because midwives are responsible for attending the majority of births in rural areas and for caring for the newborn at birth. By improving the quality of care rural women receive during delivery, the MOH expects to decrease the mortality and morbidity rates for both mothers and their babies.

During training, midwives learn:

- how to attend a delivery using hygienic practices;
- how to give preventive treatment to the newborn;  
and,
- how to recognize high-risk pregnancies and deliveries.

The program does not aim to teach novices how to attend deliveries; its objective is to improve the techniques of women who now perform this role in their communities. For the most part, these women have little or no formal education, cannot read and write, and are middle-aged or older. They are, consequently, more difficult to train.

The training of midwives first began in 1976. Since then, the training has been modified. In June 1978, a six-day course was added. The course, given by a professional nurse in a local MOH health center is 80 percent practice and 20 percent theory. It is complemented by a monthly refresher course, (modulo) in which key topics are reviewed and new materials are presented. The training covers:

- normal home delivery;
- care of the newborn at birth;
- post-partum care of the mother;
- health education for the mother;
- promotion of breastfeeding;
- referral of clients to other services; and,
- information on family planning.

It is estimated that each of the 20,000 communities in Honduras has approximately one midwife. The MOH estimates that since 1976, it has trained approximately 4,000 midwives, and at least 2,000 of these women have been trained under the new system initiated in June 1978.

The objective of this assignment was to design a research program that would provide feedback on this program. The problems in conducting an evaluation of the training program are outlined below. The solutions proposed during the initial week of planning in Honduras are also described.

## Observations and Findings

### A. The Research Design Methodological Considerations:

The major premise of the midwife training program is that by improving the quality of the midwife's care, the maternal and infant mortality rates (attributable to inadequate care during delivery) can be decreased.

Although some data are available on mortality and morbidity rates in rural Honduras, they cannot be analyzed for applicability to the midwife training program. This type of analysis would require an experimental or quasi-experimental design (e.g., one with pretest/post-test measures in an experimental and control population). Such a design does not exist, and it is not feasible to measure the impact of midwifery training on mortality and morbidity.

One way to measure the impact of training is to evaluate, by direct observation, the quality of attention the midwife gives to a delivery. Ideally, the evaluator should observe the midwife before and after training; or, as an alternative, compare one group of trained midwives with one group of untrained midwives (control group). This type of evaluation requires the observer to be present for several days, if necessary) in the community at the time of the delivery. The observer would have to be trained and be experienced in attending deliveries to be able to evaluate the midwives. The methodology is not practical if one calculates the time and money needed to carry it out. Moreover, the women giving birth and their families may react negatively to the observer.

Another alternative is to simulate a delivery using a model. This is more practical than the other methods but has several limitations:

1. It is not a natural or real situation; the midwife may not be able to perform her job in her usual manner.
2. The midwife may perform "correctly" because she is being observed. She may not be doing her job in her usual way.
3. The observer's evaluation would be subjective and could be influenced by any number of factors (weariness; personal relationship with the midwife, etc.).

In brief, this methodology provides a more direct measure of the behavior of the midwife, but it has limited application. A further drawback is that no one from the MOH is available to act as observer at any time in the near future.

In recognizing the problems noted above, the project advisors recommended that the MOH evaluation focus primarily on knowledge acquired and practices reported by the midwives. Obviously, a person may know and understand a given practice but not use it in her work. The approach is limited, and is recognized as being so, but it can be used to determine whether the training has had an effect or benefit, if only in increasing knowledge.



To obtain the necessary data a questionnaire will be administered to one group of trained midwives and one group of untrained midwives. The responses of the two groups will be compared to determine the effect of the training (i.e., knowledge acquired and reported practices in delivering a birth). Moreover, the survey will provide feedback on other aspects of the training. The information will be useful in modifying the various components of other training programs.

#### B. Objectives of the Study

The objectives of the study are:

1. To compare the level of knowledge of trained midwives with that of a group of untrained midwives (control group).
2. To determine the importance trained midwives attach to the supplies (maletin) they receive during training and the use they make of those supplies.
3. To record midwives opinions about and attitudes toward the six-day training.
4. To determine why midwives do not attend the monthly refresher course (modulos).
5. To assess the trained midwife's perception of her acceptance by her own community.
6. To obtain descriptive profiles of the socio-demographic and personal characteristics of trained and untrained midwives.

#### C. Variables to be Included in the Study

A series of questions related to each of the objectives has been prepared and will be included in the questionnaire (see Appendix B). Only trained midwives will be asked to respond to the questions corresponding to objectives 2-5; both groups will be asked to answer the questions corresponding to objectives 1 and 6.

#### D. Sample

The sample will cover 200 trained midwives and 200 untrained midwives. (The sampling plan was prepared using the lists of midwives who have been trained since June 1976). The trained midwives will be randomly selected from different areas of Honduras. The controls will be selected from areas with similar socio-characteristics and where no training has been carried out.

## E. Data Collection

The responsibility for the selection and training of interviewers has been subcontracted to a local group, "Asesores para el Desarrollo" (ASEPADE) the Executive Director of which is Celina Kowas. MOH staff will participate in the interviewer training sessions. They will subsequently be responsible for supervising the collection of data in the field.

Susan Hearn, who has recently received her M.P.H. from the Tulane School of Public Health, will work with the team during the first few weeks of data collection. She also will devise a system for coding the data and transferring it to cards (or directly onto discs) for data processing.

## F. Current Status of the Project

Since Jane Bertrand left Honduras on April 13, 1980, there have been several delays in the project. Although the guidelines for the study were prepared jointly by all the parties involved, the MOH decided that it wanted to have a more substantial role in the study. The draft of the protocol was to be revised and modified by the MOH group. The group devoted more time to this task than was expected. It is hoped that the consequent delays will be justified by the MOH group's increased involvement in and identification with this study.

(In retrospect, it would have been preferable to have devoted two or three weeks (instead of one week) to initial planning. Jane Bertrand could not, however, be away from Tulane University for more than a week. The group continued its meetings, in any case, after Ms. Bertrand returned to the United States.)

## Recommendations

The USAID/Honduras mission requested that Jane Bertrand return to Honduras the week of June 8-15, 1980, to visit the field, discuss problems, review the coding system which is being developed, and further assess the capability of local facilities and available personnel to process data. During her visit, Ms. Bertrand should discuss the "revised" timetable for the study and determine what mechanism should be used in the final processing and analysis of data. The USAID/Honduras mission is hopeful that the APHA will be able to cover a third visit by Jane Bertrand in the fall of 1980 so that she may follow through on the data analysis for this study.

The APHA should respond affirmatively to mission's request to cover two additional trips by Ms. Bertrand. The first trip would be for six days, the second for approximately two weeks. USAID/Honduras intends to submit soon a formal request for assistance.

**Appendix A**  
**LIST OF PERSONS CONTACTED**

## Appendix A

### LIST OF PERSONS CONTACTED

#### USAID/Honduras

Dr. Thomas Hyslop, Chief, Division of Health and Nutrition  
Ms. Anita Siegel, Public Health Advisor  
Dr. John Kelley, Social Science Advisor

#### Ministry of Health

Dr. Alberto Guzman, Director General of Health  
Dr. Danilo Velasquez, Director of Maternal Health  
Lic. Maria Teresa Cerella, Chief Supervisor, MCH  
Dr. Januario Garcia, Head, Research Block,  
Division of Epidemiology  
Dr. Jose Antonio Solis, Advisor, PAHO  
Lic. Maricela Zuniga, Department of Nutrition  
Lic. Rosa Maria Bonano, Nurse Supervisor,  
Community Participation Program

#### Asesores para el Desarrollo (ASEPADE)

Lic. Celina Kawa, Executive Director  
Lic. Melba Zuniga, Sociologist

#### Personnel Associated with Midwife Training

Maria Trinidad Rivera Martinez, Auxiliary Nurse,  
Health Center in Sabana Grande  
  
Maria Elena Hernandez, Auxiliary Nurse, Health  
Center in Nueva Armenia  
  
Antonieta Ramos, Midwife (trained at Nueva Armenia)

Appendix B

ESTUDIO SOBRE PARTERAS EMPIRICAS  
(First Draft Questionnaire)

AN EVALUATION OF MIDWIFE TRAINING IN HONDURAS:  
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## EXECUTIVE SUMMARY



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Under the auspices of the American Public Health Association (APHA), technical consultant Jane T. Bertrand went to Honduras to help the Ministry of Health (MOH) design and execute an evaluation of a MOH training program for midwives. The research project is being conducted by staff of the MOH; a representative of USAID/Honduras; ASEPADE,\* a local group responsible for data collection; and two technical advisors (one of whom is the author of this report).

During the first trip (April 7-12, 1980), the group defined the objectives of the study, selected a methodology, and designed a preliminary questionnaire. The group had intended to revise the objectives, methodology, and questionnaire and submit its plans for approval. If the project was approved, ASEPADE was to have begun the field work. This action was not taken, however, for several reasons.

Despite their efforts, the advisors were unable to finalize the protocol and questionnaires as soon as they had hoped. The Director General of the MOH and the head of the Maternal Health Division recognized that the project should move forward, but did not want to risk alienating the members of the working group by pressuring them directly.

It appears that the project can and will be completed, although the original advisors will not be able to guide it to completion because of the initial delays. The MOH is still very much interested in completing the study. ASEPADE is well respected for its ability to carry out field work. Furthermore, it is willing to revise its contract to include data analysis. This change would provide continuity to the project and assure a final product.

Several problems which may delay the project should be noted. One, it has not been determined whether the MOH will be able to complete the two questionnaires which ASEPADE intends to use in the field. Two, if the transportation (to be provided by the MOH) for field staff proves to be unreliable, there may be further delays. Three, local AID/Honduras personnel believe that ASEPADE's strength is in data collection, not analysis.

In light of the above conditions: the contract with ASEPADE should be expanded to cover all remaining aspects of the study, including data collection, processing, and analysis. If the study group wishes to include the advisors in the analysis, negotiations for further technical assistance could be completed at a later date.

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\* Asesores para el Desarrollo

## A REPORT ON TECHNICAL ASSISTANCE

### Background of the Current Assignment

In April 1980, technical consultant Jane T. Bertrand spent six days in Honduras, where, under the auspices of the American Public Health Association (APHA), she helped design a research project to evaluate a training program for midwives. Training midwives has been one of the chief activities of the Ministry of Health (MOH) of Honduras since 1976. The Ministry is particularly interested in receiving direct feedback on this project.\*

The proposed study was to be designed and conducted by several collaborating parties including:

- a group from the MOH;
- a representative of USAID/Honduras (Anita Siegel, R.N.);
- a technical advisor in the coding, processing, and analyzing of data who would remain in Honduras for three months (Susan Hearn, M.P.H.; paid under a contract with USAID/Honduras);
- a local private organization, Asesores para el Desarrollo (ASEPADE), originally contracted to recruit and train interviewers and collect data; and,
- a technical advisor in study design, data analysis, and interpretation who would make two or more short trips to Honduras (Jane T. Bertrand, Ph.D).

During the six-day trip in April 1980, these groups (except ASEPADE) held a series of working sessions during which they defined the objectives of the study; prepared a study design; and design a preliminary questionnaire. (The results of these meetings are summarized in Bertrand's trip report to the APHA, dated May 14, 1980, published in July 1980.)

It was expected that after this groundwork was completed, the group would revise the questionnaire, draw the sample, and discuss and conclude any other pending business. If the group was satisfied with the questionnaire and study design, it would then contact ASEPADE, which would take the necessary steps to initiate the fieldwork. These steps were not taken, however, because of initial delays and other problems.

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\* For background on this study see, Jane T. Bertrand, "An Evaluation of Midwife Training in Honduras: A Report on the Initial Planning Session, April 7-12, 1980," American Public Health Association, July 1980.

## Observations and Findings

### A. Delays in Initiating Fieldwork

Fieldwork was delayed for the following reasons:

1. When this project began, the MOH had not clearly specified who was to work on it. Consequently, personnel changed several times during the first week of planning.
2. After the first week of planning, there were further changes in personnel. One person who had been deeply involved in the project decided to leave her job at the Ministry. The head of the project had to be out of the country for several weeks. Two new members were assigned to the project, but neither attended the first week of meetings.
3. The MOH group felt strongly that a formal protocol should be written for the project before the fieldwork began. Most of the protocol was written from scratch, although some parts of a document that had been prepared earlier were used. It took approximately five weeks to write the protocol. On several occasions, Siegel and Hearn questioned the need for such a detailed, perfected document, because it was delaying the initiation of the fieldwork. The MOH group felt that it was extremely important and that the time spent in preparing the document was fully justified.
4. The group worked together for approximately three weeks to revise the questionnaire. Revision was thought to be necessary, though staff had expected to devote less time to the task.
5. At the end of the eight-week period devoted to rewriting the protocol and revising the questionnaire, consultant Bertrand returned to Honduras (June 9-13, 1980). The MOH group believed then that the protocol and questionnaire were in acceptable form, but, it later realized that the questionnaire had not been reviewed adequately. One problem was that new personnel had been brought in to work on the project after the original questionnaire had been prepared, and they may not have considered it their own work, even though they had participated in the three-week revision session.

6. Several times staff discussed interviewing a small sample of women who had been attended by the midwives performance in the community. Although the project advisors were not enthusiastic about a community survey (they noted the difficulty of obtaining a truly representative sample of women attended by midwives, which would have been preferable to interviewing only those women whose names the midwife provided), the MOH group was interested in taking this survey. A second questionnaire must now be designed and administered to women who have been recently attended by midwives. Fieldwork will be delayed until this second survey is ready for use.

## B. Efforts to Move Forward

To move the project forward, the MOH group met with the advisors to discuss and reach a consensus on the questionnaire. Unfortunately, they did not agree on the survey instrument, thus delaying the project further. Some members of the MOH group felt that entire sections of the questionnaire should be redone, but the advisors at that point were unwilling to spend more time on a new questionnaire. They felt the current version (with revisions by the MOH group) was a technically sound instrument.

The situation was discussed with Dr. Danilo Velasquez, head of the Division of Maternal Health and with Dr. Alberto Guzman, Director General of the Ministry of Health. Both were sympathetic to the need to move the project forward and were determined to hasten the process and submit the questionnaire to ASEPARE as soon as possible. ASEPARE has yet to receive the questionnaire, and it is not known how much longer fieldwork will be delayed.

In summary, the project is progressing at a much slower pace that had been expected. The main counterpart on the project, Dr. Danilo Velasquez, recognizes this but does not want to risk alienating members of the MOH group by trying to accelerate the pace of work. Despite their efforts the AID representative and advisors have not been able to finalize the protocol and questionnaires and guide the fieldwork as soon as they had intended.

Given the delays and other problems, one should determine what can be expected of this project in the future. Some positive aspects of the project and potential problems are described below.

## C. Positive Aspects

Several conditions favor the successful completion of the project.

1. The MOH is still enthusiastic about the study and considers it to be an important project.
2. ASEPARE has agreed to test the questionnaire, select and train the interviewers, supervise and carry out the fieldwork, code the questionnaires and revise them for errors, and arrange for the required printing. The organization is highly respected for its ability to carry out such tasks. Once the questionnaire is in its hands, the fieldwork should run smoothly and on schedule.

#### D. Potential Problems

There may be further delays if the following potential problems are not avoided.

1. The current questionnaire for the midwife survey is still being revised. The project advisors feel that the current version (with modifications by the MOH group) is a sound instrument and would provide the data needed to fulfill the stated objectives of the study. If some of the current items are replaced by new items not directly related to the objectives of the study, the questionnaire may be less effective than it now is.
2. If there are further long delays, ASEPADE may become less enthusiastic about and less willing to take part in the study.
3. The MOH is responsible for providing transportation for the interviewers until they complete their fieldwork. Vehicles from each health region will be requested in advance and a member of the MOH will accompany the interviewer team. Past experience suggests that fieldwork will be detailed if for any reason this transportation is not made available when needed.
4. It was originally planned that the advisors (Jane Bertrand and Susan Hearn) would play a major role in designing the plan for analyzing, processing, interpreting, and preparing a final report on the data. This would work closely with a counterpart from the MOH (this person has yet to be selected). Given the delays in the project to date, it may not be possible to follow this plan, because both advisors have other commitments. An alternative plan to use ASEPADE's services has been prepared to ensure that a final product is provided. The AID/Honduras mission would prefer that the advisors participate in the analysis, because of their previous experience in data processing, analysis, and interpretation. It is doubtful that the advisors will be able to do so.

## Recommendations

The following action should be taken:

1. The ASEPADE contract should be extended to cover all subsequent aspects of the midwife study. (Items marked with an asterisk are included in the current contract.)
  - a.\* Revise and reorder the questionnaire as necessary.
  - b.\* Train eight interviewers for a survey. (Four will be selected for the job).
  - c.\* Pretest the questionnaire and repeat the pretest (as necessary) among midwives who do not fall in the sample.
  - d. Prepare a set of instructions (instructivos) for each question (including the rationale, way to present question, probes, etc.).
  - e.\* Conduct all interviews specified in the study design.
  - f. Prepare a codebook for all open-ended questions.
  - g. Code the questionnaires in the field according to the coding instruction in the questionnaire and in the codebook.
  - h.\* Have the field supervisor review and approve all questionnaires in the field.
  - i. Arrange for all questionnaires to be key-punched.
  - j. Prepare a plan to analyze the data.
  - k. Obtain the necessary computer runs that provide the data specified in the plan of analysis (i.e., prepare a computer program).
  - l. Correct errors (e.g., values out of range) detected in the initial run by manually reviewing the questionnaires.
  - m. Obtain additional runs as necessary to further analyze the data.
  - n. Interpret the computer printouts.
  - o. Prepare a final report.

It would be desirable to have a member of the MOH team work with ASEPADE to design process and analyze the data.

2. If the MOH group or USAID/Honduras would like Bertrand and Hearn to assist with the analysis, it should contact APHA (or some other agency) to make the appropriate arrangements.



**Appendix A**  
**LIST OF PERSONS CONTACTED**

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Minsiterio de Salud

Dr. Alberto Guzman, Director General  
Dr. Danilo Velasquez, Head, Division of Maternal Health  
Dr. Jose Antonio Solis, Advisor, PAHO  
Dr. Richard Molina, Division of Maternal Health  
Lic. Dilema Moreno, Division of Nursing  
Lic. Ma. Teresa Cerella, Supervisor, MCH  
Lic. Gustavo Aguilar, Administrator, MCH Division  
Lic. Gerardo Pavon, Computer Programmer

USAID

Dr. Thomas Hyslop, Chief, Health and Nutrition  
Ms. Anita Siegel, Public Health Advisor  
Ms. Katherine E. Nimmo, Public Health Advisor\*

ASEPADE

Celina Kawas, Sociologist, ASEPADE

Other

Ms. Susan Hearn, Technical Advisor,  
April 7 - July 10, 1980

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\* As of August 1980.