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Collaborative Research Support Program (CRSP)

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TRIP REPORT

MEXICO CITY, MEXICO

August 14 - August 28, 1986

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TRIP REPORT: CRSP MEXICO PROJECT

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Lindsay H. Allen and Gretel H. Pelto

Travel: Storrs, Connecticut to Mexico City

Purposes: to review project matters with respect to data management, data analysis plans and progress, the preparation and translation of the methodology manual and the budget to the end of the project. We feel it is very important during this final year of the project to maintain effective communication between the Connecticut and Mexico components of the project, which requires direct meetings as well as other forms of exchange.

In addition to the Mexican Principal investigator, Dr. Adolfo Chavez, the core project staff now working in Mexico consists of the Data Management Unit (with Ramon Lira, data manager; Carlos Cevallos, statistician; Irene Fetter, coordinator and the Area Chiefs: Mirna Vara (morbidity); Elsa Molina (coordinator); Luz Maria Meneses (social data); Alba Sosa (diet); Vicki Alanis (activity) Eulalia Martinez (psychology) and Angeles Cervantes (laboratory). A series of meetings -- as a full group, in small subgroups and with individuals -- were held during this visit.

DATA MANAGEMENT

We began our meetings with a description of data management activities at Connecticut-UMass. The system we had worked out earlier with our Mexican colleagues to avoid duplication of efforts in data checking and cleaning appears to be working. We explained the nature and structure of the data analysis files

that are being created to facilitate analysis with SAS for the microcomputer, and illustrated these with several samples, including the descriptive documentation prepared by Ed Stanek and his staff.

The group in Mexico feel that the division of labor in data management between Mexico and Connecticut is working well. The Area Chiefs will receive cleaned, labeled data files from Connecticut on microcomputer diskettes. Through the Pan American Health Organization we hope to provide the Institute with access to SAS for the microcomputer, giving the Area Chiefs an important opportunity to learn the fundamentals of statistical analysis in the coming months. The availability of data sets that are ready for analysis will greatly facilitate achieving the goals they have set (see below), as well as assuring that the groups in Mexico and Connecticut are using exactly the same data files.

Data Transfer to Connecticut

When we arrived in Mexico, another tape of visually-checked, corrected data was ready to be carried to Connecticut. A second tape will be ready at the end of September. A calendar of the schedule for the transfer of remaining raw data was reviewed with Mr. Lira. (A copy is attached to this report.)

The data management team in Mexico has done an admirable job of maintaining the flow of data, inspite of two setbacks:

- 1) The long-anticipated move of the IBM Scientific Center has finally taken place. This not only caused a hiatus in access to the IBM computer during the move itself, but the new location is more than one hour from the Institute. Thus, instead of the previous 30 - 45 minutes of total travel time, staff now spend

two hours or more in travel. As described in previous reports, the IBM equipment plays an important role in data management, so that the "lost time" in travel simply has to be figured into the total time requirements for data management activities.

In July Dr. Loraine Schlaepfer, head of the data management unit, received a leave of absence from INN, a request based on personal reasons, which was granted with short notice. Her able assistant, Ms. Irene Fetter, assumed the coordination responsibilities, but a shift of this nature is inevitably disruptive of scheduled flow of work.

Microfilming of Raw Data

Microfilming of raw data has continued at the field site at Solis, which is also still the site for visual checking of original data against computer printout. The massive microfilming task is proceeding efficiently. As of September 1, the following data areas have been completely photographed:

1. Food Intake and related Diet Data
2. Psychology Data for all Study Types
3. Mother-Child Observations
4. Weekly Morbidity Monitoring Records
5. Socio-economic Status Interview Protocols

At the present rate of work, it is anticipated that all project records, including the social workers' files on households, will be completed by the end of November, at the latest.

PREPARATION OF METHODOLOGY MANUALS

The methodological record of the project consists of many

parts, including the field manuals, data collection instruments, data quality control protocols, and narrative accounts of field procedures. The process of consolidating these into a single document began during the summer of 1984 and has continued, as time permitted, during this year.

In this visit, we reviewed the manuscript content, area by area, with the Area Chiefs. The information was updated and corrected for each area of the study, including sample selection and maintenance.

DATA ANALYSIS

The Work of the Area Chiefs

During the summer the staff at INN held regular seminars in which each area of the study was reviewed with a focus on the formation of hypotheses of special interest to the Area Chiefs. The Area Chiefs also received lectures on statistics and analytic strategies from Dr. Carlos Cevallos.

Prior to our visit most areas of the study had gone through this review process. The topic scheduled for the first week of our visit was the analysis of socio-economic and migration data. From the formal presentation, by Area Chief Luz Maria Meneses, and the discussion that followed, it is clear that the Area Chiefs have learned an impressive amount about the conceptualization of research questions as well as the management and supervision of fieldwork. In a general discussion about scaling techniques and alternative modes of constructing variables, the Area Chiefs participated actively. We discussed the value of constructing a basic set of "intervening variables" (such as SES, Degree of Reliance on Farming, and Sanitation

Level) that could be used by all the Area Chiefs as they found these useful to their own analyses.

Dr. Chavez has organized the work of the Area Chiefs during the analysis stage by asking each of them to prepare one article that examines a hypotheses internal to the area for which they were responsible; that is, the hypothesis concerns a relationship between two or more variables primarily within a data set. At this time the level of specificity in the projects varies somewhat from one Area Chief to another. As can be seen from the list below, these projects are quite ambitious, particularly in view of the previous academic training of most of the Area Chiefs. We anticipate that consider work on our part will be necessary to help the staff achieve their goals.

1) Area Chief for Social Data, Luz Maria Menesis, is examining the relationship between material possessions (as an indicator of general economic status of a family) and amount of time the male household head migrates.

2) In the area of food intake, Elsa Molina is going to relate quantity of staple foods consumed to season of the year, as defined by the agricultural cycle. She is also working with L. Allen and A. Sosa to publish a new diet methodology manual for INN.

3) Area Chief for diet, Alba Sosa, is analyzing the first dietary validation study in detail, comparing the results of the observation and recall data with respect to specific foods and nutrients and types of recall errors.

4) Vicki Alanis, Area Chief for activity measurement, is

planning to examine maternal time allocation and activity patterns, relating these to family characteristics.

5) The psychology Area Chief, Eulalia Martinez, is especially interested in the Bayley results and wants to examine the patterns of preschooler responses in Mexico to the standardized scores, which are based on children in the United States.

6) Dr. Mirna Vara, the Area Chief for morbidity, is developing measures of morbidity experiences, which she plans to examine in relation to household socio-economic status and sanitation.

During our visit we worked with the Area Chiefs on their planned analyses, helping them to develop operational definitions of variables and an outline of the next research steps.

Dr. Cevallos is working with the Area Chiefs to help them with the statistical analysis. During our stay in Mexico we met with him and Ramon Lira (Programmer) to develop an outline of the analysis steps that are required to assist the Area Chiefs to achieve goals. The Area Chiefs are learning Wordstar, as a word processing system, and they will write their papers at the computer.

Analysis Plans For Year VI

A primary purpose of this trip was to plan Year VI analysis activities with Dr. Chavez. To this end, several tasks were carried out:

1) We agreed on a division of responsibility among the three PIs for supervising the quality of the final data sets. These responsibilities include the development of analytic variables (to be used in testing primary CRSP hypotheses) and their documentation.

2) We agreed on a division of responsibility for supervising the analysis and publication of other investigators, including co-investigators.

3) We reviewed the publication and data access policies of the SCB.

4) We summarized the priorities for analyses by the PIs with reference to the SCB decisions of the February, 1986 meeting at UCLA.

Management and Analysis Issues in Specific Areas

In the course of the trip, a number of specific issues and problems related to data management and analysis were discussed. These included the following:

1. We reviewed and approved the coding protocol for the detailed clinical and reproductive histories, which are too massive to be entered as raw data.

2. We agreed that the subroutine on case following of morbidity episodes was not a high priority for analysis at this time.

3. We discussed the severity rating developed by Dr. Neumann and reviewed the proposals for various types of severity measures

that are being developed by Dr. Vara.

4. We outlined our proposal for creating Daily Consumption Summaries that include information on the consumption of nutrients and foods by each individual. Since these represent a major data reduction from the full Food Intake Interview (ie. they do not contain recipes, etc.) it is important that these summaries satisfy most analytic needs. The original data will, of course, be preserved on the raw data tapes. The group in Mexico added ideas for additional foods to be carried in the Summaries.
- 5) We discussed how to analyze the second (end of project) food intake validation study, and wrote extensive notes on the procedures used in the field.
- 6) We reviewed the interviewing process that was used to collect data on food intake of breast fed infants and constructed an operational "weaning date" file.
- 7) We determined that, as we had requested in January, RMR data were collected from many of school children in the sample (n= 65).
- 8) We discussed alternative uses of the bacteriological and parasitological data in the morbidity analyses.
- 9) We determined that the laboratory analyses that are completed include: hematology, ferritin, T-lymphocytes and blastoid transformation. Transferrin and prealbumin analyses will be completed by mid-October. Following discussions with Drs. Watson, Neumann and Keusch, we made a decision not to measure other immune factors.
- 10) We brought back to Connecticut 500 serum samples, which had

been stored in order to be analyzed for zinc at no cost to the project. We also brought back milk samples for future laboratory analyses.

Budget

This trip coincided with the end of Year V funding, and another purpose of our visit was to assess the financial situation as we enter the final project year. We reviewed all recent expenditures at INN and obtained an estimate for August expenditures as well as projected costs to the end of 1986. We also reviewed the recent auditors' visit and learned that the previous problems have been resolved.

The review of the budgetary situation of the CRSP at INN is being used in the preparation of the new budget, which will be submitted shortly.

General Comments

The present work in Mexico is impressive and moving at a gratifying pace. The staff is still quite large, including 25 assistants working on "data cleaning," in the fieldsite at Solis. At the present pace of work, it is anticipated that all data correction in the field will be finished by December, 1986.

An important aspect of our activities on this trip were the meetings with Area Chiefs, helping to clarify hypotheses and describe methods for operationalizing variables, planning with them, step by step, the procedures to complete their work, and coordinating their requirements with the data management and programming staff and the statistician, Dr. Cevallos. The discussions with our Mexican colleague, Dr. Chavez, were also very fruitful, leading to decisions about specific analyses and writing tasks necessary to achieve program goals.

REVISED CALENDAR OF DATA CAPTURE

<u>Area of Study</u>	<u>Dates Collected</u>	<u>Capture</u>	<u>Cleaning</u>	<u>To CT</u>
Clinical History	1/85-1/86	4/19-5/19	5/30-7/15	Oct.
Clinical History	2/86-5/86	7/15-7/30	5/30-7/15	Oct.
Family Anthropometry	3/86-5/86	5/15-5/30	6/15-6/30	8/26
Physical Exam	1/85-1/86	5/30-6/15	6/30-7/30	Oct.
Physical Exam	2/86-5/86	6/15-6/30	6/30-7/30	Oct.
Food Intake, Individ.	3/86-5/86	5/19-6/15	6/30-7/15	9/30
Sanitation	2/86-5/86	6/15-6/30	7/15-7/30	8/26
Census	Final	6/30-7/15	7/30-8/15	8/26
Socioeconomic II	85/86	7/15-7/30	8/15-8/30	9/30
Sociocultural, remainder	85/86	7/15-7/30	8/15-8/30	9/30
Diet validation	3/86-5/86	7/15-7/30	8/15-8/30	9/30
Activity recall	1/84-12/84	7/30-8/15	8/30-9/30	8/26
Morbidity	3/86-5/86	5/1-6/15	7/15-7/30	8/26
Anthropometry	3/86-5/86	5/1-6/15	5/30-6/30	8/26
RMR adults	3/86-5/86	5/1-6/15	5/30-6/30	8/26
Productivity I-II	84	5/15-5/30	6/15-6/30	9/30
Weaning	all	6/1-6/30	7/15-7/30	9/30
RMR schoolers	4/86-5/86	6/1-6/30	7/15-7/30	9/30
Mortality	all	6/1-6/15	7/15-7/30	9/30
Food prices	all	Sept.	Sept/Oct.	Oct.
Blood	all	Sept.	Sept/Oct.	9/30
Urine	all	8/15-8/30	Sept/Oct.	Oct.
Psychology	all	8/1-8/30	Sept/Oct.	9/30
Maternal Activity	all	Sept.	Sept/Oct.	Oct.
Behaviors	all	Sept.	Sept/Oct	Oct.
Maternal activity (obs)	all	Sept.	Sept/Oct.	Oct.