

PD-MAR-588
104033

RECEIVED MAR 12 1985

TRIP REPORTS OF
LINDSAY H. ALLEN and GRETTEL H. PELTO
February 6 - 13, 1985

9311309

LOCATION: Instituto Nacional de la Nutricion in
Mexico City, and the field site in
Solis.

In this report we have departed from the usual procedure of writing individual trip reports and submit this as a joint report. In many of the meetings, especially at INN, we were both participants. In Solis we did have a division of labor, which allowed us to review every area of the project in the short period of time that was available. Thus, the report covers all activities, those we carried out together and those that were conducted as separate consultations.

ITINERARY

- Feb. 6 Flight to Mexico
- Feb. 7 Discussions at INN with Drs. Mata and Chavez about current status of the project.
- Feb. 8 Continued discussions at INN with Drs. Mata and Chavez. Also with Lic. Martianano Garcia about

000150

financial matters.

- Feb. 9 Meeting at INN with Dr. Mata, and with Mr. Juan Feijo our financial assistant.
- Feb. 11 Meeting at INN in morning with Luzmaria Meneses, chief of social data, to discuss effect of change in data-gathering team on the families and project workers. In the afternoon we went to Solis and held discussions with Dr. Jose Santos (chief of clinic) and Eulalia Martinez (Psychology). Also reviewed the data entry process in the field.
- Feb. 12 In solis, we met with Eulalia Martinez (Psychology, Kelley Scanlon (Activity), Julia Beatriz Cabrera (to view RMR testing), Margarita Mata (to discuss laboratory progress, procedures and needs), and Elsa Molina (Diets). Returned to Mexico City at night.
- Feb. 13 Meeting with Drs. Chavez and Mata at INN to summarize our findings and discuss current project needs. G. Pelto left for Connecticut. L. Allen met with INN Data Management team (Ramon Lira) and administrators.
- Feb. 14 L. Allen left for Detroit (personal business).
- Feb. 15 L. Allen arrived in Connecticut.

THE SAMPLE

In December, 1984, many families indicated that they intended to withdraw from the project after the first of the year because they found the burden of interviews to be too heavy. Therefore, the reorganization and other adjustments (including deleting activity recall, see below) was undertaken to maintain the sample. As a result nearly all families have agreed to continue. Thus, the sample is at full strength, as indicated by the following figures.

CURRENT ENROLLMENT

| <u>COMM.</u> | <u>FAMILIES</u> | <u>CURRENT</u> <u>PREG.</u> | <u>PRE-</u> <u>SCHOOLERS</u> | <u>SCHOOLERS</u> | (PREGNANCY) |
|--------------|-----------------|--------------------------------|---------------------------------|------------------|------------------|
| | | | | | (FOLLOWED) |
| | | | | | <u>LACTATING</u> |
| Ø1 | 13 | 11 | 20 | 29 | 06 |
| Ø2 | 34 | 4 | 22 | 20 | 05 |
| Ø3 | 36 | 9 | 20 | 20 | 06 |
| Ø4 | 49 | 15 | 29 | 20 | 11 |
| Ø5 | 45 | 10 | 23 | 23 | 06 |
| TOTAL | 207 | 49 | 114 | 112 | 34 |

FOOD INTAKE

The food intake measurements are going extremely well. There are few missing data. All of the data from 1984 have been cleaned, and are being captured in Solis using Apple

been cleaned, and are being captured in Solis using Apple computers. A program has been developed to enter all the household recipes and intakes of key individuals for the same day. This eliminates the need for any calculations prior to data entry. Data from January, 1984 to August, 1984 were originally converted from recipes into amount of each food consumed by individuals by calculations. These data have now been reentered as recipes and individual intakes of ingredients. We have found that the field site is the best location for input of food intake data. Among the reasons for this are the ability of data capture personnel to clarify any doubts about food types and amounts with the nutritionists, and the data entry personnel's familiarity with the food codes.

The programs to calculate nutrient intake of individuals from family recipes have been developed at Connecticut and are in use.

PROJECT ORGANIZATION

A major purpose of the trip was to understand the reorganization of field data collection and to assure that this reorganization did not compromise the research design.

The major element of reorganization involves a shift in the personnel collecting primary data on diet, sanitation

and activity. Previously diet intake and activity measures were collected by auxiliary personnel working under the direction of professional (college-educated) supervisors, who reviewed all field data.

In mid-January it was decided that this system was not the most efficient and effective use of personnel time. In the latter part of 1984 it was becoming difficult to maintain interest and quality of data collection on the part of the auxiliaries, (high-school level local personnel) who were in primary contact with the families. Furthermore, correcting errors and sending interviews back to the household to fill in missing data was extremely time-consuming.

An analysis of work loads and time requirements to complete specific tasks showed that, without adding personnel, but shifting job responsibility it would be possible to have professionals collecting primary data and auxiliaries checking for completeness.

A total of 13 college-level trained personnel now work in primary data collection, each responsible for 15-20 households. They collect the dietary data following the previous procedure and schedules, as well as carrying out routine household observations.

Socio-economic data collection remains under the direction of Luz Maria Meneses and Psychological data

continues as before, under the direction of Eulalia Martinez. RMR and anthropometry are collected by additional personnel, and weekly morbidity is still evaluated by the physicians and their assistants.

We perceive the advantages of the new system to be as follows:

- 1) At the end of the year many families indicated their reluctance to continue with the study. Once they learned that the number of different interviewers coming to the household would be reduced, that there would be fewer visits overall, and that the activity interviews which the subjects found most objectionable, would be discontinued; they agreed to continue to participate.
- 2) A number of the senior personnel were also threatening to resign, in part from a feeling of being overworked but also because the nature of their supervisory tasks left little intellectual challenge. The professional personnel have now all agreed to continue, with the exception of the consulting anthropologist (M. Mack) and one M.D. (c.f. G. Pelto trip report, 1984). During our visit they expressed their enthusiasm and sense of satisfaction with their new roles.
- 3) The new system is remarkably efficient. The professionals require only about 1/2 of their time in primary field data collection, the rest of their time is spent carefully checking their interviews for errors

and coding data when necessary.

- 4) The professionals turn over their data sheets to auxiliaries who make official checks on all items (including ID numbers) before sending it on to data capture personnel. The number of errors is now much fewer and the process is greatly speeded up.
- 5) The beneficial effect of the enthusiasm and interest that the professionals convey to the families cannot be underestimated.
- 6) Apart from their own data collection activities, the professionals are responsible for scheduling the families visits to the clinics and accompanying them to Solis for these visits, which further facilitates rapport and timely data collection.

PSYCHOLOGICAL DATA

Throughout the duration of the project the shortage of trained personnel willing to work in field conditions has been a serious problem. In no area is this more true than in the matter of psychological measurement. Eulalia Martinez has been a dedicated member of the staff, but her effectiveness has been compromised by staff turn-over, which means that she must spend large amounts of time in training new personnel. In late November it became apparent that two of the three psychologists working under Lala were not doing

an effective job, particularly because of their insensitivity to rural Mexican cultural norms. Their departure from the project meant that, once again, Eulalia had to begin training new people.

We were very fortunate to be able to hire in January two recent graduates in psychology, one from the University of Morelia, the other from UNAM, the national university of Mexico. They are both excellent, careful researchers who have learned very quickly. Psychological measurement is proceeding, now, on schedule and we are confident that the data being collected are of the highest quality.

During January Eulalia traveled to Miami to meet with Gordon Finley, bringing him a large sample of primary data. Together they examined the data and scoring. Gordon reports that he is extremely pleased with the data; they appear to be well-collected, and he feels assured that the subjects taking these tests understood what was required of them.

As we have discussed in previous reports, it is very difficult, in the Mexican context, to carry out the Brazelton examination in the home. In this culture, newborns are regarded as extremely vulnerable, not least to the influence of the evil eye. Newborns are supposed to be protected from outsiders, even neighbors. Therefore, it has only been possible to carry out the Brazelton on babies born in the clinic. Of the 34 babies born to date, 16 births have taken place in the clinic. There is some evidence that

the proportion of clinic births is increasing.

The Bayley exams and mother-infant interaction exams are all being routinely given and are generally well-accepted. Neither the WISC nor the WAIS exams have presented problems of acceptance. The second round of schooler testing will begin later in the spring. Adults tests have been completed in all but one of the five communities. Another round of schoolyard observations is starting in March. Teacher rating questionnaires are being completed currently.

Two additional professional psychologists are in the process of being hired, and their arrival in Solis will be an important addition to the psychology staff, freeing Eulalia to work on scoring psychological test results.

The most difficult scoring involves the analysis of tape recordings of mother-infant interaction. It takes approximately three hours for every hour of interviewing and needs to be done soon after the interview. Thus, augmenting the psychology staff is recognized by everyone as vitally important to progress in data analysis.

CHILD CARE/SANITATION

The reorganization of the field staff, described above, has made possible a more frequent observation schedule for child care, hygiene and sanitation-related practices. When

dietary and activity data were being collected by local assistants, we could not use these data collection occasions as opportunities for observation of cleanliness, affect, and other personal characteristics. To ask these local young women to make judgements about their friends and neighbors would have been regarded by all (research assistants and community people alike) as extremely offensive. It is possible, in this context, to ask sensitive questions of highly selected local key informants, including asking them to "score" or "rate" families and individuals in terms of a series of characteristics. However, the use of this method requires great care in the selection of key informants and would not work with young assistants who are required to make repeated household visits, as was the case with diet data collection.

Prior to the reorganization, the observation guide for sanitation required a special visit to the household. Under the new system, all visits of professionals to the household (eg. the three visits for dietary data collection) are occasions for collecting observational data related to sanitation-maternal conduct. After each visit the interviewer fills out a form, which contains part of the observation guide that was originally administered with a special visit. The guide has been divided into three parts to ease the burden of the interviewer who has, of course, come to the house for other purposes. Thus, part of the observation takes place at the first diet interview, a

second part the following morning and the third part in the afternoon.

The physicians making routine morbidity data collection visits also fill out this form. As a result of the reorganization there will be a larger number of observations, so that the scoring for the variables contained in this data collection instrument can be based on an average over time or an index based on frequencies, rather than a few points, separated by several months, as was the case previously.

SOCIO-ECONOMIC/PRODUCTIVITY DATA

From December through the middle of February all of the households in the sample have been interviewed with the basic socio-economic data collection instrument. For the majority of families this represents a second interview; for some (who entered the sample more recently) this represents the first interview.

The first round of socio-economic data was collected by local assistants, who had been carefully trained by Luzmaria Meneses, the area chief for social data. In the second round of interviewing, Luzmaria carried out all of the interviews personally. We felt that this was an important control for accuracy, as well as an opportunity to review

the effect of using community interviewers.

The interview format for collecting data on agricultural activity and other income-earning activities was designed prior to the massive increase in temporary male out-migration, which has so plagued data collection schedules. As a consequence of changing labor patterns, the allocation of agricultural tasks appears to be changing, with women and older children assuming certain aspects of farm management. Thus women and adolescents, as well as male household heads, have (in some families) become the source of information about agricultural activities and costs.

In view of these changes, including the expanded role of external income-earning (wage labor outside the valley) it was necessary to redesign the data collection format for this aspect of the study. During this trip I worked with Luzmaria to reformat and change the scheduling for interviewing on productivity. It should be stressed this reformatting does not involve losing any information that was collected with the previous instrument. The variables to be coded from these interviews are unaffected. Rather the change represents stream-lining and efficiency, and reduces, by one visit, the number of visits that need to be made to collect these data.

RESTING METABOLIC RATE

This is being done on all target adults every 3 months as planned. Subjects are brought into the field clinic in the fasted state, so our values are actually closer to BMR. We are still using a Max-Planck respirometer and oxygen analyzer. The BMC is still non-functional in spite of repeated efforts to repair it. Virtually the only missing data are on migrant males.

ANTHROPOMETRY

Adults and accompanying target children have height, weight, skinfolds and circumferences taken at the clinic every 3 months during RMR testing. Visits are made to the subjects homes to get monthly weights on target children, heights every 3 months, and missing adult data. This is a greater frequency of measurement than that which occurred at the beginning of Phase II, and is possible because of the greater confidence of the families in the project personnel.

LABORATORY ASSAYS

Venous blood samples are being taken from women at 5 and 8 months of pregnancy. We plan to take finger-prick samples from key individuals but are meeting a great deal of verbal resistance from the subjects. Saliva samples are being

taken routinely from key subjects. The assay for immunoglobulins in saliva is being done successfully by laser nephelometry. Breast milk samples are being collected on schedule, and are being stored for future analysis. Skin-testing will be done for response to Candida and Trichophyton in March, for all target individuals.

Activity Measurement

In discussions with the families and the field staff it was clear that the interview the families found most objectionable was the activity recalls. In fact many families said that they would be willing to continue in the study if they no longer had to participate in these.

For many families we have a full year of activity records and we have 2 months on almost all of them. In view of the household's intolerance and the large body of data already collected there was little choice but to change the method of data collection in this area.

The current method involves intensive observations, for short periods, over the course of the day. The observer returns to the house once each hour to observe for a 10 minute period for a total of 100 minutes over the space of a day. There are currently two researchers involved in this data collection, which will be reported at monthly intervals

on families. So far the 20 families on whom the method is being tried appear to be tolerating these less obtrusive interventions in their daily life.

Birth Weights

As described above in connection with Brazelton examinations, approximately 50% of births are now occurring in the Solis clinic. This means that we also have birth weights on 50% of the babies.

With the improved rapport developing with the new system, the staff are hopeful that it will be possible to go to the homes to get infant weights at 8 days postpartum. We expect that as a "worst case scenario" we will have birth weight and Brazelton exams on 50-60 babies.

Data Entry

The staff in Mexico are well aware of the problems that delay in data entry has caused for our project and for the CRSP as a whole. During January and early February a great deal of effort was expended in cleaning the primary data. The majority of 1984 data for diet, morbidity, activity and anthropometry is now ready for entering.

The dietary data will be entered in Solis, while the other data sets will be sent to Public Health for data processing. On this visit we brought back diskettes to Connecticut holding an entire year of anthropometric, dietary and morbidity data on 50 families. The addition of the Columbia will greatly facilitate data entry and the new data collection-checking system should prevent the accumulation of a large backlog in the future.

Comments

The first two months of 1985 represented a "turning point" in the project. Serious challenges to the maintenance of the project were successfully met and there is clear forward motion. At this juncture the staff are enthusiastic and the families are generally cooperative. All components of the research are in place with the exception of blood-testing on target individuals (apart from pregnant women) which is planned in March in conjunction with the skin-testing.