DEVELOPING A MODEL OPERATIONS RESEARCH PROGRAM
(prepared for Iran)

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Scope and Purpose of Paper

A model operations research program should have comprehensive and extensive availability of family planning services, including permanent medical contraception, injectibles, tubectomy, implants, access to medical and surgical abortion, emergency contraception, levenorgesteral and copper IUDs, the ring depot and spacing methods such as oral contraceptives and condoms. A comprehensive contraceptive service is defined as that which uses all medical and paramedical personnel, within the limits of their capabilities or qualifications after training. A model project should have at least one distribution point for condoms and pills in every village.

Objectives

Couples should want and have replacement size families. The goal of the model project is to determine if comprehensive contraceptive services and communication efforts can achieve this goal.

National and local leaders should understand the effect of population growth on agriculture, education, health and all phases of socio-economic development. The public should be informed about contraceptives with the message to stop at one, two or at most three children.

Specifically, the government, working with donor agencies, would:

1. Assign a project director for the model project and hire the necessary staff.

2. Develop a population awareness program for national and local leaders.

3. Utilize all medical and paramedical personnel to provide permanent medical contraception, injectibles, implants, oral contraceptives and IUDs within the limits of their capabilities or qualifications after training.

4. Set up carefully supervised depot distribution of oral contraceptives and condoms in public/private sectors.

5. Develop the training, working procedures, supervision and evaluation of fieldworkers and persons paid fees to recruit new acceptors.

6. Conduct a continuing mass media communications program with a special campaign four months of the year directed at both the public and opinion leaders.

7. Develop and evaluate special information and educational programs.

8. Expand the services and promotion through the use of mobile units.

9. Develop the model project area as a training and research base for the nation.

Assessing priorities in a comprehensive model is difficult. At first developing a contraceptive service is more important than a communication program. Priority in communications could be given in the following order:

Leader education
Mass Media
Fieldworkers
Mobile Unit
Functionaries
Developing Training and Text Materials for Institutions with Public Contact

Project Setting and Fact-Finding

The pretest area for the model campaign should be typical of the country as a whole, with similar rural and urban characteristics. A feasibility study of the setting should describe population characteristics and distribution, education, occupation and literacy. The potential contribution of the medical manpower and functionaries should be ascertained.

Fact-finding should determine government policy supporting the model, what government ministries besides Health will cooperate and participate, what improvements are needed in contraceptive services, what fieldworker manpower is available, what is the media structure and potential, what materials are available and needed, what existing evaluation has been done and availability of staff to handle evaluation.

Leader Education

Before starting the project, government, business and professional leaders should be assembled at a seminar. The seminar should be opened by the leading government official in the area (the Governor), a representative of the Ministry of Health/Planning, the Model Project Director and Research Director. After an explanation of the project, each leader should be given a questionnaire to get baseline information on the leaders' knowledge of population and family planning as well as gauge potential participation in the project.

The leaders should determine when they believe the population in the project area should reach zero growth rate. The government and private officials would be requested to issue statements supporting the project with specific directives to staff to cooperate and participate in the program.

All the local leaders could receive monthly mailings describing the relationship between population and developmental efforts as well as a progress report on the project. Legislators, ministers and deputy secretaries, religious leaders, newspaper editors, radio station directors and professionals should be added to the mailing list.

The project director would be responsible for writing a progress report each month. The problems covered in the project area would include:

A leadership statement on population
The relation between population growth and agricultural development
The projected school age population and needs for schools and teachers
Religious leaders' support of family planning, etc.

The content can also be related to local news, such as agricultural yields in the area and plans to build schools.

After one year all persons on the mailing list should be given a post-evaluation questionnaire to gauge the effectiveness of the mailing.

In addition, a sample of the leaders attending the opening meeting should be interviewed in their office before the project begins and one year afterwards to measure changes in knowledge and actual participation in the project. After one year, there should be another meeting of local leaders. Outstanding participation in the project will be rewarded.

Administration, Organization and Goals

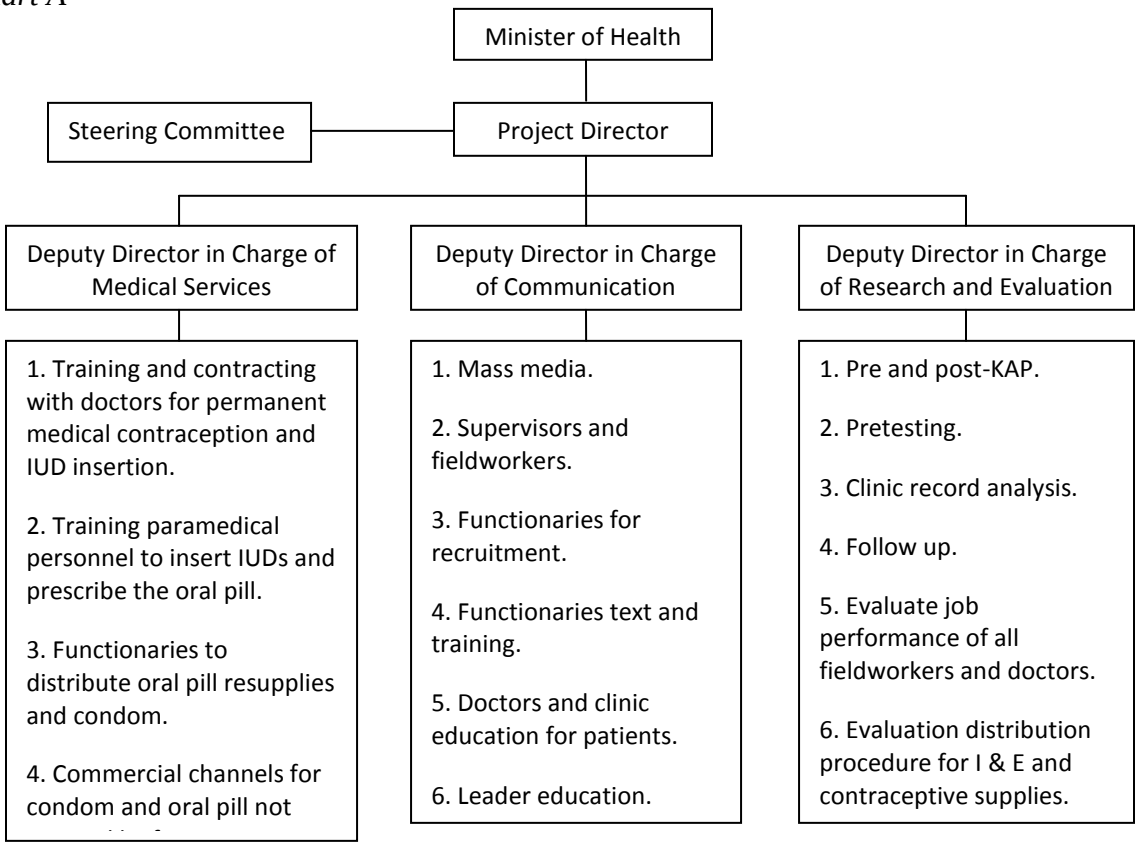
Initially the Project Director will be responsible for getting policy clearances to operate, negotiating the budget with the government and donor agencies and setting up the steering committee. The Project Director would have authority to implement all phases of the project, including hiring and firing of personnel.

The medical policy issues would cover contracting with public and private doctors to provide permanent medical contraception, Implant, IUDs, paramedical personnel to insert IUD and prescribe oral contraceptives. The communication policies would cover clearances to use all mass media, hire full time fieldworkers and pay finders' fees to persons trained to recruit permanent medical contraception and IUD acceptors.

The Steering Committee would consist of leading government officials in the goal area, a representative of each of the ministries participating in the project (Health, Education, Agriculture, Information and Labor), a representative of each media which will be used, such as radio, television, newspaper, cinema, a representative of each donor agency and the Project Director. Before the first meeting of the Steering Committee, the Project Director would send each member a description of the project. At the first meeting the details of the project would be explained with a specific time table. The specific responsibilities of each committee member would be agreed upon at the meeting.

If the grant is administered under the auspices of the Minister of Health, an organization chart would resemble Chart A.

Chart A



In a population of 2,000,000 there would be about 360,000 women in the reproductive age group. At any given time about 14% would be pregnant, 9% infertile, 10% to 20% practicing some form of contraception, 30% to 40% would be wanting more children and the remaining 20% to 30% would be wanting more children and the remaining 20% to 30% would be the immediate goal population. The goal for the first year would be to recruit 10% of the women or their husbands in the reproductive age group. After the second year, another 15% should be using contraceptives effectively. After three years at least 30% to 40% of the couples should be practicing contraceptive usage, 50% after four years and 60% after five years. With 60% of the couples using some form of contraception, then the birth rate should drop about from about 40 to 20 per 1,000 live births in five years. **(NOTE: are these statistics outdated? If so, should we update them or delete this paragraph?)**

All couples should want and be able to have replacement size families. With the exception of surgical contraception services, abortion procedures should be available for the couples who fail while using the contraceptives offered.

The goal for the first year would be 3,000 vasectomies, 5,000 implant acceptors, 3,000 tubectomies, 11,000 IUDs, 11,000 oral pill cycles and 12,000 condom acceptors. Second year goals should be similar yet permanent medical contraception should double. Continuous use goals would have 80% of IUD acceptors continuing after one year and 60% after two years. If 60% of oral pill and condom acceptors continue after one year and 50% after two years, this would be better than the average performance. **(NOTE: are these statistics outdated? If so, should we update them or delete this paragraph?)**

Development of Contraceptive Services

All qualified doctors, gynecologists and surgeons would be offered the opportunity to participate in the permanent medical contraception program and be eligible for training and signing contracts. Each doctor can sign a contract for both his private and public practice. Specific fees would be based on fee schedules for medical services in the project area.

All acceptors should be given complete and accurate information on all methods, including side effects, how to use the method, probability of discontinuation and pregnancy failure rate.

To control false reporting, all receipts will be signed by acceptor, doctor or nurse, motivator and program accountant. All permanent medical contraception and IUD acceptors will be followed up by fieldworkers. Any doctor giving a false claim would be fined and dropped from the program.

Ten mobile units will each set up ten IUD distribution points which will be visited every two weeks. Pills and condoms will be provided to fifty village distribution points every other month. The mobile team will consist of a driver, nurse midwife and fieldworker. The nurse midwife will be trained to insert the IUD. A gynecologist will assist the nurse midwife in developing the ten clinics. For women wanting the IUD, implant or permanent medical contraception, the mobile unit will take them to the clinics or hospitals. The IUD clinics may be one of their units own centers or a private doctor's office.

A prominent woman, such as a granny midwife, a woman continuing to use the pills, a school teacher or wife of the village leader will be used to resupply pills and condoms at the village distribution point. The distributor will get a set fee per cycle of pills distributed.

The condoms and resupplies of oral contraceptives will also be distributed through commercial channels. The distributors of soap, tea, matches and aspirin will be invited to bid for distributing oral contraceptives and condoms in villages. The wholesalers would be given free condoms and pills and they would add on the wholesale and retail mark up which would be charged to the acceptor. Once the price to the consumer is fixed, the program would be supervised by mobile teams.

Some of the communication procedures that can be tested at the point of service are:

Signs and symbols identifying the doctors and contraceptive depots
Posters and pamphlets in the waiting room and on retail counters

Audio visual aids such as playback cassettes and film strips

The most important aspect of communication will be influencing the acceptor to adopt the method that will help him or her avoid an unwanted pregnancy.

Mass Communications

The communication director has to find out what to say, to whom, through what channels, when and how often. The strategy should consider the audiences to be reached, the cost effectiveness of the media and the media infrastructure. The biggest difference between developing countries will be the amount of control the government has over the media, especially radio and television. Most newspapers and magazines report on population and family planning news as well as take advertisements.

Existing family planning media campaigns and continuing media programs fail in the following ways:

They do not have pretested slogans, symbols or themes

They lack a strategy of reaching opinion leaders and functionaries

They do not support fieldworkers' activities

They do not give complete and accurate information on the methods of fertility control

They do not have message reinforced through a multimedia program

They do not consider the cost effectiveness of media

They do not have proper evaluation techniques by the acceptors or general public

The communication director should first gather as much information as possible on the infrastructure of the media from the Ministry of Information and Advertising Agencies. How many radio sets are there in the projects areas? Has there been any media exposure or listener surveys? What are the favorite radio programs for men and women, or what age group and socio-economic background? What is the cost per 20-second and one-minute announcement? Can the government request the radio director to give the project free time? What programs scheduled during a week could have population and family planning information added? What news items could be released during the project? What are the circulation figures for newspapers and magazines? What audiences do they reach? What is the cost for placing inserts and advertisements? Can the ads be localized to the goal area or will they cover a larger region? How many cinema houses are there, what is the seating capacity and attendance figures? Do they have advertisements or public service film clips or slides before films? What is the paper and printing cost? How effective and extensive is the mailing system? What is the cost for mailing postcards and letters? Can a government stamp be used for free postal services? Is there a sound truck or loudspeaker equipment? Are billboards commonly used and what is the cost?

Advertising and market research agencies can provide valuable information, especially where media is predominantly controlled and operated by the private sector. If there are a large number of radio stations in the project areas, then an advertising agency is likely to have conducted a listener survey. If there is considerable competition among radio stations, then proper timing and scheduling of radio spots is essential. The agencies can inform the communication director as to the type of campaigns that have been most effective. They can help with pretesting and collecting baseline information. They will even prepare prototype campaign materials and suggest a strategy.

Where the government controls the media, the Ministry of Information is the best source of information. The directors of various media divisions can describe what public education programs have been most effective. Health educators can provide assistance and experience.

After collecting information and getting advice, the Director of Communications Research should develop materials and pretest instruments as well as conduct a baseline KAP (Knowledge, Attitude and Practices) and media exposure survey. The details of sampling, pretesting the instruments, printing, training interviewers, supervising the data collection, coding, editing and tabulating need to be formulated at the beginning of the project. The pretesting should determine what radio spots to use and the readability and comprehension of posters, leaflets and pamphlets.

The pre-survey can help construct a media profile of various audiences and confirm pretested findings as well as provide a baseline on fertility characteristics and the public knowledge, attitudes and practice of family planning. Baselines need to be formed as to awareness of the population problem, perceived motives of having children and ambivalence toward an ideal size. A media profile can be constructed for the functionaries in samples consisting of school teachers, village leaders, granny midwives, etc., for the newly married men and women with only one or two children, for older men and women and for varying socio-economic groups. The objective is to know as much about goal audiences as possible.

The actual use of specific media in a continuing program as well as special campaigns should be determined by cost and effectiveness of the media. With predominantly illiterate audiences in rural areas, the radio will be the most effective media. Television will soon be the most important media in urban areas.

For developing a model communications project, full-time or even part-time artists, printers or script writers are not needed. One energetic communications director can contract with artists, film studios, script writers, reporters, etc., for all the materials needed.

Although the messages and themes will evolve from the pretesting and baseline surveys, there are a number of specifics to keep in mind. The eventual objective is to help couples want and have replacement size families. Most of the men and women accepting in the first two years will not want to have any more children. Permanent and semi-permanent methods need to be stressed. Couples need to know how to stop child birth. Most couples are ambivalent about a specific family size. The message should help couples discriminate between specific family sizes and determine a specific family size. Messages should support the fieldworkers and help

open doors. After understanding the media exposure of functionaries, a special effort should encourage them to go to training classes and to distribute coupons and resupplies of contraceptives. For example, the aspirations for education, consumer durables and security in old age should be related to the two or three child family. The most important messages should be reinforce through all media.

Special gimmicks can be used, such as free offers for a limited time, prizes for the first acceptors, special introductory cards, etc. These gimmicks can have a considerable impact, especially during the campaign periods. All media should direct the public to specific locations for contraceptive services. The public should be given alternate methods for receiving further information, including a post office box, telephone number and, where applicable, a website for the program.

The actual increase in acceptors and continuous use resulting from the campaign and continuing program will provide the most important indices. All the changes in contraceptive service and use of fieldworkers and functionaries will also affect acceptance levels. Although acceptor discrimination between sources of information provides only a tenuous indicator, the following questions should be added to the clinic records:

1. Before coming here, what were all sources of information you heard about the method you chose?

2. What was the most important source resulting in your visit?

The clinic staff puts a check before all information sources and circles the most important source. Coupons can identify the impact of functionaries and fieldworkers. Besides source of referral and patterns of acceptance, changes in age and parity should be recorded, prior contraceptive use, open interval, the ideal family size and if methods are for spacing or limiting child birth. The questions can be on the coupons or clinic forms and tabulated monthly by one person in the research and evaluation unit.

The project should attempt to diagnose word of mouth communication, especially rumors. By selecting 20 literate people in the villages and cities to write down what they hear and see, they can record discussions between people about family planning and get information on rumors. The diarists should never start a discussion. They should only record what is stated between people. Besides recording verbatim what is said, they should note the location, the sex of discussants and if other people are present or overheard the discussion. The diarists should send in their notes to the Evaluation Unit at the end of each month.

<u>Use of Frontline Health Workers in Family Planning Programs</u>

This description is a model based on family planning programs in Asia. The fieldworkers are between the ages of 30 to 35, married, have 2 or 3 children, and are using a contraceptive. There are geographic, cultural and religious variations plus differences in health, education, medical and mHealth infrastructure.

In cities one fieldworker per 15,000 is adequate. Towns with 7,000 to 10,000 people usually have an assessable surrounding population of another 5,000 to 7,000 thousand.

About 60% of a two million population would be covered with 52 fieldworkers in one year. There would be one chief supervisor for every 10 fieldworkers.

The fieldworkers are selected from men and women who have successfully practiced family planning. The supervisors would be given three weeks of training and fieldworkers two weeks of training. The only educational requirement is that they be able to fill out the necessary forms. The training would cover the following topics:

1. The social, economic and health reasons underlining population growth, gender equality, rights-based family planning and quality of care.

2. A description of the goal and objectives of integrating family planning with maternal and child health.

3. How to help youth and couples choose a specific family size.

4. How to help couples choose a method of family planning. How to work with couples in preventing child marriage and adolescent pregnancies.

5. How to inform men and women about contraceptives at work, during home visits and at group meetings.

6. The physiology of reproduction.

7. Why vasectomies and mini-laparotomies are offered for men and women not wanting any more children. How to give consulting.

8. The IUD, its expulsion, removal, pregnancy rate and the side effects to expect. Exploring sub-dermal implants, injectibles, and the vaginal ring. Instructions on post abortion care, including medical and surgical abortion.

9. The oral pill, including side effects to expect and difficulties in continuous use.

10. Using educational, visual aids and mHealth.

11. How to work with functionaries such as traditional birth attendants, village and religious leaders, school teachers, agricultural extension agents, etc.

12. How to establish community distribution of condoms and oral contraceptives.

13. Record and reports.

14. Operation and goals and quality of care.

15. Fact-finding.

16. Fieldwork practices and community organization during home visits and group meetings.

17. An examination of knowledge and skills acquired.

18. Maternal and child health, nutrition and causes of maternal and child deaths.

The fieldworkers have the following objectives:

1. To have couples want and have wanted pregnancies and births. To have youth and couples practicing contraception and family planning without coercion and family planning without coercion and with guaranteed quality of care.

2. To have measurable working procedures and performance.

3. To understand how population growth impacts development, poverty, the environment and the capacity to deliver health, education and productive employment.

4. At the end of a home visit or group meeting, couples should consider the contraceptive choices needed to plan, space or stop pregnancies.

There are three techniques developed to help couples fix an ideal family size. One procedure develops functional relations between couples' aspirations and specific family sizes. Men and women can quantify the cost of current living expenses as well as desired durable goods, educational cost for children, transportation needs, housing expectations, food costs and other expenditures required to fulfill current aspirations. By dividing varying family sizes into the cost of achieving these aspirations, couples soon learn the cost of having each additional child. Simple text and exercise materials have been developed for adult functional literacy classes and can be easily adopted to the home visit procedure of the fieldworker.

Names of persons interviewed at home
Spouse's name
Address
Age of women
Live births
Ideal family size
When the next pregnancy is desired
Voucher, coupon or contraceptive given

After visiting the wife and husband, if present, the fieldworker signs or fixes a thumb print to the record form. A signature can be an expression of commitment. At subsequent home visits or group meetings, the fieldworker can determine if the couple is achieving the ideal size, using the contraceptive desired and timing their pregnancies accurately. Births and deaths are recorded at

subsequent meetings. Once a couple fixes an ideal size and decides when they want their next pregnancy, the fieldworker helps them choose the contraceptive that will achieve this objective.

The husband or wife should be offered an appointment to visit the doctor or clinic, specifying the time, date and location. If couples decide on the contraception desired, then transportation should be arranged for them to go to the services on a specific date.

The fieldworker should have the wife or husband discuss the subject of family size and method of family planning with their spouse and then make a decision. The information recorded in the daily record form should be based on the couple's decision. Besides having the couples sign the record forms expressing an intent, there are other techniques to close the gap between desire to practice and actual practice, such as having a free-for-a-limited-time-only campaign period and involving the mass media and local functionaries or issue certificates to youth who increase the age at marriage, delay the first birth by 2 to 3 years, increased the intervals between births by 2 or 3 years and enroll families in small family clubs.

One male and female fieldworker will each be assigned to a 30,000 population. In this population there will be about 5,400 women in the reproductive age groups between the ages of 15 and 45. If each fieldworker contacts ten men or women a day, all the families can be contacted the first year.

The first week in the assigned area will be for fact-finding. The fieldworker will have a map showing all health and medical facilities where family planning methods are available. She will be introduced to the leaders in the community by the supervisors. At the meeting for the leaders, the fieldworker will be present and explain their part in the project. The fact-finding should determine where groups meet, such as parent-teacher meetings, women's organization meetings and meetings of professional groups. The fieldworkers should arrange to integrate family planning instructions into these meetings.

The male fieldworkers will primarily work at factories, tea houses and with husbands who object to their wives practicing family planning. The male fieldworkers will concentrate more on group meetings. The female fieldworkers will concentrate on home visits. Both will be responsible for follow up of all acceptors and establishing community-based distribution of contraceptives.

After the first visit to all families in the first year, priority will be given to women who recently gave birth, men and women who accepted a coupon but did not respond and couples who failed to achieve proper timing of births. With each subsequent visit they will keep track of births and deaths.

The fieldworkers will have a training manual and detailed instructions on the contraceptives, mHealth and the mass media will help open the door for the fieldworker. Radio spots will state that someone will be knocking on doors to help couples decide on a family size, when to have their next child and explain the methods available to stop and space pregnancies.

The supervisors will visit each fieldworker at least once a month to check on working procedures and to provide in-service training. Problems will be reported monthly by the supervisor to the

chief supervisor and director of the project. The supervisor will be responsible for handling community relations for the fieldworkers.

The communications research should first concentrate on pretesting procedures to help couples fix an ideal family size and choose the contraceptive needed to avoid unwanted pregnancies. Pretesting would also include what to say when opening the door, stimulating group acceptance and choosing a method of family planning.

From the monthly records, the following information could be fed back to the fieldworkers: Number of acceptors and continuous users by method during the month; Number of home visits, group visits and attendance; Couples who fix an ideal size or determine when they want their next pregnancy; Contraceptives distributed by fieldworkers and functionaries as well as follow up visits and activities focused on youth in the community.

At the end of each year a fieldworker questionnaire will determine why certain fieldworkers are more productive than others. The study can determine how many home visits it takes to achieve positive results, the resistances to couples choosing a family size and guaranteeing quality of care.