

PN - AAL - 995



**AMERICAN PUBLIC HEALTH ASSOCIATION**  
International Health Programs  
1015 Fifteenth Street, NW  
Washington, DC 20005

DEVELOPMENT OF OPERATIONS RESEARCH  
PROPOSALS FOR TWO BRAZILIAN FAMILY  
PLANNING ORGANIZATIONS:  
BEMFAM AND CPAIMC

A Report Prepared By:  
ROBERT C. BLOMBERG, Dr.P.H.

During The Period:  
SEPTEMBER 24-OCTOBER 14, 1982

Supported By The:  
U.S. AGENCY FOR INTERNATIONAL DEVELOPMENT  
(ADSS) AID/DSPE-C-0053

AUTHORIZATION:  
Ltr. AID/DS/POP: 12-3-82  
Assgn. No. 582166

## ACKNOWLEDGMENTS

The author wishes to thank Karen Lassner, M.A., M P.H., Director of the CPAIMC Research and Evaluation Unit, and Dr. Carmen Gomes, Director of the BEMFAM Planning and Programming Unit, for their cooperation and assistance during the undertaking of this assignment.

The consultant, Robert C. Blomberg, Dr.P.H., is the Western Region Director of the Planned Parenthood Federation of America.

# C O N T E N T S

|                                                      | <u>Page</u> |
|------------------------------------------------------|-------------|
| ACKNOWLEDGMENTS . . . . .                            | i           |
| ABBREVIATIONS . . . . .                              | vii         |
| <br>                                                 |             |
| I. INTRODUCTION . . . . .                            | 1           |
| Purpose of the Assignment . . . . .                  | 1           |
| Itinerary . . . . .                                  | 1           |
| <br>                                                 |             |
| II. CPAIMC OPERATIONS RESEARCH PROJECT #1 . . . . .  | 3           |
| Background . . . . .                                 | 3           |
| Purpose . . . . .                                    | 3           |
| Study Design . . . . .                               | 4           |
| Training . . . . .                                   | 9           |
| Supervision . . . . .                                | 11          |
| Activities . . . . .                                 | 12          |
| General Observations . . . . .                       | 14          |
| Personnel . . . . .                                  | 15          |
| Project Budget . . . . .                             | 17          |
| <br>                                                 |             |
| III. CPAIMC OPERATIONS RESEARCH PROJECT #2 . . . . . | 19          |
| Background . . . . .                                 | 19          |
| Purpose . . . . .                                    | 20          |
| Study Design . . . . .                               | 20          |
| Personnel . . . . .                                  | 21          |
| Project Budget . . . . .                             | 22          |
| <br>                                                 |             |
| IV. CPAIMC FACTORY PROJECT . . . . .                 | 23          |
| Possible Sites . . . . .                             | 23          |
| Possible Interventions . . . . .                     | 23          |
| Adjunct Interventions . . . . .                      | 23          |
| Measures/Indicators . . . . .                        | 24          |
| Critical Issues . . . . .                            | 24          |
| <br>                                                 |             |
| V. BEMFAM OPERATIONS RESEARCH PROJECT #1 . . . . .   | 25          |
| Title . . . . .                                      | 25          |
| Location . . . . .                                   | 25          |
| Anticipated Duration . . . . .                       | 25          |
| Soliciting Institution . . . . .                     | 25          |
| Justification . . . . .                              | 25          |
| Objectives . . . . .                                 | 27          |

|                                                                       | <u>Page</u> |
|-----------------------------------------------------------------------|-------------|
| VI. BEMFAM OPERATIONS RESEARCH PROJECT #2 . . . . .                   | 29          |
| Background . . . . .                                                  | 29          |
| Purpose . . . . .                                                     | 30          |
| Research Design . . . . .                                             | 30          |
| Sample Design . . . . .                                               | 32          |
| Timetable . . . . .                                                   | 33          |
| Personnel . . . . .                                                   | 33          |
| Budget . . . . .                                                      | 33          |
| <br>APPENDICES                                                        |             |
| Appendix A: List of Contacts . . . . .                                | 35          |
| Appendix B: Description of CPAIMC Service<br>Unit Structure . . . . . | 37          |

## ABBREVIATIONS

|        |                                                                           |
|--------|---------------------------------------------------------------------------|
| APHA   | American Public Health Association                                        |
| BEMFAM | Civil Society for the Well-Being of Brazilian Families                    |
| CBD    | Community based contraceptive distribution                                |
| CPAIMC | Center for Research and Service for Integrated<br>Maternal and Child Care |
| FPIA   | Family Planning International Assistance                                  |
| IFRP   | International Fertility Research Program                                  |
| OC     | Oral contraceptive                                                        |
| OR     | Operations research                                                       |
| ORT    | Oral rehydration therapy                                                  |

## I. INTRODUCTION

## I. INTRODUCTION

### Purpose of the Assignment

The purpose of this assignment was (1) to identify operations research topics that could be developed into research proposals by two Brazilian family planning agencies, and (2) to work with staff members of these agencies to select one or more of the topics and draft operations research proposals. The request for the consultant's technical assistance was initiated by the Social Development Attache, AID/Brazilia.

It was anticipated that any proposal(s) resulting from the consultation would be sufficiently developed to allow discussion of their merits by members of the operations research staff at AID/W. After discussion, modification, and negotiation, a funded operations research project might result.

The initial request for the consultant's assistance indicated a start date of late August for a period of 1 month, but the sponsoring agency, the American Public Health Association (APHA), postponed the start date to late September. Because of the reduced availability of the consultant, the in-country assignment, which originally included visits to Salvador, Teresina, Sao Paulo, and Rio, was reduced to 12 working days (plus Saturdays and Sundays) with two family planning agencies in Rio.

Because of interruptions and delays at CPAIMC, the consultant requested a 2-day extension to be spent at CPAIMC to conclude the generation of one complete draft proposal. Consequently, the time available at BEMFAM was reduced. Conflicting work priorities and a national holiday (October 12) resulted in only 4 work days with that organization. Nonetheless, a proposal for discussion was generated.

### Itinerary

|                                     |                                            |
|-------------------------------------|--------------------------------------------|
| September 23                        | Travel - Berkeley to Washington, D.C.      |
| September 24                        | Briefing - Operations Research Unit, AID/W |
| September 24 (evening)              | Travel - Washington, D.C., to Rio          |
| September 27-October 6              | Work with CPAIMC                           |
| October 7-October 13                | Work with BEMFAM                           |
| October 13 (evening)-<br>October 14 | Travel - Rio to Berkeley                   |

II. CPAIMC OPERATIONS RESEARCH PROJECT #1

## II. CPAIMC OPERATIONS RESEARCH PROJECT #1

The CPAIMC operations research project involves the use of community lay workers to promote service utilization and provide contraceptive resupply. The effects on contraceptive adoption and service utilization rates under conditions of partial fee for service would be assessed.

### Background

1. Statement about CPAIMC; its work, including number of service points, adopters, and patients seen; its relation to other health centers/family planning providers; and the implication of these for current operations research proposal model development/plans for more service points - 1984.
2. CPAIMC's current operations research project/purposes.
3. Introduction of current concerns which resulted in following proposal; how this builds on previous operations research study.
  - The cost of establishing and staffing mini-posts/staff turnover productivity.
  - The need to expand accessibility of contraceptive services.
  - The need to conduct active health promotion/family planning in favela communities.
  - The need to determine the effects of partial patient fees on service utilization/contraceptive adoption, both in existing services and those to be opened.
  - The need to explore how much money CPAIMC can expect to raise from patient sources as a step toward reducing dependence/FPIA expectation re funding reductions/counterpart funding in FY1984.

### Purpose

The proposed study is designed to answer the following questions:

1. What is the effect of introducing partial patient fees on service utilization and contraceptive adoption and resupply in existing health service points, both units and miniposts, as compared with new service points where fees are introduced from the start?

2. Can trained satisfied contraceptive users from the community be more cost-effective in health service promotion and contraceptive distribution and resupply than trained auxiliary nurses working from miniposts?
3. Can miniposts be made more cost-effective by having auxiliary nurses work 3 half-days (e.g., Tuesday, Thursday, and Saturday) in the minipost and 2 half-days (Wednesday and Friday) doing health/family planning promotion in the community?
4. Can satisfied contraceptive users be trained to do multipurpose health promotion (e.g., prenatal, well-child care, oral rehydration therapy, family planning) in the community, and are they more effective if they do multipurpose promotion than if they only do family planning promotion?
5. Are satisfied users more successful if they work with individuals (e.g., one-to-one, door-to-door), or are they more successful if they work with small groups?
6. Is it logistically feasible to have satisfied users serve for non-prescription contraceptive distribution as well as oral contraceptive resupply and IUD/surgical referral?
7. What portion of the actual service delivery costs in a given community can be obtained through service/supply fees, given the anticipated economies of the satisfied user program operating in the community?

The study design is intended to investigate a number of program issues simultaneously and to provide management information for changes in existing service delivery programs as well as for expansion of services to new communities to be undertaken by mid-1984. Since it is intended that CPAIMC community-based health service programs serve as a model for future replications at CPAIMC-associated programs elsewhere in the country, it would be important to launch these replications with the most cost-effective delivery system possible.

### Study Design

The study is designed to replicate three experimental conditions (plus two subset conditions) and one control condition in two different CPAIMC operating conditions. For purposes of discussion, these two operating conditions are called Phases I and II.

Phase I is intended to determine the effect of several operational variables on contraceptive prevalence, adoption, and health service utilization in existing CPAIMC health service delivery points (both women's health care auxiliary units and miniposts; see Appendix D for a description of differences

between the two) when partial patient fees are introduced where services have previously been available for free. Phase II is intended to replicate the experimental and control conditions in new settings where patient fees will be charged from the time service delivery is initiated (new services which will be opened with FPIA funds between January 1983 and mid-1984).

This two-phase design will contribute to the study in a number of significant ways.

1. It will allow CPAIMC to determine the effects of patient fees on service utilization where patients learn that a fee is associated with the service from the start, as compared with communities where these health services have been available free in the past. It is expected that there will be a greater negative effect on service utilization/contraceptive adoption when fees are introduced for services which were formerly free than where the community expects to pay something for these services from the start, although the impact may not be significant in either case.
2. It will allow the research to be initiated promptly, because it will begin where services already exist and can be ongoing while efforts are made to establish the new health units in communities to be identified. Since the new health units will be established with FPIA program funds, this operations research project would not carry service delivery costs for them.
3. Logistically, the two-stage project will be easier because the CPAIMC research unit can move its interviewer teams from Phase I communities to Phase II communities without having to recruit, train, and supervise large numbers of interviewers. It is anticipated that the slight lag in surveying these communities will not result in the data being contaminated by some historical event, and that baseline data from Phases I and II will be comparable, ceteris paribus.

Figure 1 represents the study design. In table 1, the hierarchy of experimental conditions to be tested is outlined, followed by discussion. (Key words which emphasize comparisons are underlined.)

In both Phases I and II, pre- and postintervention surveys will be conducted in 300 homes near each service delivery point (minipost or lay-worker's home) for a total of 600 interviews for each treatment condition in each phase. Since there is a total of 24 service delivery points, 12 in each phase, this implies 7,200 preintervention interviews and a similar number of postintervention interviews.

Figure 1  
STUDY DESIGN

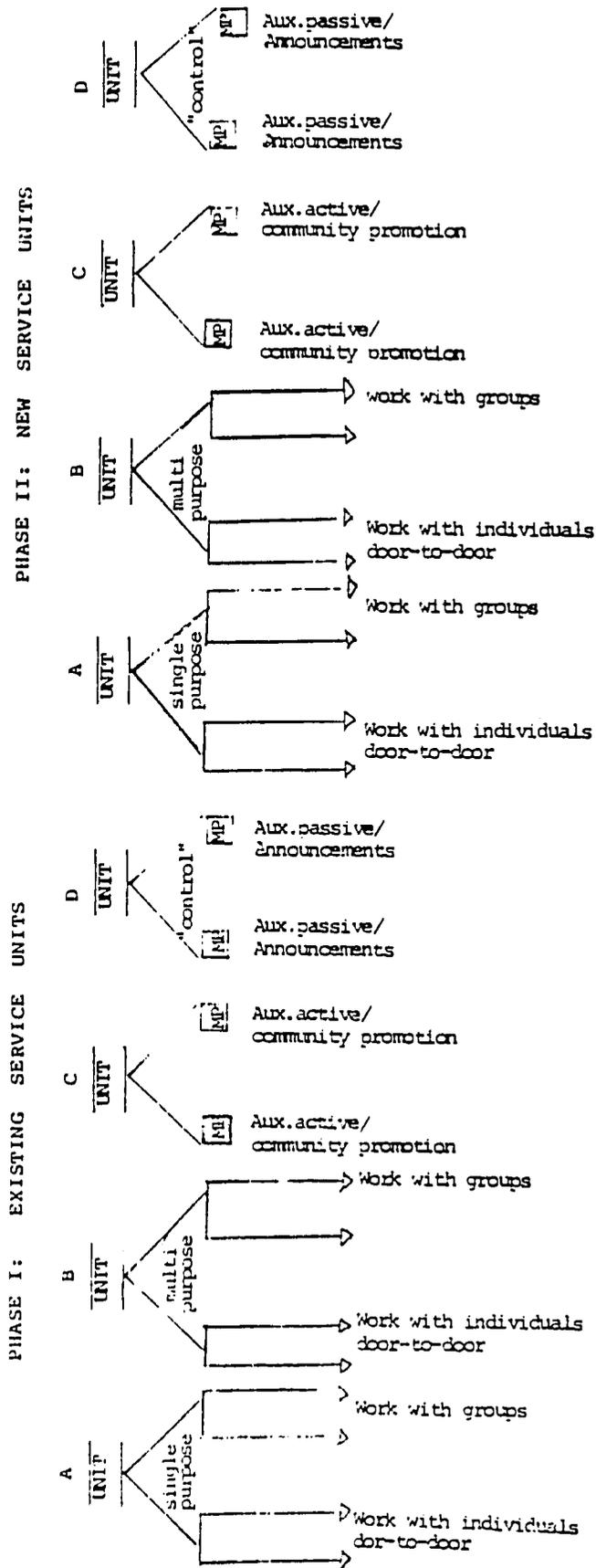


Table I

HIERARCHY OF EXPERIMENTAL CONDITIONS

|    | <u>Phase I</u><br><u>(Existing service units)</u>                                                                                                                                                                                                                                                                                                | <u>Phase II</u><br><u>(New service units)</u>                                                                             |
|----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|
| I  | Effect on service utilization/<br>contraceptive adoption of<br>introducing partial fees in<br><u>existing</u> service units.                                                                                                                                                                                                                     | II Effect on service utilization/<br>contraceptive adoption of<br>introducing partial fees in<br><u>new</u> service units |
| IA | Effects on service utilization/<br>contraceptive adoption of having<br><u>satisfied contraceptive users</u><br><u>(layworkers)</u> from the community<br>do <u>family planning promotion</u><br><u>and contraceptive distribution/</u><br><u>resupply half-time.</u>                                                                             | IIA Same as Phase I                                                                                                       |
|    | IA.1 Having layworkers work<br>with <u>individuals</u> ; i.e.,<br>door-to-door.                                                                                                                                                                                                                                                                  |                                                                                                                           |
|    | IA.2 Having layworkers work<br>with <u>small groups.</u>                                                                                                                                                                                                                                                                                         |                                                                                                                           |
| IB | Effects on service utilization/<br>contraceptive adoption of having<br><u>satisfied contraceptive users</u><br><u>(layworkers)</u> from the community<br>do <u>multipurpose health promotion</u><br>(e.g., prenatal, new born care,<br>oral rehydration therapy, family<br>planning) and <u>contraceptive dis-</u><br><u>tribution/resupply.</u> | IIB Same as Phase I                                                                                                       |
|    | IB.1 Having layworkers work<br>with <u>individuals</u> ; i.e.,<br>door-to-door.                                                                                                                                                                                                                                                                  |                                                                                                                           |
|    | IB.2 Having layworkers work<br>with <u>small groups.</u>                                                                                                                                                                                                                                                                                         |                                                                                                                           |

Table 1, cont.

|    |                                                                                                                                                                                                                                                                                                                                                    |     |                                                                                                           |
|----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------------------------------------------------------------------------------------------------------|
| IC | Effects on service utilization/ contraceptive adoption of having <u>auxiliary nurses</u> in miniposts do <u>active community outreach</u> part-time, operating miniposts three half days including Saturdays.                                                                                                                                      | IIC | Same as Phase I                                                                                           |
| ID | Control Group. Taking an existing unit, adding miniposts and having <u>auxiliary nurses</u> operate in the <u>passive mode</u> (wait for clients to show up) three half days per week. Community-based promotion would use announcements at community meetings, flyers, posters, word-of-mouth, but no staff time (monthly or quarterly campaign?) | IID | Control Group. Same as Phase I except attached to a new unit where fees have been charged from the start. |

Given conditions:

1. All sources of supply/service will charge the same fees for the same services.
2. All sources will do resupply of oral contraceptives and distribution of other methods.
3. All layworkers will work half time.

The preintervention questionnaire will be essentially the same as the one used on the CPAIMC CBD condom distribution OR study. Additional questions will be added to accommodate the purposes of this study. In condition D (minipost with auxiliary nurses in the passive mode), at the conclusion of the preintervention interview, interviewers will provide brief information about the new minipost and the services available there.

Postintervention interviews will include questions specific to the experimental condition undertaken in the community, such as whether the interviewee was ever contacted by a CPAIMC auxiliary nurse or layworker, the nature of the contact (i.e., content of information given, whether contraceptives or other health remedies such as oralte, were offered for sale, whether any were purchased, whether the staff person asked interviewee to form a small group to which worker would make presentation, whether she formed such a group, etc.). Questions could also attempt to ascertain respondent's attitude toward the contact (if any) with CPAIMC staff working in the community, including indirect questioning as to "what people say" about the service delivery point.

In addition to pre-post comparisons of contraceptive prevalence and other survey data, the study would rely on service utilization statistics on all types of health services, including resupply and other contraceptive sales by layworkers (these can be measured at supervisory meetings where layworkers return receipts/obtain supplies).

Historical comparisons can be made with service statistics from other nonproject health units at similar periods in their operation-- that is, the first 12-month period of intervention.

### Training

Training will be required for auxiliary nurses to staff miniposts as well as for contraceptive users who will be working in communities. Auxiliary nurses who are required to do active promotion of minipost and health unit utilization, including family planning, will require training in community promotion activities in addition to CPAIMC's regular training for auxiliary nurses. A consultant in training methods will develop the training programs.

### Selection of Trainees

Auxiliary nurses to staff the project miniposts will be recruited and trained using standard CPAIMC methods. Layworkers, who are satisfied contraceptive users, will be selected for training based on recruitment/recommendation by CPAIMC staff at sites where these women currently receive services. A checklist or profile of desirable characteristics for community workers will be developed by the research

staff to help standardize the trainee selection criteria across service sites. One or more members of the project team will interview each training candidate, review the expectations regarding tasks and time commitment, and confirm her interest, commitment, and availability prior to inviting a candidate for training.

A specific curriculum will be prepared for layworkers, based on an analysis of tasks they will be expected to undertake in the community. It is anticipated that the training will take half days, every day, for 4 weeks, during which time all layworker trainees will be paid.

Because CPAIMC has not had experience selecting, training, and supervising layworkers and to allow for attrition, it is proposed that three times as many workers be selected for training as will be hired for the project. Based on evaluation by trainers and other staff, a selection of the project community layworkers will be made at the conclusion of training.

Two training cycles for layworkers will be held in the mornings and afternoons in conjunction with each phase. One of the cycles will train layworkers to do single-purpose family planning promotion in the community; the other cycle will train others to do multipurpose promotion. Each cycle will have 12 trainees, three from each of four study communities, from whom only four will be selected for employment (or a total of eight from the two training cycles).

In addition to providing trainees with basic information on all methods of family planning, the training will emphasize correct pill usage and provide reinforcement messages for women who are still adjusting to pill use and may be experiencing minor side effects. Trainees will also learn the signs that indicate a method user should have a medical control visit in a health unit.

While the content of the information is important, equally important is providing the layworker with a skill level that will allow her to undertake her tasks with a reasonable level of assurance and comfort. Thus, there will be a heavy emphasis on role playing and active participatory learning procedures, rather than passive, didactic instruction. During the final week, supervised fieldwork will be undertaken in nonproject communities where CPAIMC operates units, and experiences will be shared, reviewed, and discussed at the conclusion of each day.

Any informational handout materials for use in the community and any audio-visual aids (e.g., flip-charts) intended for layworker use will be incorporated into the training.

## Supervision

Supervision, especially of layworkers, will be critical to the usefulness of findings from this project. All supervisors, especially the layworker supervisor, should form part of the research team from the start of the project and should participate in the development of the recruitment and selection procedures as well as the actual selection. They should also participate in the development of the training curriculum and sit in on the actual training (although they will not be responsible for the conduct of the training). This procedure is intended to help build team spirit, to promote communication with future layworkers, to facilitate training modifications in view of subsequent fieldwork problems, and to allow the supervisor to participate in the final selection of trainees.

During the first 6 weeks of the intervention, weekly supervision will be conducted individually, with the layworker supervisor going to the layworkers' homes as well as group meetings at CPAIMC headquarters. Separate meetings will be held for layworkers working on single-purpose promotion and those working on multipurpose promotion. Supervisory group meetings will be held to share experiences, report on method distribution, do mutual problem solving, and to build esprit de corps. The layworkers can replenish their contraceptive supplies and report sales at those meetings. A research team member other than the supervisor will handle the matters of replenishing supplies and receiving money so that the bookkeeping will be systematic and will not interfere with the supervisory meeting. Individual supervisory meetings will be used to provide guidance, discuss individual performance problems, etc.

After the first 6 weeks of the intervention period, supervisory visits and meetings will be held biweekly, unless the supervisor or research director feels more frequent supervisory sessions are still required. Four weeks after the Phase II intervention is launched, supervisory group meetings will combine layworkers from the two phases who are working in the same experimental condition.

The layworkers' supervisors will be selected for their ability to establish rapport with community people, interpersonal relations, and enthusiasm for the project.

Before assuming their responsibilities, supervisors will be given a 1-week training course in modern supervisory methods by a management consultant specialist, to be identified.

## Activities

### Condition A - Single-Purpose Layworkers

Subcondition A.1 - Layworker Works With Individuals. Contacts will be made principally by working door-to-door, discussing family planning with all females of reproductive age in the residence. No effort will be made to exclude neighbor women who are also present; that is, a return visit will not be made to avoid making a presentation to more than one woman or to women who reside elsewhere. An outline for the content of the presentation will be developed by CPAIMC and used in training layworkers; but a routine speech, to be repeated at each encounter, will be discouraged. A checklist will serve as a guide to the layworker to make sure all points are covered on each visit. This checklist will be used by the supervisor, who will have the layworker go over the presentation from time to time on supervisory visits. Printed material, describing family planning methods and where to get them in simple language, will be made available for distribution on door-to-door visits.

Layworkers will provide pill resupply to women who have begun pill use through CPAIMC health service points. This will be done initially by inquiring if the contact is currently using CPAIMC family planning services and, if so, if she would like to have pills delivered or, alternatively, buy them from the layworker at her home. Women who become pill users for the first time during the period of the research project, other than those referred to the service point by the layworker, will be encouraged by the auxiliary nurse or other staff at the unit or minipost to obtain her pills from the layworker. This obviously applies only to women who are from communities where layworkers are available; however, if a woman from a layworker's community goes to a minipost outside her community, staff at that minipost should inform the woman of the layworker, rather than trying to keep her as their own client. A scheme may be tested whereby nonexamined women who wish to adopt oral contraception are supplied one cycle of pills for the price of two and given a receipt entitling them to pick up the second cycle free from the CPAIMC unit or minipost after receiving a medical check for contraindications.

Current CPAIMC policy provides for the free distribution of seven cycles of pills to a new patient who has had a medical examination and adopts this contraceptive method. It is unrealistic to anticipate that under a scheme of partial payment for pill cycles, women will have enough money to purchase this number of cycles at one time. It will, therefore, be important to assure easy access to resupply. Layworkers will endeavor to resupply current OC users on a routine basis by selling pills from their homes or by delivering them. While nonprescription methods will be sold by the layworker, anyone desiring an IUD or a surgical method will be referred.

Another of the tasks of the layworker will be to provide reassurance and information to new pill users who have experienced minor problems. She will encourage the new user to stick with the method during a 3-month adjustment period. Failing this, she will offer alternative dosage pills or brands. Because the layworker, typically, will be a satisfied user of oral contraceptives, she will be able to offer this reassurance from her own experience. However, the layworker will be trained to recognize symptoms which do require medical control and to make appropriate referral to the nearest CPAIMC clinic.

Subcondition A.2 - Layworker Works With Groups. Contact will be made principally through small-group presentations. While it is expected initially that presentation may be made to previously existing or formal groups, the main method will be through informal groups, brought together by different community women. That is, the layworker will organize groups herself, composed of five or six friends or acquaintances. At the conclusion of her presentation, she will request that each woman form a small group of her own to which the layworker can make a presentation, and so on. Meetings will be held both in the layworker's home and in homes of women who form a small group.

Consideration will be given to the development of appropriate visual aids for small-group presentations (e.g., flip-charts), and such materials will be incorporated in the layworker training.

Training for this group will naturally provide exercises and practice in group presentation. At the time of recruitment for training, women from this experimental condition will be told that group work will be required and that they will be trained in its use. This should result in some self-selection for ability in this approach.

To facilitate the formation of small groups and to make such meetings more attractive, each layworker who works with groups will be given a thermos for coffee, a supply of small disposable plastic cups, and a supply of coffee, as needed, so that cafezinho, a common and important Brazilian social custom, may be offered at the meetings. The use of a thermos in this way is also very common in Brazilian daily life.

Layworkers working with groups will sell the same methods as the layworkers in subcondition A.1, will supply oral contraceptives, and will make IUD/surgical referrals. All other aspects of her work will be similar.

### Condition B - Multipurpose Layworker

Subconditions B.1 and B.2 will be undertaken as in A.1 and A.2, the difference being in the number of messages or content areas the layworker will be prepared to discuss. A selection from additional topics such as

prenatal care, breast-feeding, well-child care, and oral rehydration therapy (ORT) will be considered to complement the family planning messages and appropriate training will be provided.

In both B.1 and B.2 conditions, layworkers will seek out women in the community who would be appropriate recipients of special information, e.g., pregnant women would get information on prenatal care, mothers of newborns would get breast-feeding and well-baby care instruction, etc. All will be given information and offered methods of family planning. Group layworkers will try to form small groups of women with similar needs for the same presentations.

As in conditions A.1 and A.2, layworkers will have nonprescription contraceptive methods for sale, will refer for other methods, and will do OC resupply as described. They will also encourage prenatal checks, well-baby vaccinations, etc., at CPAIMC health delivery points.

#### Condition C - Auxiliary Nurses Active in the Community

Auxiliary nurses will work 2 half-days per week in the community, going door-to-door making themselves known in the community, and describing the services that are available at the minipost. They will provide information for special groups (prenatal, well-baby, etc.) and will make appropriate referrals to CPAIMC health units.

#### Condition D - Auxiliary Nurses Passive (Control Group)

This is the current method of operating miniposts. All promotion is currently done by survey interviewers in the OR research project. In order not to make this control condition useless, some mass communication methods will be used to promote the miniposts, e.g., posters, handbills, announcements at community meetings.

#### General Observations

To help the CPAIMC layworkers develop an identity within their communities, they will be provided with a small sign to attach to their houses showing the CPAIMC logo and will be given either an armband, or, if desired, a T-shirt with the CPAIMC logo to be worn while working in the community. All miniposts, even if located in other facilities (i.e., barber shops, samba school) will have an identifying sign near the entry visible from the street.

## Personnel

The principal investigator will be responsible for overall project direction. Together with CPAIMC directors, she will recruit and select project staff. She will hold weekly meetings with co-project coordinators, assuring compliance with the project work plan. She will actively participate in data analysis and will have responsibility for preparation of project progress and final reports.

The co-project coordinators will be responsible for project execution. Co-project coordinator no. 1 will have as primary responsibility all activities related to data collection. Co-project coordinator no. 2 will be responsible for all service delivery activities. The two will work together as a team assuring harmonious integration of project data collection and service activities. Both will be responsible for selection of communities to be included in the study. During the project planning time, co-project coordinator no. 1 will be actively involved in activities preparatory to data collection, such as personnel recruitment and selection, preparation of interview instrument and manuals, and interviewer training. Co-project coordinator no. 2 will be actively involved in selection of new service sites, to assure their timely installation, and in community worker recruitment, selection, and training. During the data collection and service delivery phase, co-project coordinator no. 1 will direct and supervise the community surveys and services data collection. Co-project coordinator no. 2 will coordinate all service activities, assuring adherence to project interventions in each community, giving special attention to community worker activities and the charging for services in all service sites. During the data analysis phase, both will participate in data analysis and project reports preparation.

The research assistant will assist the principal investigator in project organization, particularly mapping of the communities; interviewer recruitment, selection, and training; and preparation of manuals. During the data collection phase, s/he will also be a field supervisor, responsible for the supervision of four interviewers. The research assistant will also participate in interview coding at the completion of the initial and final survey and will assist in data analysis and report preparation.

The field supervisors will each be responsible for direct and indirect supervision of four interviewers during the initial and final surveys. They will receive specific training in field supervision and will assist in conducting interview training.

The interviewers (auxiliary nurses) will conduct the initial and final household interviews in each community. A total of 24 auxiliary nurses will participate in interviewer training for each round of the survey, to assure that 12 successfully complete the training and initiate data collection activities. The interview teams will be comprised of different auxiliary nurses during each survey round.

The physician supervisor will be responsible for supervision of services provided by physicians in the eight units included in the study, assuring compliance to CPAIMC medical norms, routines, and procedures. S/he will also assist the co-project coordinator no. 2 in installation of the four new units included in the study.

The nurse supervisors will be responsible for training and supervision of services provided by technical and auxiliary nurses in the eight units and eight miniposts included in the study. They will also assure that minipost activities are carried out according to the respective intervention in each community and will assist co-project coordinator no. 2 in installation of the eight new miniposts included in the study. They will also be responsible for supervision of overall service site operations, including financial and logistic control. They will orient and supervise the technical nurse supervisors as needed.

The technical nurse supervisors will supervise the community workers, assuring that their activities are carried out according to the respective community worker intervention in each community. They will meet both individually and in groups with the community workers. They will also assist in community worker recruitment, selection, and training.

All service supervisors (physicians, nurses, and technical nurses) will participate in short-term training in supervisory techniques prior to initiation of services.

The community (lay) workers will be responsible for community outreach activities as defined by the treatment condition and subcondition in each community (see Activities). They will be recruited from among CPAIMC satisfied users and will be employed on a part-time basis (20 hours/week). Prior to initiation of services, they will participate in a 4-week training course (1 half-day per day) for which they will receive a training stipend.

The statistician/programmers will be responsible for the preparation of computer programs for data cleaning and processing. They will supervise service data collection activities in all service sites and will prepare monthly service reports. They will give special attention to developing and operating a reporting system for income generated at all service sites. They will also be responsible for interview coding as the initial and final interviews are completed in each community. They will prepare a final service statistics report (including income generated) and will participate in both service and survey data analysis and report preparation.

The secretary will be responsible for all project typing and filing.

## PROJECT BUDGET - 24 MONTHS

TOTAL COST US\$

## I. DIRECT COSTS

| <u>Personnel</u>             | <u>P/M</u> |         |
|------------------------------|------------|---------|
| (1) Principal Investigator   | 6          | 15,000  |
| (2) Co-Project Coordinators  | 48         | 86,400  |
| (1) Research Assistant       | 24         | 36,000  |
| (2) Field Supervisors        | 18         | 14,400  |
| (12) Aux. Nurse Supervisors  | 96         | 24,000  |
| (1) Physician Supervisor     | 19         | 28,500  |
| (2) Nurse Supervisors        | 36         | 36,000  |
| (2) Tech Nurse Supervisors   | 32         | 22,400  |
| (16) Community Workers       | 96         | 16,800  |
| (2) Statistician/Programmers | 24         | 25,200  |
| (1) Secretary                | 24         | 12,000  |
|                              | Subtotal   | 316,700 |

Training

|                                                       |       |
|-------------------------------------------------------|-------|
| Interviewers (48 trainees x US\$9/day x 10 days)      | 4,320 |
| Community Workers (48 trainees x US\$3/day x 15 days) | 2,160 |
| Subtotal                                              | 6,480 |

Local Travel

|                                                      |       |
|------------------------------------------------------|-------|
| Interviewers (US\$15/mo x 12 interviewers x 8 mos.)  | 1,440 |
| Survey Supervisors (US\$50/mo x 40 supervisor mos.)  | 2,000 |
| Service Supervisors (US\$50/mo x 87 supervisor mos.) | 4,350 |
| Subtotal                                             | 7,790 |

Printing

|                                       |       |
|---------------------------------------|-------|
| Interviews: 16,000 x US\$20/interview | 3,200 |
| Forms/records                         | 1,200 |
| Subtotal                              | 4,400 |

Supplies

|                                                                  |       |
|------------------------------------------------------------------|-------|
| Comm. Worker Initial Supplies (16 workers x US\$100)             | 1,600 |
| Comm. Worker Monthly Supplies<br>(16 workers x 12 mos. x US\$10) | 1,920 |
| Interviewer Initial Supplies (12 interviewers x US\$15)          | 180   |
| Subtotal                                                         | 3,700 |

Equipment

|                                                |     |
|------------------------------------------------|-----|
| Pocket calculators (16 service sites x US\$20) | 320 |
| Subtotal                                       | 320 |

Administrative Expenses

|                                         |       |
|-----------------------------------------|-------|
| Office Supplies                         |       |
| Xerox and Mimeograph (US\$75 x 24 mos.) | 1,800 |
| Postage                                 |       |
| Telephone                               |       |
| Subtotal                                | 1,800 |

Data Processing

|                                                       |       |
|-------------------------------------------------------|-------|
| Key Punching (14,400 interviews at US\$.06/interview) | 864   |
| Processing                                            | 8,000 |
| Subtotal                                              | 8,864 |

Total Direct Costs \$350,054

## II. PROGRAM SUPPORT COSTS

15% of Direct Costs \$ 52,208

GRAND TOTAL \$402,562

III. CPAIMC OPERATIONS RESEARCH PROJECT #2

## II. CPAIMC OPERATIONS RESEARCH PROJECT #2

The CPAIMC operations research project #2 is concerned with the effects of introducing family planning on the rate of utilization of other health care services.

### Background

CPAIMC operates its health service units in facilities provided by a number of different agencies, including quasigovernmental, private foundations, and community owned. In some of the locations where CPAIMC has been asked to offer family planning services, the host agency has informally reported that the utilization of other health services available at the site has increased. If this is true, it has important implications for health policy in Brazil and would be a significant finding for wider publication.

Preliminary consideration was given to a prospective OR research project where CPAIMC family planning services would be introduced in several new locations where health services are currently offered. Statistics would be compared for rates of health service utilization by type of service before and after the introduction of family planning. However, in light of the upcoming elections and the resulting replacement of large numbers of political appointees in the host agencies, some of whom would be participants in the negotiations to establish such new services, it was decided that a prospective study would be inopportune at this time. It was also felt that a retrospective study was too small to be considered as a separate OR project. However, certain conditions of the OR proposal #1 which CPAIMC is submitting for funding make it feasible to conduct this retrospective study using personnel supported by that project, with only minor supplemental funding.

Specifically, the survey field supervisors will have a period of time between the preintervention and the postintervention waves to compile data from a sample of CPAIMC units where the increase in health service utilization phenomenon has been reported. This will have the secondary and not insignificant benefit to CPAIMC of allowing them to keep their field supervisory staff in place between interview waves, rather than having to recruit and train a new set of supervisors for the second survey.

## Purpose

The purpose of the proposal can be summarized as follows:

1. To study an informally observed phenomenon of increased utilization of other than family planning services in health delivery points when family planning is introduced and other services have been available previously.
2. To determine if the phenomenon is real and significant.
3. If real, to determine which services experience the greatest increase in utilization.

## Study Design

Data from 24 months of other health service delivery will be compiled from six sites where CPAIMC currently offers family planning services. This will be divided to include data from the 12 months immediately preceding the introduction of family planning and the 12 months following. It is necessary to use a full year to control for seasonal variations. Data to be collected and compiled include the following:

1. Number of patients seen by type of service by week.
2. Sex and age of patients seen.
3. Change in staffing patterns, hours of service, and related administrative changes.
4. If possible, whether patients who come for other health services subsequently use family planning services.
5. If possible, the number of family planning patients who previously had used some other health service.
6. If possible, the number of women who first use the family planning service and subsequently use other health care services.

All data will be compiled from existing clinic records and no new data will be collected. CPAIMC's Research and Evaluation Unit will develop special data compilation forms designed for use in data entry as well as key-punching. Preliminary data analysis will be undertaken to determine if the phenomenon is real. This will entail use of crude service utilization statistics (all services) plotted on graph by month, with separate means and

standard deviations computed for the 12 months before and after family planning is introduced. If the phenomenon is corroborated by the preliminary analysis, a further analysis will be undertaken to determine where the utilization rates changed the most (e.g., prenatal, post-partum, well-child services) and what characterized service users before and after the introduction of family planning.

If change is in the direction informally observed, findings from the study will be published and distributed to governmental health administrators around the country. The findings will also be used to develop a prospective OR study, which would allow for interviews with service users to determine why they use the services with family planning present when they hadn't before.

### Personnel

The principal investigator will be responsible for overall project coordination. She will contact the host agencies, make the necessary arrangements for release of the data for compilation, review the type and quality of existing data available, and determine the evaluation indicators to be utilized and the necessary data to be compiled. She will also orient the research assistants in the preparation of data compilation forms and supervise them during data collection and processing. Together with the research assistants, she will actively participate in data analysis and will be responsible for preparation of the final report and dissemination of project findings.

The research assistants will be primarily responsible for data collection and processing. They will also work closely with the principal investigator in defining data collection and processing procedures and preparing data collection forms. They will participate in data analysis, carrying out analytic tasks as defined by the principal investigator. They will also assist in preparation of the final report, specifically with respect to preparation of tables and graphs.

PROJECT BUDGET - 8 MONTHS

TOTAL COST US\$

I. DIRECT COSTS

| <u>Personnel</u>           | <u>P/M</u> |               |
|----------------------------|------------|---------------|
| (1) Principal Investigator | 2          | 5,000         |
| (2) Research Assistants*   | 16         | <u>12,800</u> |
|                            | Subtotal   | 17,800        |

Other Direct Costs

Other direct costs, specifically local travel and general administrative expenses, are estimated to be minimal and would be covered by the primary OR project.

Total Direct Costs \$17,800

II. PROGRAM SUPPORT COSTS

15% of Direct Costs 2,670

GRAND TOTAL \$20,470

\* Corresponds to the two field supervisors in the primary OR project.

#### IV. CPAIMC FACTORY PROJECT

#### IV. CPAIMC FACTORY PROJECT

The following represents a scheme for a possible operations research project.

##### Possible Sites

- Factories employing mainly men
- Factories employing mainly women
- Factories employing about equal numbers of men and women
- Additional possibility: military units.

##### Possible Interventions

- Multiple educational sessions over a 1-month (I) period.
- Single education/orientation session with CPAIMC staff available for consultation during lunch hour for 1 month ( $\pm$ ).
- Single education/orientation session with CPAIMC staff available for consultation and contraceptive distribution during lunch hour for 1 month ( $\pm$ ).
- No education orientation session; just announcement over loud-speakers (if appropriate/available) and distribution of flyers to employees announcing that CPAIMC staff will be available during lunch hour for the next month ( $\pm$ ) for consultation, with or without contraceptive distribution.
- Train factory health workers at CPAIMC to provide family planning information and services, including IUD insertion.

##### Adjunct Intervention

Establishment of a men's clinic at a separate location where vasectomy would be available; all male staff. Male outreach workers in factories would staff clinic during hours of operation; "andrologist" (urologist) contracted by hour or procedure.

### Measures/Indicators

- Preintervention: contraceptive prevalence among factory workers (problems: adequacy of data obtained from males; difficulty in locating partners for interview).
- During intervention: service utilization statistics; acceptance of vasectomy.
- Postintervention: followup prevalence survey.

### Critical Issues

1. Finding comparable factories with sufficient number of employees comparable with respect to sex ratios, SES levels, availability of medical clinic on site, etc.
2. Obtaining factory management support/approval for program, release time for some interventions.
3. Finding space at the factories for making presentations.
4. Deciding whether attendance at educational/orientation sessions should be optional.
5. Obtaining adequate baseline measures.

V. BEMFAM OPERATIONS RESEARCH PROJECT #1

V. BEMFAM OPERATIONS RESEARCH PROJECT #1  
(Translated from Portuguese by the Consultant)

Title

Research on the Reasons for High Rates of Fertility in Adolescence and Application of Findings in an Integrated Program of Family Planning and Primary Health Education with Community Mobilization in the State of Bahia.

Location

The research will take place in three states. In Bahia, a community program will be undertaken to be used as the area of experimentation using the results from the proposed surveys.

Anticipated Duration

Two years.

Soliciting Institution

Sociedade Civil Bem-Estar Familiar no Brasil - BEMFAM  
Rua Esmeraldino Bandeira, 120  
CEP 20961 - Riachuelo  
Rio De Janeiro - RJ

Justification

The results found in research and studies on the high rate of adolescent fertility in Brazil are truly alarming. This is corroborated in the preliminary data that, in 20 percent of the births registered in the country, the mothers are between 10 and 20 years of age. Furthermore, among these adolescent mothers, 25 percent have already interrupted previous pregnancies using abortion. Many of these births to adolescents result in an increase in the already high level of abandoned minors; 23 percent of adolescent mothers, for a variety of socioeconomic reasons, wish to abandon their newborns in the same hospital where they are born or to deliver them to couples who are interested in adopting them.

As these data refer only to the births which take place in hospitals, we infer that these percentages would be even higher if data on births which occur without medical attention were included. In some states--for example, in Bahia--49.1 percent of all births take place outside of medical institutions.

The research cited here reveals that adolescents are generally uninformed and are carriers of venereal disease; and that their pregnancies result in premature births and, consequently, a high percentage of perinatal mortality in comparison with births to older women.

Based on data found in the work "Population and Socio-Economic Development in Brazil," the states of Brazil present different rates of adolescent fertility among women 15-19 years of age. The average rate for the country is 66 per 1,000 women between 15-19 years, which varies among the states from 46 per 1,000 (Rio Grande do Sul) to 136 per 1,000 (Rondonia, or Roraima, Acre, and Amapa).

The above work also concludes that, in the period between 1970 and 1980, the fertility of girls between 15-19 had a noticeable increase, compared with the decrease in fertility in women older than 19 years.

According to the census of 1980, in the 12 months prior to the census data collection there were 3,628,455 live births in Brazil. Of these births, 448,210 were to girls 15-19 years; that is, 12.5 percent of all live births.

It should be noted that, of the total of 27,240,295 women in reproductive age (15-44 years), 6,748,510 or 25 percent are adolescents from 15-19 years.

According to preliminary data from the census, 48 percent of all women 15-19 years who had children gave birth in the year previous to the collection of the data. That is, nearly one-half of the total of adolescent mothers gave birth in this period.

Besides the physical health problems, childbearing has significant psychological implications in the development of the adolescent and subsequently, on family organization and structure. In many cases, the family is not in a position to provide the necessary support, leaving the adolescent without adequate shelter and protection. This situation begins to affect all of the society, which, at the national level, finds itself struggling with the problems of unwanted and abandoned children.

In the face of these data, there is a need to undertake a study aimed at understanding the reasons for so many pregnancies among adolescents, thereby making possible a selection of interventions to modify or eliminate this situation--one of the most serious problems that presently confronts the nation.

Concurrent with the research, a service program will be initiated in a selected state. Data obtained from the research can be used to design information and services on human reproduction and family planning for adolescents and for the general population.

## Objectives

### General

The objective of the project is the investigation of the reasons for high rates of fertility among adolescents. The project includes designing a work plan which would modify these tendencies and developing an experimental program in selected communities for family planning services and sex education for adolescents and the population in general.

### Specific

1. Using a questionnaire, interview 4,800 adolescents between 12-19 years in three states selected for low rate of fertility in this group of the population, high rate of fertility, and where a CBD program has been underway for 5 years but which also presents high rates of fertility in this group (possibly Alogoas). The questionnaire will seek:
  - Data from adolescents in relation to marital status, education, reproductive history (pregnancies, abortions, live births), history of contraceptive use, sexual life history, leisure time activities, and cultural patterns.
  - Investigation of adolescent knowledge of human reproduction and contraceptives and sources of information on these, as well as the identification of persons with whom they consult.
  - Understanding of (adolescent) need for information and for services, their preferred channels of information, and preferences with respect to locations for receiving services.
  - Understanding of the reasons for the high rates of fertility and the low utilization on the part of adolescents of the CBD services offered in the state where the program is in operation. The survey will inquire as to whether the adolescents have knowledge of the existence of the services, whether the program reaches adolescents, whether it attracts them, or whether the program is rejected by adolescents and, if so, for what reasons.

- Diffusion of the research results through publication of the findings. Presentation of a seminar directed toward institutions and private and public entities associated with or interested in the problems of adolescents, including participation of adolescent leaders. Contacts with the press to inform the public in general of the findings of the research.
2. Application of a questionnaire to 1,080 teachers of the primary and middle grades in private, public, and religious schools in three selected states. Among other topics, the questionnaires will obtain responses to teachers' points of view on sex education:
    - Beginning at what age?
    - Through what vehicles?
    - Who should be the person providing instruction?
    - Teachers' views of sexual comportment of students of this age.
  3. To establish a CBD program in a selected state, which offers the general population education, information, and services on family planning and human reproduction, with special emphasis on the needs of adolescents as identified through the survey. The data from the research will also be used for planning and development of activities for the program.

VI. BEMFAM OPERATIONS RESEARCH PROJECT #2

## VI. BEMFAM OPERATIONS RESEARCH PROJECT #2

This is an operations research project to screen oral contraceptive users being supplied through CBD programs to determine the prevalence rates of use in the presence of contraindications, and to gather information on medical referral. (This idea was discussed with BEMFAM staff but the proposal draft has not been reviewed by them.)

### Background

BEMFAM began its community based contraceptive distribution (CBD) program in 1973 in the state of Rio Grande de Norte. In 1975, CBD programs were initiated in four more states (Paraiba, Pernanbuco, Alaogas, and Parana). In 1979, Piaui was added as the site of a major CBD operations research project. Rio de Janeiro and Sao Paulo had CBD programs introduced in 1980. Ceara was most recently added in March 1982, bringing to nine the number of states where a BEMFAM CBD program is operating. As of October 1981, BEMFAM had 1,688 CBD distribution points. Between 1973 and 1981, 1,097,227 women received contraceptives through the CBD program.

BEMFAM CBD distributors are trained in distribution procedures, including recognition of contraindications for pill use. They are provided with a checklist which they are to go over with each prospective user for contraindications prior to supplying pills. If contraindications are found, the prospective user is referred to a physician or medical clinic where further evaluation is made as to whether the woman should use pills.

Until recently, BEMFAM paid a small retainer to physicians who cooperated with their CBD program by seeing referred women and sending a monthly report on the patients seen. This retainer is no longer paid, and the percentage of women in the program who are reported seen by a physician has dropped significantly. Whether this is due to diminished referral, physician visits, or physician reporting of visits made is not certain. More than a concern for the causes, BEMFAM is concerned as to whether women are being given the pill without appropriate medical control and whether the checklist is being used effectively by community distributors.

Over the years, BEMFAM has been strongly criticized by the medical community, which had lodged the complaint that BEMFAM provides oral contraceptives indiscriminately, even to women who have contraindications for hormonal contraceptive use.

The proposed OR project will assess the extent, if any, to which women in the CBD program are being supplied OCs in the presence of contraindications and the effectiveness with which the contraindications

checklist is being used. If excessive prevalence of contraindications is found, outcomes of the research will determine whether changes are required in the checklist, distributor training, or supervision. If the prevalence of contraindications among users is low, this information will be used to rebut criticisms that the CBD program operates indiscriminately and is prejudicial to the health of women of reproductive age.

### Purpose

The purpose of the project is summarized as follows:

1. To determine whether CBD clients are being supplied pills in the presence of contraindications and, if so, to what extent.
2. To determine, based on brief interviews with distributors, their use of the checklist, number of women referred in previous week, and related issues.
3. To determine, based on brief interviews with clients, whether they have ever been referred to a physician or medical clinic by the distributor and, if so, for what reasons, the outcome of this referral (whether completed, physician recommendations), etc.
4. To determine, if unacceptable prevalence levels of contraceptive use by women with contraindications exists, the corollaries of this. That is, are prevalence rates a function of length of time the distributor has been in the program, the number of clients served, the frequency of supervisory visits, etc.
5. To determine if current levels of availability of medical examination, control, and client supervision are adequate and whether procedural and structural changes in this aspect of the CBD program are needed.

### Research Design

A team of registered nurses (10) will be assigned a sample of distributors in selected CBD areas. Each nurse will spend 1 week with a distributor (1) conducting medical screening for contraindications of all OC resupply patients and new patients who come to the distributor during that week; and (2) interviewing patients, using a questionnaire, regarding recommendations made for medical control, etc. The questionnaire will provide space for data entry from the medical screening. Screening of new patients will take place after the distributor has determined independently whether the patient is qualified to receive OCs.

Since the sampling unit is distributors, not clients, the sample of distributors will be stratified according to the following characteristics:

1. Length of time in the program. Cut points will be determined, based on distribution of "length of participation" data. It is suggested that at least some of the distributors be very new to the program and others be long-time participants.
2. The number of clients resupplied per month in the previous 3 months. Again, cut points will be determined based on distribution of average number of clients per month per distributor. High volumes of clients may be related to more accurate use of the checklist or, alternatively, may result in careless and less regular use of the checklist.
3. Distributors will be selected from areas where the nutritional status of clients is relatively high and low (probably different states), if there is reason to believe that prevalence of contra-indications is related to nutritional status or if it is deemed politically expedient to control for this in sampling so that it can be reported in the findings.
4. Efforts will be made to see that clients in the study represent different periods of program participation (i.e., OC use). Given the current BEMFAM procedures for OC supply and resupply of cycles (first visit - one cycle; second and third visit - three cycles each) efforts will be made to see that approximately equal (or proportional) numbers of users fall into the following three groups: less than 8 months; 8-16 months; greater than 16 months.

While it is anticipated that at most distributor points there will be universal screening of clients presenting during the week, at some high-volume posts it may be necessary to sample from presenting clients. In this case, a selection algorithm will be established to assure that all clients in low frequency groups are screened. That is, if clients with 16 or more months of use are few in number, an effort will be made to see that 100 percent of these women are screened.

Using the above stratification criteria, a sample of approximately 200 distributors within the geographic areas selected will be included in the study.

SAMPLE DESIGN

Geographic Areas

|                           |      | Client Nutritional Status - High |     | Client Nutritional Status - Low |     |
|---------------------------|------|----------------------------------|-----|---------------------------------|-----|
|                           |      | Length Distributor In Program    |     | Length Distributor In Program   |     |
|                           |      | New                              | Old | New                             | Old |
| Distributor Client Volume | High |                                  |     |                                 |     |
|                           | Low  |                                  |     |                                 |     |

N=25/cell

Timetable (estimate)

Months 1-3

Selection of sample; recruitment and training of nurses, supervisors, etc.; development of data collection instruments, etc.

Months 4-8

Fieldwork data collection

Months 9-12

Coding, keypunching, data processing, analysis, reporting

Personnel

Budget

## APPENDICES

Appendix A  
LIST OF CONTACTS

Appendix A  
LIST OF CONTACTS

AID and Other Donor Contacts

Sam Taylor, AID/Brazil  
Don Newman, AID/W  
Maria Jaffe, IFRP  
Bob Murray, FPIA  
Louise Tyrer, M.D., FPIA  
Dr. Jose Codes, M.D., Pathfinder Fund

BEMFAM

Dr. Walter Rodrigues, M.D., Director, BEMFAM  
Carmen Gomes, Director, Planning Advisory Unit  
Marcio Thome, Director of Evaluation  
Florida Rodriguez, Sociologist  
Paulo Roberto, Technical Assistant, Planning  
Marcio Schiavo, Head, IE & C Unit  
Mariana de Marinda Puccini, Technical Assistant, Planning

CPAIMC

Dr. Helio Aguinaga, Director Presidente, CPAIMC  
Karen Lassner, M.A., M.P.H., Director, Research and  
Evaluation Unit, CPAIMC  
Gilson Guilhermino, Jr., Research Assistant  
Wander Pechra, Research Assistant  
Sergio Nunes, M.D., Medical Chief, Community Health  
Ann Mary Ross, Nursing Chief

Lia Kropsch, Executive Director

Beatriz Bittencourt, Field Supervisor

Lucy Mar Rodriguez, Head Nurse, Central Clinic

Eduardo Lavander, M.D., Head M.D., Central Clinic

Appendix B  
DESCRIPTION OF CPAIMC SERVICE UNIT STRUCTURE

## Appendix B

### DESCRIPTION OF CPAIMC SERVICE UNIT STRUCTURE

CPAIMC Women's Health Care Auxiliary Units differ from miniposts in that:

1. They have a longer history of existence.
2. They have a larger catchment area.
3. They are physically larger facilities.
4. They may or may not have miniposts associated with them.
5. They are staffed differently, usually having a full-time technical or registered nurse as well as one or more auxiliary nurses, and a limited number of physician hours per week. By contrast, miniposts are staffed by a single auxiliary nurse working part time (3 half-days/week), who is supervised by a registered nurse.