

FORTY-EIGHTH MONTH PROGRESS REPORT

Contract No.	DPE-0632-C-00-1029-00
Project No.	932-0632
Project Title:	Family Planning Operations Research in Asia
Period Covered:	1 October 1981 - 30 September 1985

Submitted: October 1985

FAMILY PLANNING OPERATIONS RESEARCH IN ASIA

Forty-Eighth Month Progress Report

(Oct. 1, 1981 - September 30, 1985)

AID Contract No. DPE-0632-C-00-1029-00

Background

The Family Planning Operations Research in Asia Project began October 1, 1981, and has now completed four years of activity. Funded by AID/Washington through the Office of Population, the O.F. in Asia Project has supported fourteen research studies in four countries, conducted six proposal development workshops attended by 86 participants, provided technical research assistance to family planning and public health ministries, USAID Missions, universities, and other organizations; and published and distributed O.R. materials ranging from executive summaries of completed studies to published articles to handbooks. Earlier Progress Reports should be consulted for information on each of these activities. This report concentrates on the six month period from April 1 through September 30, 1985.

Technical Research Assistance

Staff associated with the Operations Research Project were fully engaged during the period with monitoring on-going research studies and assisting principal investigators with data

analysis and report writing. Six of the fourteen funded studies are in the Philippines. In June, Dr. John Laing worked with the research staff of each of these studies. Draft reports for the Natural Family Planning study and the Evaluation of the Cebu Male Specific Campaign were completed during the period and are now being edited before the final reports are printed. Dr. Laing also provided research technical assistance to the Bangladesh USAID Mission to plan an evaluation study of the pill and condom social marketing program.

In Thailand, Dr. John Stoeckel and Dr. Andrew Fisher worked with the two research groups in Khon Kaen and the two in Haad Yai, Songkhla, to help them complete their operations research studies. A final report in English and Thai was completed for the Songkhla research project, "A Study of the Effectiveness of the Village Health Communicator and the Village Health Volunteer Upon the Family Planning of Buddhist and Muslim Couples in Southern Thailand." A summary of the principal findings from this study is included with this report. Draft report for the other Songkhla study and for the two Khon Kaen Studies have also been completed. Final editing and printing of these three reports will be completed in October.

In late August Dr. Fisher and Mr. David Leon spent a week in Sri Lanka to assist the Family Planning Association (FPA) with the data tabulation, analysis, and report writing for the IUD O.R. study. Mr. Leon worked with the FPA's computer programming staff to install and run the LIFETAB program developed by

Family Health International. While most of the analysis for the IUD study was completed in Sri Lanka, some of it had to be undertaken in Bangkok particularly a time series regression analysis. A summary of the Sri Lankan IUD study is included as part of this report.

Both Dr. Fisher and Dr. Laing assisted the USAID Thailand Mission with the development of a study on teenage sexual activity and its consequences. Also in Thailand, Dr. Fisher continued to assist the Family Health Division with reviewing and developing family planning operations research studies. He also continued to assist the Population Development Association (PDA) with conducting workshops on research and evaluation. In May Dr. Fisher spent a week in Nepal working with Mr. Ram Risal on the O.R. cost effectiveness study.

A summary of staff travel during the period is shown in Appendix A.

Summaries of Completed Operations Research Studies

1. "A Study of the Effectiveness of the Village Health Communicator and the Village Health Volunteer Upon the Family Planning of Buddhist and Muslim Couples in Southern Thailand," by Porntip Pongsupaht and Rachanee Kalayakunavuti, Prince of Songkhla University, Haad Yai, Thailand.

The Village Health Volunteer (VHV) and Village Health Communicator (VHC) programs were introduced in Thailand in 1977 by the Ministry of Public Health. These programs were intended to provide primary health care personnel at the village level. Yet despite the laudable aims of the programs and the effort that has gone into the selection and training of the personnel, several past studies indicate that the VHV and VHC are not having the impact that they might have, particularly in the area of family planning.

The research study described here tested on an experimental basis a relatively simple strategy for increasing the effectiveness of the VHV and VHC. In 9 villages of Tambon Nam Noi and 6 villages of Tambon Tachamuang the VHV and VHCs were given a short two day training program which focussed on family planning. They also were given permission to distribute pills and condoms in their assigned areas. Following the training program, a series of village meetings were conducted. These meetings were intended to introduce the VHV and VHC to the villagers and to outline the range of services which these workers provide.

A baseline survey was conducted in the 15 experimental villages and in another 10 control villages. Approximately eight months later a follow-up survey was conducted. In all, a panel of 808 married women were interviewed both times in the experimental and control areas which included Muslim and Buddhist villages. In addition, a panel of 171 VHVs and VHCs were

interviewed twice. The major results from the study are summarized below:

1. In both the Muslim and Buddhist experimental areas, the village level meetings had the effect of greatly increasing the respondents knowledge about the VHV and VHC and about contraceptive methods.

2. The training program given to the VHVs and VHCs plus the permission given for them to distribute condoms and pills appears to have made them far more active in the area of family planning. They were far more likely than their counterparts in the control villages to make home visits, discuss family planning with couples, hold village meetings, advise people to receive family planning, and most importantly, distribute pills and condoms in the village.

3. The greater activity of the VHVs and VHCs had a major impact in the Muslim experimental villages where contraceptive prevalence rose from approximately 15 percent at the baseline to 49 percent at the follow-up survey.

4. While in general the Buddhist villages had higher levels of family planning knowledge, a more favorable attitude towards family planning and a higher contraceptive prevalence rate at the time of the baseline survey than the Muslim villages, the experimental program greatly diminished these differences by the time of the follow-up survey. The mean number of all contraceptive methods known and of modern methods known was approximately the same at the follow-up survey in both the Muslim

and Buddhist experimental villages. Indeed, knowledge levels were higher in the Muslim experimental villages than in either the Buddhist or Muslim control areas. Approval of family planning was nearly universal in all areas (above 92 percent) at the time of the follow-up survey. Finally, although the Muslim experimental villages remained lower in terms of contraceptive use than the Buddhist control villages, the difference was narrowed considerably between the time of baseline and the follow-up surveys.

The findings summarized above have several program implications for the National Family Planning Program and for the VHV and VHC programs. First, they suggest that the relatively simple strategy of holding village meetings can have a major impact in terms of increasing family planning knowledge and use of VHV and VHC services. Most villagers do not know about the VHV and VHC programs. They are unaware that health and family planning services are available from these voluntary workers. Village meetings serve the very useful purpose of introducing the VHV and VHC to the village and explaining the services available. Second, this study suggests that allowing the VHVs and VHCs to distribute pills and condoms can help to increase the contraceptive prevalence rate. Third, since family planning is not heavily emphasized in the initial VHV and VHC training program given by the Ministry of Public Health, it is probably necessary to provide a short program which focusses specifically on family planning. This is particularly important if the VHVs

and VHCs are given permission to distribute pills and condoms. Finally, this study suggests that the differences between Muslims and Buddhists can be greatly reduced by simply increasing educational activities (such as village meetings) and service delivery in the Muslim areas.

2. "An Experimental Operations Research Field Study to Increase IUD Acceptance in Sri Lanka," a joint study conducted by the Family Health Bureau of the Ministry of Health and the Family Planning Association of Sri Lanka.

The primary objective of this study was to increase the number of IUD acceptors in Sri Lanka. Three activities were undertaken to accomplish this objective. First, satisfied IUD users were teamed with government Midwives and then given a short training course designed to help them increase IUD motivational and recruitment efforts. Second, physicians, Registered Medical Practitioners (RMP), and Assistant Medical Practitioners (AMF) were re-trained in IUD insertion techniques and Public Health Nurses were trained for the first time in these techniques. Third, the facilities of rural clinics were upgraded so that insertions could be done safely and effectively.

The study was implemented in six Medical Officer of Health (MOH) Divisions. An additional six MOH Divisions were used as matched comparison areas. In the Experimental MOH Divisions, half of the Midwives were randomly chosen to be teamed

with satisfied IUD acceptors. Each of these Midwives selected four satisfied IUD acceptors with whom to work. The area where teams were formed was called Experimental Area I. Midwives who were not teamed with satisfied acceptor motivators (SAMs) worked alone in areas designated Experimental Area II. The only difference between Experimental Area I and II was that in the former the Midwives worked with SAMs while in the latter they worked alone. In all other respects such as training and attendance at monitoring meetings the two areas were the same. In all, there were 99 Midwives and 423 SAMs in Experimental Area I, 123 Midwives in Experimental Area II, and 201 Midwives in the Comparison Area. The intervention phase of the study covered a thirteen month period from January 1984 through January 1985. Throughout this time a study monitoring system collected data on new IUD acceptors in both the Experimental and the Comparison MOH Divisions. In addition, at the end of the study a survey was conducted in the Experimental and Comparison Areas among a systematic one-third sample of new IUD acceptors. The major findings from the study are summarized below.

- 1) A total of 3,019 new IUD acceptors were recruited in the Experimental MOH Divisions during the 13 month study period, and 1,217 in the Comparison MOH Divisions. Although the Experimental Areas account for only 6.1 percent of Sri Lanka's total population, they contributed 17.3 percent of the island's total new IUD acceptors. In contrast, the Comparison Areas with 6.5

percent of the total population contributed only 7.0 percent of new IUD cases recruited during the 13 month period.

2) Figure 1 shows graphically the monthly trends since 1980 in new IUD cases for the Experimental and Comparison Areas. While the trend in the two areas is visually similar for the first four years, late in 1983 when training had been completed in five of the six Experimental MOH Divisions there is the beginning of a wide and very apparent divergence. In order to determine whether this divergence might be a seasonal aberration, the study investigators used a Generalized Least Squares time series regression model to determine the net effect of the IUD intervention program during the 13 month period controlling for the history of differences between the Experimental and Comparison Areas and for seasonal fluctuations within these areas over time. The results from this analysis showed that on the average during the 13 month study period there was a statistically significant difference ($p < .001$) between the Experimental and Comparison areas of 117 new IUD acceptors each month. This difference is over and above what might be expected on the basis of the past history of differences between these two areas or seasonality. In other words, it is a net effect of the program intervention.

3) In Experimental Area I (Midwives working with SAMs), the mean number of new IUD acceptors recruited per Midwife was 16.

In Experimental Area II (Midwives working alone) the mean number of new acceptors per Midwife was 10 while in the Comparison Areas it was 6. A one way analysis of variance showed a statistically significant difference ($p < .002$) between the three Areas.

4) Figure 2 shows age standardized total cumulative gross IUD termination rates for ordinal months 1 through 18 for Experimental Areas I, II, and the Comparison Area. While there is no statistically significant difference between Experimental Area I and II, there is a highly significant difference ($p < .004$) between the termination rates in either of these areas and the Comparison Area. At the end of 18 months, the IUD termination rate in the Comparison Area is 25.4 percent compared to only 17.6 percent in either one of the Experimental Areas.

5) Prior to this study, Public Health Nurses were not allowed to do IUD insertions in Sri Lanka. As part of this study, nurses in the Experimental Areas were given training in IUD insertion techniques and their performance, in terms of complaints from new acceptors and termination rates among these acceptors, was compared against clients who had an IUD inserted by a physician, a RMP, or an AMP. The findings from the study show that there is no difference between the nurses and other service providers in terms of the percent of new acceptors who expressed complaints or in terms of termination rates among new acceptors.

The findings summarized above have a number of important program implications for Sri Lanka and possibly for other countries in the region.

First, this experimental study demonstrated that local residents who are current and satisfied users of a contraceptive method can be used as volunteer recruiters and motivators among their friends, relatives, and neighbors. Initially, when the study began, there was some concern that women in rural areas might be reluctant to publicly identify themselves as current contraceptive method users, and might be hesitant about becoming volunteer motivators and recruiters. This concern proved to be groundless. Indeed, there were more women willing to work with the Midwives than the study could accommodate. Based on the experience from this study, satisfied contraceptive method users can be an important resource for recruiting new users and for providing counselling and support to these new acceptors.

Second, this study strongly suggests that the IUD can become, as it was in past years, an important method of choice for many women. While it seems likely that most women who accept an IUD will experience some initial discomfort, termination rates can be reduced significantly through a program of training for service delivery personnel. In particular, termination rates for reasons of side effects and expulsion can be reduced.

Third, the availability of IUD services can be expanded greatly by using Public Health Nurses to do insertions. In this study, 217 women had an IUD inserted by a nurse. These women were no more likely to express complaints or to terminate use than women who had an IUD inserted by a physician, an RMP, or an AMP.

FIGURE 1

New IUD Acceptors in Sri Lanka January, 1980 thru January, 1985

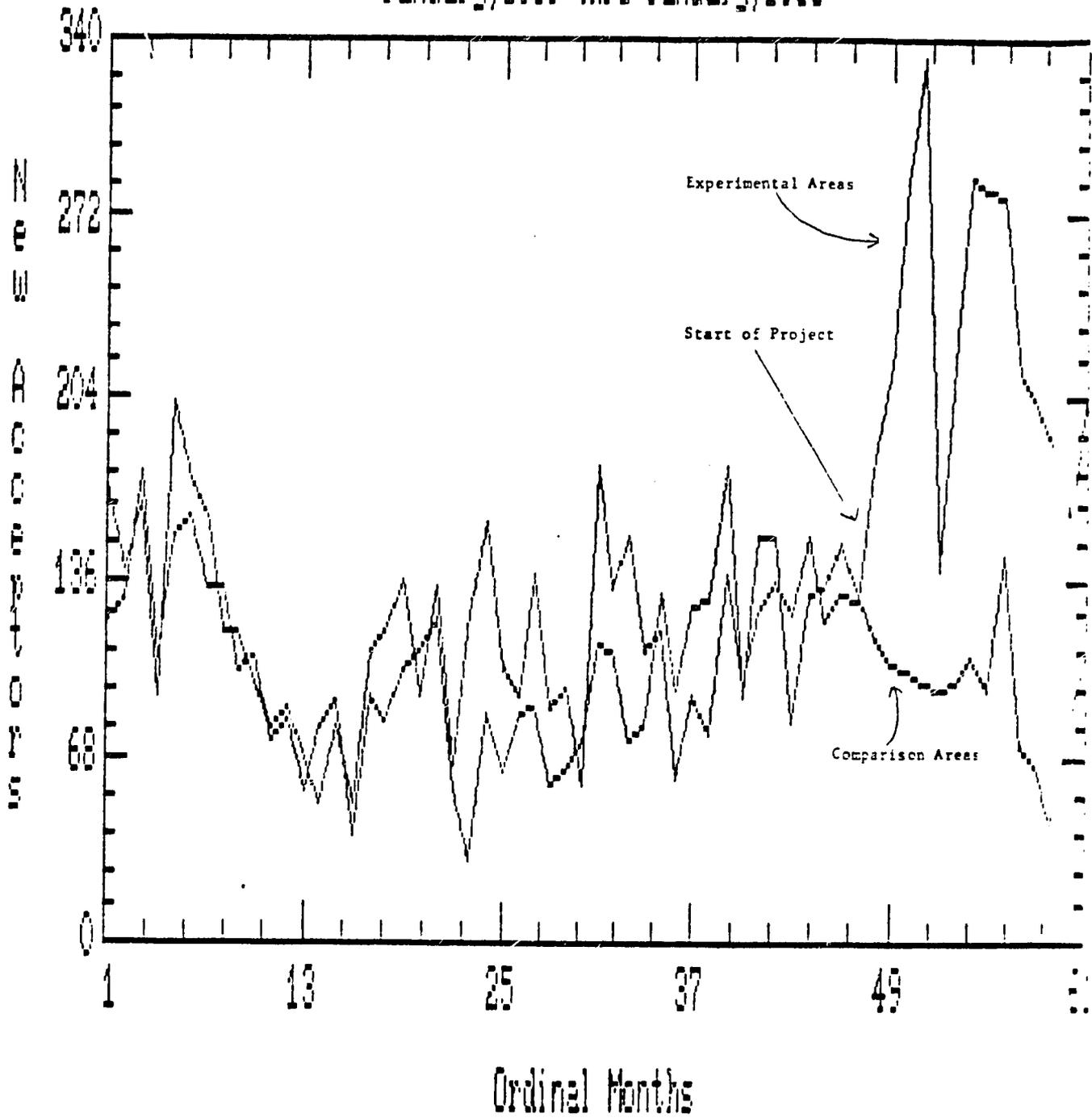
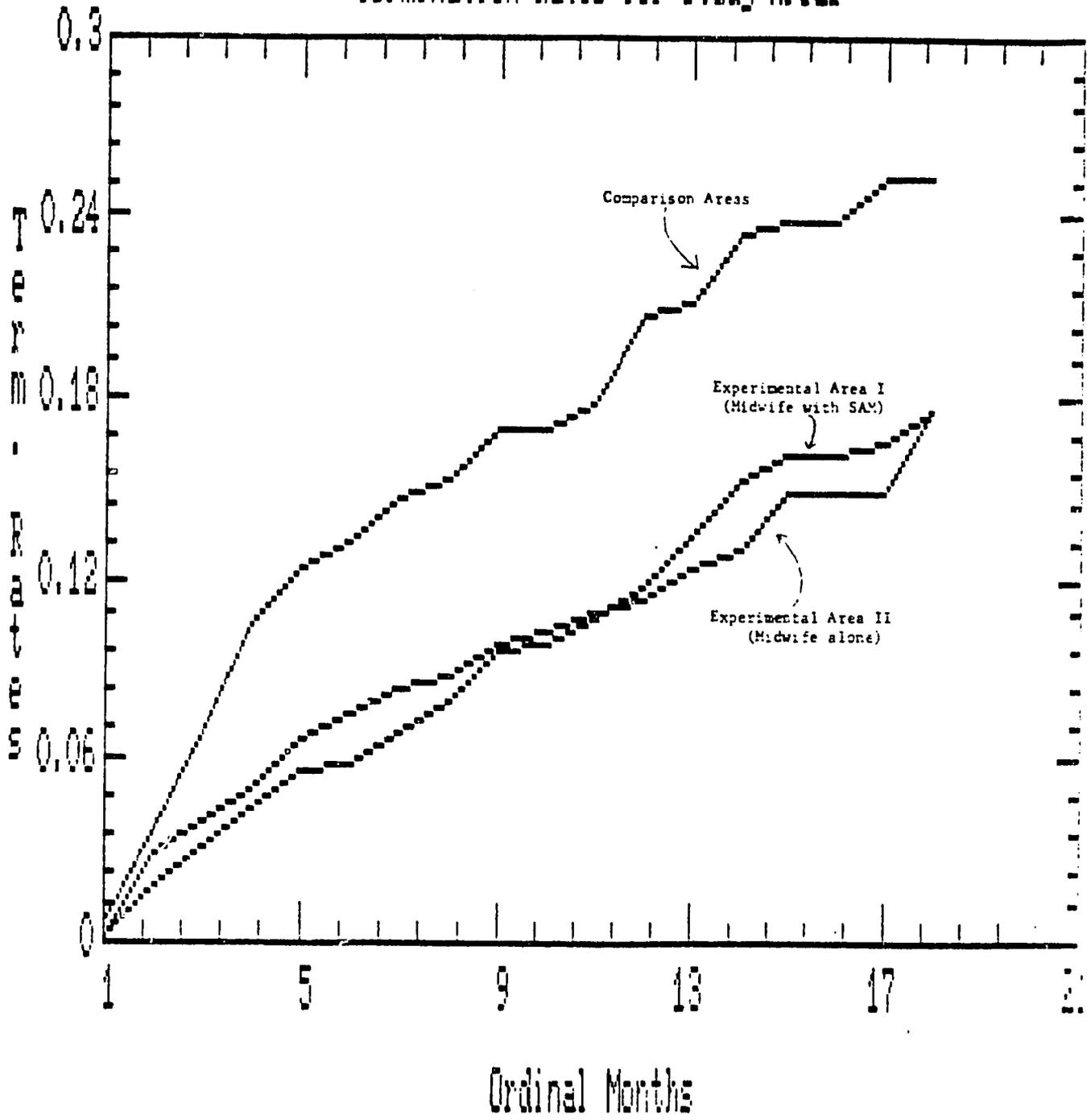


FIGURE 2

Age Standardized Cumulative Gross IUD Termination Rates for Study Areas



APPENDIX A

O.R. PROJECT STAFF TRAVEL FROM 4/1/85 THROUGH 9/30/85

<u>Staff Member</u>	<u>From</u>	<u>To</u>	<u>Dates</u>	<u>Purpose</u>
A. Fisher *	Bangkok	Kathmandu	5/13-17	O.R. Study monitoring
J. Laing *	Bangkok Manila Iloilo Manila Cebu Tacloban	Manila Iloilo Manila Cebu Tacloban Manila	6/9-22	Technical Assistance to six O.R. studies
A. Fisher	Bangkok	Colombo	8/23-30	Final data tabulation and analysis of O.R. IUD study
D. Leon	Bangkok	Colombo	8/23-30	Assistance to O.R. study with computer programming
J. Stoeckel *	Bangkok	Khon Kaen	7/3-4 7/18-19	O.R. study monitoring
J. Stoeckel	Bangkok	Haad Yai	9/30	O.R. Study Monitoring

* Fisher was on home leave from 6/2 - 7/15; Laing from 6/28 - 8/10 and Stoeckel from 8/6-22 and 9/5-17