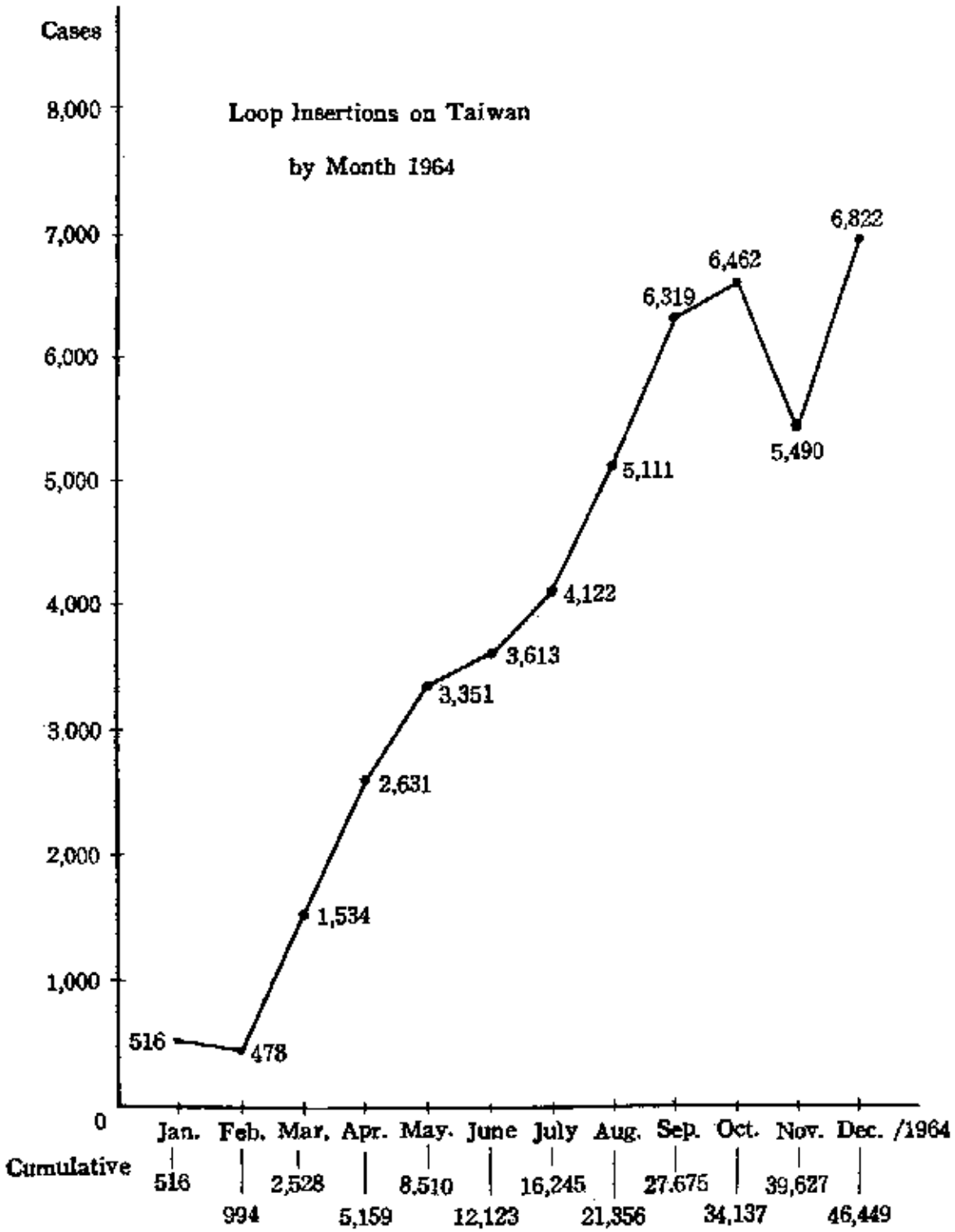
FAMILY PLANNING ON TAIWAN

1964—1965



TAIWAN POPULATION STUDIES CENTER

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Opinions expressed in this paper do not necessarily reflect the official viewpoint of the Taiwan Provincial Department of Health nor of the Taiwan Population Studies Center.

A 1965-66 report is under preparation and soon will be made available.

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I. SUMMARY

A. During 1964, the first year of the national family planning program, 46,449 women have responded for loops. The three principal reasons are:

1. A large number of women in Taiwan, between the ages of 30 and 45, with 3 or 4 children, are already interested in stopping child birth.

2. These women have been informed by mass media, field staff, health station personnel, private practitioners and word of mouth that an easy-to-use, inexpensive, reliable and safe contraceptive is available.

3. Easy access to this contraceptive, the Lippes loop, has been offered the women by private doctors who have been trained to insert the loop.

B. Medical acceptance of the loop:

1. The China Medical Advisory Board has approved the use of the loop for the island-wide program. The loop has also been approved by leading Western medical authorities.

2. Although the private doctors inserting the loop are paid only half of what they receive for the insertion of the Ota Ring, they are generally very cooperative.

3. During the first three months of the program, more than half of the island's obstetricians and gynecologists (OBG's) volunteered to attend the loop demonstration instruction clinic. An invitation was sent to all the specialists in an area, more than 90% responded. So far, only specialists have been invited to do insertions, although the plan for 1965 calls for training 300 to 400 private practitioners and perhaps selected health station personnel. Emphasis has been given to training women doctors because they are preferred by many women.

C. Why is family planning desired?

1. The community "felt need" is strong. A survey conducted in Taichung revealed that 90% of the women in the child-bearing age approve of family planning; 85% of these women say they do not want more than 4 children. (But they will have 5 to 6 unless something is done.) At least 10% of these women have admitted having one or more abortions, which is illegal.

2. Because of the efficient public health program, many diseases which were common killers just a few years ago have been almost eliminated. The use of modern drugs, which have controlled malaria, typhus, T.B., and cholera, has contributed to one of the most severe problems facing the world today: rapid population growth. Women are now aware that they do not have to have five or six children in order to have 3 or 4 survive.

3. The main reason that the Government and the parents are interested in family planning is economic.

i. Parents want a better standard of living for themselves and for their children. They want to be able to provide adequate food, living space, clothing and, most important, education.

ii. For every dollar spent on family planning program, the government saves about US$300 in educational cost alone.

D. Information and education:

1. A planned educational program benefits the poorly educated and the rural population--people who ordinarily would not know about or accept family planning without benefit of the program.

2. One of the most important findings to date is that the program's main asset is its use of existing medical personnel and information channels. Word-of-mouth communication is free, and the program makes its own news. More than half of all the respondents have been referred directly by health station personnel and by the private doctors at negligible cost.

3. The couples are informed that family planning is not only becoming popular in many other countries but also that many couples in their own community are practicing it.

4. People are taught that family planning will help them realize their family goals, that, when the right method is used correctly and when needed, it is safe and effective.

5. Most couples with large families realize why family planning is important. But they need to be informed what methods are available and where.

E. Accomplishments and evaluation of the field staff:

1. Who is the best field worker?

i. An effective worker is a woman, usually around 30 years old, emotionally mature, with some influence in the community where she works.

ii. She is usually married, with 2 to 3 children.

iii. It is essential that she know the language and that she has a background similar to that of the people with whom she works.

iv. She is capable of using an effective sales approach.

v. She is composed during public speaking.

vi. Although some nurse-midwife training is helpful, the most effective worker is usually the hardest worker, whether trained or not.

2. How does the field worker obtain the most loop cases?

i. Each worker has about 30,000 people in her area, with about 5,400

households, 3,600 women 20 to 44, and about 300 lins. A lin is a neighborhood household unit with usually about 15 to 20 families.

ii. Her working capacity in a year is about 1,600 initial home visits, plus 400 follow-up visits, and 100 lin meetings. By dividing population target (households, high parity women, or lins) by her working capacity (home visits and lin meetings) she can determine what proportion of the population she can be expected to approach in the first year.

$$\frac{\text{5,400 households}}{\text{1,600 home visits}} = \text{about 30\% of the households}$$

$$\frac{\text{300 lins}}{\text{100 lin meetings}} = 1/3 \text{ of the lins}$$

iii. But the field worker knows that women who have not had at least 3 children, including at least one son will usually not be interested in family planning. Most women want to have the number of children desired, one right after the other, and then stop child bearing. In order to save time, the worker copies from the village registration the names and addresses of those women who have 3 children and at least one son. This eliminates over a third of the households, giving the worker the opportunity to visit 80.7 to 90% of the women who are likely to be interested.

iv. The worker also budgets her time by conducting lin meetings for just the women with many children. During these group meetings, visual aids, such as flip charts, slides, and pelvic models are used. The group meetings serve two main functions. They are educational; but, more important, they provide social support for women who become aware that small families are socially acceptable. The women also learn that many people in the community are already using means to have only the number of children desired.

F. What is known about the average 100 women in the child-bearing age?

1. Out of every 100 such women*:

i. About 14.0 are practicing contraception to their satisfaction.

ii. Another 15 have been sterilized or are believed sterile.

iii. About 15 will be pregnant.

2. This leaves only about 56 who might be interested in accepting family planning.

i. But about 28 of these are just married, or do not have 3 children and a living son and usually not interested in spacing their children.

ii. Of the remaining 28, a full 24 will say that they intended to

*Taken from a survey of 12,643 women

accept the method that appeals to them, usually the loops.

iii. With any reasonable program, 11 of these women will respond during the first year, with 8 choosing the loop and three choosing the condom or other traditional supplies.

3. The other 13 women are more difficult to enlist. The barriers that keep these women from responding can be lowered by improved education and administration. These barriers are discovered by a follow-up of the women who have taken a coupon, saying they wanted a loop, but have not gone to the doctor. These women are simply asked why they did not go. Their answers, if properly analysed, provide guide lines for action. (This will be further discussed in Part IV and X.)

G. Two family planning projects and guide lines for action:

1. Channels of supplying loops and traditional methods.

i. Eight condom and foam tablet supply depots were established in two rural townships with a population of 50,016. Insertion of the loop was offered at two township health stations one afternoon a week and by 8 OBG's in a two cities 20 miles away.

ii. The information about the methods available and where to go was included in a leaflet handed from door to door. Attached to the leaflet was a numbered coupon which stated "While this special offer lasts you can receive a FREE contraceptive of your choice". The coupon expired one month from the date of issue. In six weeks, six workers had distributed fliers in 93% of the 8,080 households in the two townships.

iii. During the first 4 months, 20% of the married women 20 to 39 accepted a contraceptive.

2. Guide lines for action:

i. About 39% of the respondents chose traditional methods. This is probably because they were offered through existing community institutions, where the people could obtain them without having to answer embarrassing questions, be given a medical examination or seen accepting the supplies. These institutions were the drug and herbologists' stores, beauty parlors and barber shops, the Farmers' Association, health stations, doctors, midwives, and community leaders.

ii. The sales device of providing the free offer for a limited time only helped the couples to make a quick decision before their coupon expired.

iii. Although the community was only half literate the leaflet proved to be a good means of informing people about the contraceptives and where they were available. Bulk mail or paid distribution from door to door is a cheap way to inform a large number of people in a short time.

iv. Again, the advantages of the loop had no small part in the success of the project.

v. A large proportion (90%) of the women accepting loops chose to go to the health station near by for insertion, rather than the doctors in the city 20 miles away.

3. Use of non-OBG doctors to insert the loop and incentive payment:

i. A qualified general practitioner was chosen to insert loops. Cases were referred to him by persons who were given an incentive payment of NT$10 per loop case referred. This project has been successful.

ii. In the future, more general practitioners will be used and an incentive payment will be applied on a wide scale. The administrative details of such a project are now being worked out.

H. How much does a large family planning program cost?

1. For each insertion, the doctor is paid NT$30 (US$.75)* by the program and another US$.75 is paid to him by the patient. The total fee of US$1.50 includes any medical attention necessary and the removal of the loop when desired.

2. During 1964, it cost about US$1.50 to instruct a physician on the use of the loop. An average of 170 loops were inserted by each doctor. The service cost of the loops and inserters was about US$25.00. The total cost per loop inserted was about US$1.10. Locally produced loops and inserters are now available at the cost of US$0.025 and US$0.05 respectively.

3. The major cost is the field staff. The cost per case referred for the best workers is US$1.00, with an average of about US$4.00. Some of the workers cost as much as US$50 to $60 per case referred.

4. During 1965, if the target of 120,000 loops inserted is reached, the total cost per insertion will be US$2.50. The cost per capita is only US$0.025, a trifling amount, considering that the cost to the government to educate one child before he reaches 15 is US$700.

I. Does Taiwan have a population policy?

1. Although the government does not have a "population policy", there have been no public or political problems as a result of the rapid expansion of this program.

2. The actual responsibility of the Health Department is restricted to family planning information and education.

3. For long range health planning a Ten Year Health Plan was drafted for 1966 to 1975. The criteria for health priorities were:

*US$1 = NT$40

i. High economic justification.

ii. The community "felt need" is urgent and serious.

iii. The program is important as a cause of preventing death or illness.

iv. Means for the solution of the problem exist and the personnel and facilities are available. The cost of the program is reasonable.

v. The program is preventative in nature.

vi. The rate of return for unit investment is large.

The family planning program was placed fourth, behind reorganization, communicable diseases, and T.B.

The justifications:

i. The return per investment is higher than any other government program.

ii. The "felt need" is urgent and serious.

iii. The mortality and morbidity increases as the number of births increase. The frequent alternative, illegal abortion, threatens the lives of many women every year.

iv. Means for the solution of the problem exist. The cost is lower than any of the communicable diseases programs.

v. The Taiwan program will probably prevent about half a million unwanted births during the next 6 years.

II. SETTING

Taiwan, a province of the Republic of China, is a small and mountainous island about 100 miles off the coast of Mainland China. About 12.25 million people live within its 14,000 square miles. It is the second most densely populated country in the world, with more than 320 persons per square kilometer. Only one fourth of the island is under cultivation and one half of it is covered with forests. The population is "young" with 45 per cent of the people in the unproductive age category below 15. Although Taiwan's gross national product has doubled since 1952, the population increase has decreased, by half, the benefits to the individual.

Taiwan's population growth: In 1898, the Japanese, who occupied the island for 50 years, estimated the population to be 2.6 million. It had increased 2.3 times by 1940 to 6 million and has doubled again in the last 24 years. Part of this increase is due to immigration, but, primarily, it is due to the reduction in the death rates without a corresponding reduction in the birth rates. The death rate has decreased from 18.2 in 1947 to 6.1 in 1963, but the birth rate for the same period has decreased only from 38.3 to 36.3. Even with an intensive family planning program, to accelerate the present decline in the birth rate, the population will still double again before the turn of the century.

Taiwan has an favorable setting for a family planning program: Fundamental to the success of any attempt to slow population growth are the social and economic conditions and attitudes which determine individual family size. Taiwan is going through a transition from a traditional to a modern society. The island is becoming industrialized to a great extent. Literacy and education are wide spread, and the transportation and communication systems are good.

The location of the program: By the end of 1964, the program has become operational in 15 of the island's 22 counties and cities. The total population in these areas is 10.2 million. Only a small part of these people have been contacted directly. The main concentrated effort has been in the 100 townships and city districts where the 300 private obstetricians and gynecologists live. The population in these 100 townships is 4.5 million. At least half of the women in these areas have been informed about the loop by the Pre-pregnancy Health (PPH) workers, health station personnel, Village Health Education Nurses (VHEN's) and the doctors themselves.

III. OBJECTIVES

The objectives of the Family Planning Program have been sixfold:

A. To apply the findings of the Taichung study in an expanded program covering 18 of the island's 22 counties and city districts;

B. to integrate, through education and information, the idea of family limitation within the existing attitudes, values, and goals of people;

C. to inform what contraceptive methods are available and where the materials can be purchased;

D. to facilitate the supply of contraceptives by lowering the barriers of cost, distance, embarrassment and other inconveniences which have heretofore made their purchase difficult;

E. to utilize the private OBGYN's on the island to insert the Lippes loop;

F. to initiate general health education and instruction.

The objective for 1965 is to further extend the program on an island-wide basis by putting 168 more field workers in the field and training 300 to 400 more doctors. The gap must be closed between the large number of women who are interested in becoming or intend to become family planners and the small percentage who actually do.

IV. TARGETS

During 1964, 46,449 loops were inserted. This means that 3.9 per cent of the women on the island have accepted the loop in 1964. This was more than double the target of 20,000 set during April.

The target for 1965 is 120,000 loops inserted. The ultimate goal is to reduce the natural increase from 3 per cent in 1963 to 1.9 per cent by 1973 and 1.7 per cent by 1988. This can be accomplished if 600,000 loops are inserted in the next five years.

Calendar year	No. of Loops to be Inserted	Cumulative Total No. of Loops by the End of the Year	*Reduction in No. of Live Births
1964	45,000	45,000	-
1965	120,000	165,000	10,000
1966	150,000	315,000	30,000
1967	150,000	465,000	60,000
1968	130,000	595,000	90,000
1969	50,000	645,000	114,000
1970	-	645,000	124,000
Total	645,000	645,000	428,000

*5 loops inserted are estimated to reduce one birth. This is computed on the ages at which women have accepted loops.

To reach the target for 1965, about 1,200,000 women will have to be educated or informed about the loop through mass media, the field staff, the health station personnel, the doctors, and the friends and neighbors of satisfied loop users. More than 300 additional doctors will have to be instructed in the use of the loop. Of the 168 new PPH workers to be employed, 74 have been trained. The remaining 94 workers will be selected and trained during January and February of 1965. It will be necessary for the loop to appeal to younger women.

V. ORGANIZATION AND ADMINISTRATION

A. The Taiwan Provincial Health Department. The Commissioner of Health, Dr. T. C. Hsu, has given the family planning program guidance for the last two years. The Health Department is responsible for family planning education. Taiwan has 22 county or city health bureaus and 361 urban or rural health stations. One health station has a staff of 5 to 9, according to the population. There are one or two doctors and 2 to 4 nurse-midwives in each of them. The average population per health station is 33,000. The health station personnel have offered coupons in the 18 counties where the program has been operated.

B. The Health Education Division of the Provincial Health Department is directed by Miss Laura Lu. At the present time, there are 78 WHEN's who, out of a month's stay in the villages, spend half of their time doing village health education and improvement, and the other half doing family planning education.

C. The Maternal and Child Health Institute (MCHI) is under the direction of Dr. K. Y. Fan who was appointed the new director. Dr. C. H. Lee conducts the medical research on the IUCD's and has been responsible for training the doctors. Miss Tessie Huang is responsible for the PPH workers, who are located in 120 of the island's 361 health stations. These workers have been so effective that 168 more are being employed.

D. The Taiwan Population Studies Center (TPSC) was established under the Provincial Health Department in 1961 with a grant from the Population Council of New York. It is affiliated with the Michigan University Population Studies Center. Dr. John Y. Takeshita with the guidance of Dr. Ronald Freedman, both of Michigan, was responsible for the actual operation of the Center's program until June, 1964. Dr. L. P. Chow, Senior Specialist, Rural Health Division, Joint Commission on Rural Reconstruction (JCRR) is currently the associate director. The TPSC conducts population studies and does statistical evaluation of the family planning program.

E. Committee on Family Planning. As a result of the expansion of the program at the end of 1964, a committee was formed by the Commissioner to plan, operate and evaluate the overall program. Dr. L. P. Chow was appointed Executive Secretary, and its members will include Mr. S. M. Keeny, Dr. S. C. Hsu, Dr. C. H. Lee, Miss Tessie Huang, Miss Laura Lu, and Mr. Robert W. Gillespie.

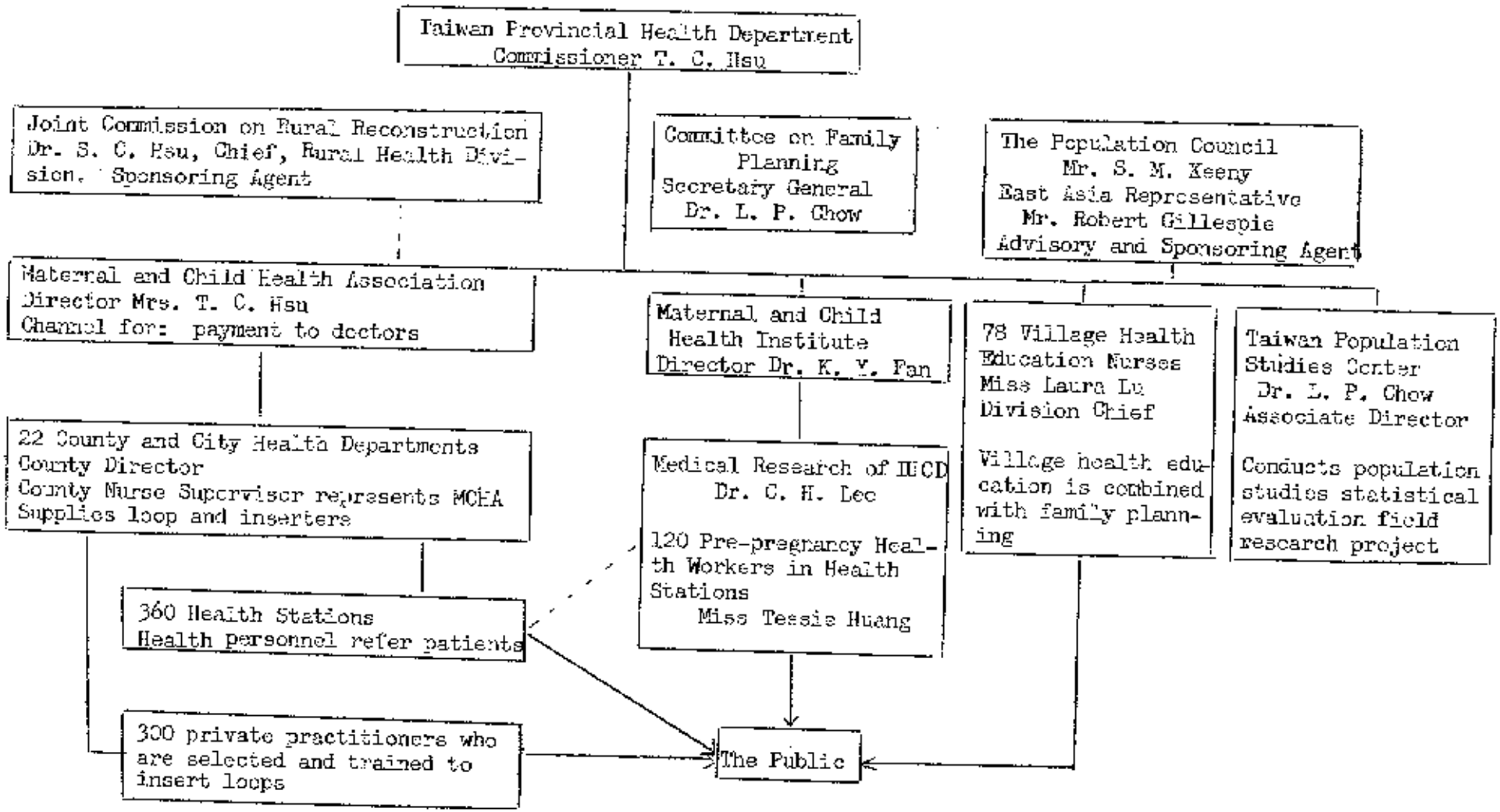
F. The Joint Commission on Rural Reconstruction (JCRR), is a Sino-American organization, set up after the war for rural development in Taiwan. Dr. S. C. Hsu, Chief of the Rural Health Division, has been the dynamic leader of the family planning movement over the past eight years. He is assisted by Dr. K. K. Chang and Miss Julia Liu, both of whom have actively participated in the family planning and the village health education program.

G. The Maternal and Child Health Association (MCHA) is a volunteer organization which consists of 233 doctors, sociologists, and other health personnel. Directed by Mrs. T. C. Hsu, wife of the Health Commissioner,

its representatives are 18 county nurse supervisors. They are responsible for supplying doctors, who insert loops, with record forms, loops, and inserters. They also pay the NT$30 (US$.75) to the doctors for each insertion they make.

H. The Population Council of New York, is a foundation which, among other objectives in the field of population, provides governments, upon request, with technical and financial assistance in family planning. Mr. S. M. Keeny, formerly Asian Director of UNICEF for 13 years is now the East Asia representative for the Council. Mr. Robert Gillespie is another Council representative who has been assisting with the design and evaluation of the action program and with field evaluation and supervision. The Population Council has financed the IUCD research and, until June, 1964, the Population Studies Center. It also supports the dollar cost of the action program and other phases of the program that cannot be included in the local budget.

ADMINISTRATION CHART OF THE TAIWAN FAMILY PLANNING PROGRAM



HOW A POPULATION LEARNS ABOUT FAMILY PLANNING AND THE CONTRACEPTIVE METHODS AVAILABLE

Education and Information

- 120 Prepregnancy Health Workers each worker has 33,000 Population. The public is informed by group meetings and home visits
- 300 Specialists, trained to insert loops. Also, 6,100 registered doctors and 2,000 midwives and 1,500 nurses
- Word-of mouth communication, friends, neighbors and relatives
- Health Station Personnel in 18 Counties and 260 Health Stations
- 78 Village Health Education Nurses spend ½ of their time on family planning
- Special groups, The Family Planning Association Farmers Association, Military, Women's Clubs
- Mass Media (newspapers, radio, ragazines)
  1) News coverage of the family planning program
  2) Advertisements for contraceptives

The Public (Approximate)*

Taiwan population	12,600,000
Women 15 to 49	1,612,000
Women interested in family planning	700,000
Current practice of traditional methods	227,000
No. of women having abortion	151,000
Current Ota ring wearers	146,000
Sterilized	109,000
Potential loop acceptors	380.000
Women who should accept loop 2nd year of Action Program	130,000
Women who should accept traditional supplies	40,000

The acceptors:

1) Usually have 3 children and at least one son
2) Usually over 30

* From survey of 12,643 women 20 to 39

Contraceptive Channels

- 300 doctors trained to insert loop. Most of the doctors have used the Ota Ring in the past and performed tubal ligation for female sterilization
- 11,000 Chemists or Pharmacists Condoms; foam tablets, and jellies, are often displayed in the front windows of the stores. Oral pills are usually sold without prescription
- 6,100 registered doctors, 2,000 midwives, and 1,590 nurses. The medical & para-medical practitioners have advised & distributed many contraceptives
- 120 Pre-pregnancy Health Workers have supplied condoms, foam tablets, and jelly for 2 years to about 50,000 women
- The Family Planning Association has, through factories and government, agencies, supplied in 10 years to 80,000 women However the active case load is about 10,000

VI. LOOP INSTRUCTION FOR PRIVATE DOCTORS

A. The private medical practitioners:

Fundamental to the success of a national family planning program is the use of the private medical and para-medical practitioners. First, the contraceptive methods to be used must have the backing of the medical authorities and specialists. At the IUCD conference, in April, 1962, sponsored by the Population Council of New York, in New York, the consensus of the participants was that "The IUCD offers a completely reversible method of controling reproduction. The combined acceptability, effectiveness, and cheapness of this method exceeds contraceptives in common use".

The China Medical Advisory Board gave its approval for the expanded use of the IUCD during March of 1964. The Advisory Board, consisting of the Taiwan's leading gynecologist, was established to supervise the medical aspects of the program.

The doctors in Taiwan, especially the obstetricians and gynecologists, have the facilities to insert these devices. The use of respected physicians legitimates the program in the eyes of the public. The doctors have been responsible for referring about a third of all acceptors during 1964.

All the contraceptive methods now in the process of research - vacines, pills, and food additives - will also need the approval of the medical profession, who must be cooperative, in order to have these new methods reach the public in the proper manner.

B. How loop instruction was given to a large number of doctors in a short time?

All the names and addresses of the OBGYN specialists were collected. Each county health director called a meeting of the specialists in his county, informing them when and where loop instruction would be given. The session lasted only one day.

At the instruction class, Dr. L. P. Chow gave a briefing on the family planning program. Dr. C. H. Lee gave instruction on the insertion of the loop.

It has been demonstrated in other countries that mailing instructions with the loops and inserters to non-specialist doctors can be done effectively, as the instruction in loop insertion is relatively easy. This method is under consideration.

C. Instruction on the insertion of the loop:

With the use of a pelvic model, Dr. Lee demonstrates how the loop is inserted. It is first placed inside a small plastic tube. This curved tube is inserted into the uterus upwards or downwards, depending on the position of the uterus, and then rotated 90° so the loop lies on a frontal plane. The loop regains its original shape after the plunger pushes it

into the uterus. The threads remain protruding through the cervix. These threads are not cut.

The following are the most important points covered during instruction class:

1. Why is the loop emphasized?

   i. If 100 women wear loop I, only 3 to 5 will become pregnant per year. Compared to most contraceptives in common use, this is a small number.

   ii. Only about 10 women will spontaneously expel loop I.

   iii. About 10 to 20 women will have it removed usually because of bleeding, or pregnancy desired.

   iv. About 70 to 80 women will be able to carry the device without complications. Because the larger loops III and IV are now being used, the expulsions, removals and pregnancies will decrease and continuous users increase.

2. When can the loop be inserted?

   The ideal time for insertion is considered to be 2 to 7 days after menstrual period. However, it can be inserted at any time, if the husband and wife are told to avoid intercourse starting 7 days after menstruation until the loop is inserted.

   Several doctors in Taiwan have inserted loops immediately after delivery at post partum clinics. At this time, the women are highly motivated toward family planning. However, not all doctors are in agreement, and many advise that, after childbirth, the women should wait until 6 weeks to have the loop inserted.

3. Will the loop be expelled?

   In a few women, the loop is expelled during the first or second menstrual period. This, of course, means that the protection is lost. To determine whether the loop is in place, the women should wash her hands and feel for the two nylon strings which are in the vaginal canal. This should be done once a week. This is particularly important in the first and second months. Generally the larger the loop, the smaller the expulsion rate.

4. When should the loop be removed?

   Most of the women wearing the loop will not have any serious side effects. Some will have minor intermenstrual bleeding for a short time. This can be expected and does no damage to the woman's health. The loop should be removed in the rare cases where the intermenstrual bleeding continues more than two weeks. The persistence of severe cramps, back aches, or abdominal pain warrants investigation and removal may be indicated. Many doctors have worried about pelvic

infection. There is little danger of this. The incidence of infection in the Taichung sutyd was only 1 in 300. This infection cannot be attributed to the loop. It occurs in this proportion of women without loops.

5. How often does pregnancy with the loop in place occur?

This depends on the size of the loop. The pregnancy rate per 100 women years of exposure varies from 3 to 5 with the small loop (25 m.m.) and 1 to 2 with the larger sizes (30 to 31 m.m.). The rate of pregnancy, when no contraception is used, is about 80 to 90; the condom and diaphragm 5 to 20; and around 30 for most other traditional methods. No harm to mother or child results from an unplanned pregnancy when the loop is in place.

6. How does the loop prevent conception?

The actual mechanics are unknown, but 2 studies indicate that the loop prevents fertilization of the egg, rather than implantation.

Doctors have experimented on monkeys. It was suggested that the IUD produces a rapid discharge of the ova from the fallopian tubes, thus preventing fertilization.

Dr. Tietze, Director of the Maternal and Child Health Institute in New York, points out that 8 to 12 ectopic pregnancies is the normal rate for 1,000 women per year, assuming normal fertilization and a low rate of tubal implantation. With 132,460 women years of exposure, between 88 to 132 ectopic pregnancies would be expected, but only 7 were actually reported with the loop in place. This fact, by the way, helps to reassure women that pregnancies outside the uterus are extremely rare when the loop is used.

7. What are the contraindications?

Women with the following conditions should not wear a loop:

i. Large fibroids or tumors

ii. Acute or subacute pelvic inflammatory disease

iii. Cancer

iv. Pregnancy

v. A history of recent intermenstrual bleeding or excessive menstrual bleeding. The cause should be investigated to see if contraindication exist.

8. After the insertion, when should the patient return to the doctor?

The patient is advised to return to the doctor one month, 6 months and one year after the insertion. Our experience shows that patients with complications return on their own accord.

9. What should the doctor tell the patient?

   i. That a certain amount of intermenstrual bleeding may occur, along with minor back aches, and abdominal pains but that they will usually disappear after a short time.

   ii. If the pain persists, return to the doctor.

The attitude of the doctor is very important in securing the confidence of the patient, who must be reassured that the loop is effective and harmless. The Taichung study illustrated that voluntary removals declined and reinsertions increased as the number of satisfied loop users increased.

10. What size loop should be used?

All four loop sizes are being produced in Taiwan - Loop I (25 m.m.), Loop II (31 m.m.), Loop III (30 m.m.), Loop IV (27.5 m.m.). All are provided to the doctors. The expulsion, removal, pregnancy and discontinuation rates are lower with the larger loops. No. III seems best suited to most women in Taiwan. It is not difficult to insert and the discontinuation rate is low.

D. Questions most commonly asked by doctors:

1. Does the string protruding from the cervix act as a channel for pathogenic bacteria?

There is no medical evidence to support this assumption. Occurrence of infection is about the same with loop and ring wearers.

2. Does the loop cause cancer?

The studies with regards to cancer and IUCD's have shown absolutely no connection between the occurrence of cancer and the presence of an IUCD.

3. Will the loss of blood from intermenstrual bleeding make the women weak?

Usually not. She can continue her daily work after her body is used to the foreign body.

4. How long can the loop stay in place?

As long as the woman wishes. When pregnancy is desired, the loop can be removed. Conception usually follows promptly.

5. From the Taichung Study, how many women resorted to abortion?

At least 10% of all married women 20 to 39 admitted to having had one or more abortions. If the abortions are performed by a

skilled doctor, the mortality and morbidity rates are lower than those of child birth. This is assuming that the abortion is performed not later than the 3rd or 4th month of pregnancy. However, in Taiwan, abortions are illegal.

6. Does vasectomy in any way affect the sex life of the male?

No. The sex life of the patient will in no way be impared.

7. Is the Ota Ring popular on Taiwan?

i. Most of the Taiwanese women know of the Japanese Ota Ring, and about one third of those practicing contraception have used it at one time or other.

ii. Although the Ota Ring is effective, dilation of the cervix and an anesthetic are often necessary for its insertion and removal. No serious mishaps are recorded.

iii. Based on an island wide survey it is estimated that over 150,000 women on Taiwan were using the device during 1964. A large proportion of these insertions have been done by general practitioners and midwives. If those have been any serious complications as a result, the popularity of the device has not been significantly effected.

E. <u>The doctors practice loop insertion</u>:

Each doctor inserts a loop after having watched an actual demonstration. After the instruction class is completed, the doctors are qualified to start doing insertions. They are supplied with record forms, loops and inserters by the county nurse supervisor, who is also responsible for paying NT$30 for each loop inserted. With adequate assistance a doctor can insert 10 loops per hour, 60 a day.

F. <u>Medical practitioners are kept informed</u>:

The doctors are sent a news letter about every 2 months to keep them in constant touch with the program. They are also informed of research findings with regard to the loop and other contraceptives being tested.

The Taiwan medical and health journals give through coverage to the program and the medical research connected with it.

G. <u>Plans for the future</u>:

To meet the requirements of the target of 600,000 loops in the next five years, it will be necessary to train more doctors. There are about 230 townships in the Province without a obstetricians and gynecologists. Training of one or two general practitioners in each of those townships is essential. Selected health station doctors may also be instructed on the use of the loop. Because women prefer female doctors, these will be given preference.

VII. THE SELECTION, TRAINING, AND SUPERVISION OF FIELD STAFF

A. How a good family planning worker is selected?

Some of the best field workers have been found among the agricultural extension workers, home economist, midwives, and door-to-door saleswomen. The best workers are those who have had previous experience in dealing with people.

Notification of job openings are placed in newspapers and circulars are sent out to health stations, universities and organizations, where the best workers are likely to be found.

The minimum requirements are a high school education, good references, and some experience in dealing with people. On first screening, the Selection Committee sets only minimum requirements, so that they have a large number of applicants from whom to choose. The applicants with nurse-midwife training are given priority. It has been shown that the best workers are usually married, with 2 or three children, are ready to work hard, healthy and willing to travel to all parts of a township to which they are assigned.

If the applicants fulfill these minimum requirements, they are sent a notice stating when and where a written examination will be given in their county. The exam tests their ability to deal with people and their general knowledge of health. Most applicants pass this test without difficulty.

The selection comes when the Selection Committee interviews the applicants. Prospective workers are chosen on the basis of their composure, personal integrity, dedication to family planning, and enthusiasm.

B. The training procedure for field workers:

The time and thoroughness of the training has varied from 3 days for most PFH workers to 3 weeks for the VHEW's. The present training schedule is approximately 2 weeks for all workers.

The training period is divided into 16 subjects:

1. Introduction. During the first morning the leading health officials give short introductory talks. One half day.

2. Taiwan's population problem. One half day.

3. Taiwan's health organization. One half day.

4. Village health education and improvement. Along with family planning assistance, village health improvement is essential. By helping couples with child care, home sanitation and improvement, the workers gain the confidence and trust of the women in their area. Helping families plan their budgets is also helpful. One day.

5. History and development of family planning program. One half day.

6. The reproductive process. One day.

7. Contraceptive methods. Supply and distribution procedures are also discussed. One day.

8. Family planning studies: Findings applied to Taiwan. Probably the factor most deterrent to success in family planning programs is that too little consideration has been given to the successes and failures of research projects. One half day.

9. How to use audio-visual aids effectively. A kit containing a wide variety of visual aids is used by both the VHWM's and the PPH workers. The kit consists of film strips, flip charts, a flannel board, an anatomical model and posters. The aids explain simply the physiology of reproduction, the "why" of family planning, and the major methods of contraception. Some of these aids, for example, the flip charts, are used in home visits. If a field worker is talking to an audience of under 15 to 20 people, the flip charts are preferred to the film strips, which require a screen and projector. They are lighter and easier to carry and use, also allow the worker to speak facing the audience. One day.

10. Public speaking skills and planning a group meeting. The trainees are divided into groups and each one practices giving a speech to audiences varying in size, composition, major interests, and education levels, at varying times and at locations with varying facilities.

    Members of the audience must feel that people like themselves have practiced family planning, as a natural part of married life. One day.

11. Sales techniques and typical home visit situations. Each field worker must believe in the product she is selling. To convey this, she is indoctrinated in sales techniques. She must learn to show an interest in people, be a good listener, to make the person with whom she is speaking feel important, to talk in terms of the person's interest, avoid arguments, and to get the other person to think positively and say "yes".

    To develop these skills, typical home visiting situations are created, one trainee assuming the role of husband or wife, the other the field worker. Based on the training program in Korea, some of these situations have the worker making the visit to a home where the women or family is: too busy, not expecting a visit, childless, or desiring sterilization. One day.

12. How to use the public information media?

    The workers are taught how to prepare news-releases on specific current events. For political reasons, an organized procedure for utilizing mass media has not been developed. One half day.

13. Working with community organizations. The trainees are taught to work with organizations such as the Farmers' Association, Parent-Teachers Association, Mothers' Clubs, Doctors, Nurses' and Midwives' Organizations and other village and township groups. They should first contact the local representative of the organization. This contact can be assisted in two ways. First, a top level family planning administrator can contact the most influencial leader in the organization. Secondly, she can have with her a member of the group when she makes her first contact with the local representative. After contact has been made, she arranges the time and a place where a lecture can be given to the members of the organization.

    At the lecture, which should always be geared to the interests of the group, she should be introduced by the local representative and, if possible, have him give supporting comment. After the lecture, supporting comment by a doctor, or, if possible, a satisfied loop user, should be made. Then, she should supply contraceptives and coupons needed for the loop. In order to avoid embarrassment to those women who want the coupons, she often give coupons to all the women present, asking those who don't want them to return them after the meeting. If too many coupons are freely distributed they are devaluated, so coupon distribution is usually limited to those women who say they will go to the doctors within 6 weeks. One half day.

14. Record and report forms. The compiling of records, reports and surveys give statistical understanding of the quantity of the work accomplished. The quality of the work is determined by field evaluation. One day.

15. Questions and answers. One half day.

16. Field work practice. 3 to 4 days.

C. <u>The art of supervision:</u>

The VHEN's, during 1964, have had 10 female supervisors, who live in the townships with the workers, and four male supervisors, who spend about 10 days a month visiting the workers in the field. The PPH workers have four supervisors, 2 male and 2 female, each assigned to a certain area. The plan for 1965 calls for an additional 27 supervisors who will be assigned to specific counties and who will report on the combined activities of the PPH workers and the VHEN's.

The principal qualities of a good supervisor are:

1. A perceptive understanding of the local conditions. He or she must be acquainted with the community leaders and health personnel and must be able to determine the amount of cooperation and respect commanded by the field worker.

2. The ability to analyze the record forms perceptively, by relating the quantity of work accomplished to the specific circumstances. Her or she knows what is expected of a worker during a certain amount

of time, and what proportion of couples approached, by group meetings and home visits, are likely to accept a coupon or traditional supplies. In short, a good supervisor can spot work that is going badly by knowing what to expect under certain conditions.

3. The ability to determine the quality of work when accompanying the worker on a home visit or to a lin meeting. Constructive advice is given to improve the workers efficiency.

4. The ability to discover the problems and needs of a worker and, if possible, find a solution. If a solution cannot be found in the field, a full report is given to the Executive Committee, who decides what action should be taken.

5. The ability to apply in the field, new findings of research projects. It is of utmost importance that the supervisors keep the field staff informed of the new methods which have been tried and tested.

6. The ability to increase the morale of the field worker and give the worker a sense of her own importance.

VIII. FAMILY PLANNING EDUCATION AND INFORMATION

There are four means of channeling family planning information and education to the public: mass media; the field staff, 120 PPH workers and 78 VHSN's who have conducted about 250,000 home visits and 20,000 group meetings during 1964; public and private health personnel, including both health station personnel and private OBGs, who have referred over half of the acceptors during the year; word-of-mouth communication, generated by the people who have been directly contacted by the program.

A. Mass communication:

Because the program does not have the official support of the Government, there has not been a large scale use of mass media. However, the program has made its own news. In fact, the newspaper articles have increased from six in January to 14 in March and 38 in September. All of Taiwan's 31 daily newspapers, with a daily coverage of about 720,000, have reported on the program. Most of the newsprint has informed the public of the arrival of the VHSN teams in a specified township, the instruction in loop insertion for qualified doctors, the developments in the research on the IUCD, and Taiwan's population problems.

Although one legislator has been critical of the program, the overall support of the program has increased remarkably.

Along with the public information media, thousands of posters are being used. One series of posters uses a grandmother, a voice of authority in the Chinese community, explaining the "why" of family planning in a manner that resembles private communication channels. Each poster has directions about the location of the family planning facilities in the area.

B. The pre-pregnancy health workers:

The PPH workers have succeeded in referring 35.7% of the total loop acceptors in 1964. Miss Tessie Huang's perceptive report, "Pre-pregnancy Health Workers in 120 Selected Areas", is the reference source for this section.

1. The development of PPH services. The first PPH program was begun in 8 townships in Nantou County to "foster happy and health families in the community by protecting the mother's health, through providing information on pre-pregnancy matters. This information consisted primarily, on ways to space children and limit pregnancy. The program is now operational in 120 of the island's 361 health stations, where 41.8% of the island's women 15 to 49 are located. Of the 114 PPH workers employed during May 1964, about 80% were married and between the ages of 26 to 60. Less than half of them were nurse-midwives, although 60% had had some medical training.

2. Family planning is taken out of the clinic and to the people. It was soon discovered that couples do not like to go to the family planning clinics at the health stations for obvious reasons. They

were embarrassed to be seen at the clinics, the time was inconvenient, the distance too far, there was no one to take care of the children, and other barriers. As a result, the FPH workers, now, spend only one half day a week at the family planning clinic in the health station. They spend the major portion of their time conducting lin meetings and home visits and working with the community organizations, particularly the Farmers' Association. The FPH workers sell condoms for US$.30 a dozen, foam tablet for US$.20 in a tube of 16, and jelly for US$.25 a tube.

3. The average worker conducts 4 group meeting a month, with a total attendance of 68 persons, making 68 initial home visits, and 48 return visits to the traditional method acceptors. With an average of 15 new cases per month, it has cost US$1.40 to enlist a case.

4. How many women on the caseload? Each worker has between 300 to 400 cases to whom she supplies condoms, jelly, and foam tablets monthly. This amounts to about 10% to 12% of the women in the child-bearing age in their townships. If the total "active" case load of 38,000 for all the workers is divided by the total number of contraceptives issued, the amount per couple is very low. Not enough is known about coital frequency, how much jelly or how many foam tablets are used at one time or how frequently a condom is reused. However, it is known that some of the women on the case load obtain their supplies from commercial sources.

5. Each woman on the case load is offered the loop. Even before the loop was introduced into the FPH program, many of the women on the caseload started switching from the traditional supplies offered by the FPH worker (condom, jelly, etc.) to the Ota Ring and sterilization. With the introduction of the loop, the transition from traditional to the newer methods has been easier for many women. However, contrary to expectations, only 26% of the women whom the FPH workers have referred to have a loop insertion were drawn from the FPH caseload. This percentage decreased from 30% in June to 20% at the end of the year. Only 6% of the active case load has switched from traditional methods to the loop.

6. How are the other 77%, not on the FPH caseload referred? First, the workers determined their target population in their area by copying down the names and addresses of the women 20 to 39 who had 3 children and at least one son. The average township, about 5,600 households, has about 1,800 women in this category. The FPH workers have conducted home visits to about one third of the women and lin meetings in one sixth of the areas where a doctor inserting a loop has been available since the middle of the year. Secondly, the workers knew of a large number of women in their communities who wanted to practice contraception, but thought the traditional methods offered too difficult. These women responded immediately when a simple, inexpensive device was offered. Thirdly, the FPH workers made effective use of the community organizations in informing large groups of the availability of the loop.

C. The village health education nurses:

Under the direction of Miss Laura Lu, the village health workers have spent half their time on health improvement and the remaining half on family planning education.

1. How many nurses?

At the beginning of the year, 44 Red Cross nurses, previously working on the cholera stricken villages, were employed for the village health education program. An additional 22 were selected and trained in January. During June, another 40 workers were selected and trained. At the end of the year, only 78 remain since some were transferred to military dependency program and many of the Red Cross nurses were being utilized for special projects in the Taipei area.

2. Where are the nurses assigned?

With three nurses combining to make a team, one team is assigned to a selected village of about 2,000 population. Each team spends one month in this village, some of which are in the depressed areas - fishing, coal, and salt making areas. It has been difficult for the workers to make significant changes in the health habits of the families in the villages. Fundamental to the success of the program is the cooperation of the community leaders - health personnel, civil servants and all county, city, lin and li leaders. However, rapid progress is being made in model areas near Taipei, under the direction of Dr. S. C. Hsu of the J.C.R.R. The wife of the President, Madame Chiang Kai-shek is taking an active interest in village health improvement in the more depressed areas in Taiwan.

3. What the teams do during their one-month stay?

When the VHEN team arrives in a village where a PPH worker is located, she contacts her. The PPH worker briefs the VHEN on local conditions and gives the team assistance for the duration of their stay. Because the VHEN's are not familiar with the community, unmarried and younger, they have a more difficult time in referring cases than the PPH worker.

Each team contacts the community leaders, including the civil affairs personnel, the principal and teachers of the local school, the leading doctors, midwives, health personnel and other official and non-official leaders in the community. Their cooperation is essential. The VHEN's introduce themselves, explain their mission and how the leader can participate in the village health program. During the first two weeks, the team teaches the families in the area about sanitation, nutrition, fly control and personal hygiene. The family planning effort is concentrated in the last two weeks of their stay. To prepare for this, each team collects the names and ages of the husband and wife in each family, number of children, date of marriage and address. Until August, the nurse worked with only a small village unit within a township. Until this time the

VHEN referrals were decreasing, because each month an increasing number of women in the villages where they were assigned had responded before the team arrived. The problem was solved when the population with which they could work was changed from the li (2,000) to the township (30,000). Since each township has about 210 lins and each team is capable of conducting about .50 lin meetings during the two week period, a fourth of all full lines are now being covered. When the VHEN's started working at the capacity in the townships, the lin meeting conducted jumped from 303 in June to 885 in October and 1,034 in November. The attendance grew from 4,817 to 10,301 and 14,311 respectively. The loop cases doubled and even tripled. With a concentrated effort, applied in a limited area, for a short time, the workers can rely more on circulation effect.

D. Health station personnel, midwives, private doctors, and military:

1. The health stations personnel have referred 17.1% of the women returning with a coupon to the doctors. This illustrates the advantages of having the cooperation and participation of the health machinery.

2 During the year, 288 health station nurses and midwives were given a 3-day family planning orientation.

The support of the County Health Directors and the active participation of the county nurse supervisors have been the reason for the success of this aspect of the program.

2. The private doctors who have been given a loop instruction have referred 30.3% of the total acceptors in 1964. The participation of the medical practitioners has been fundamental to the program's accomplishments. The private midwives have also referred 1.4% cases, although family planning takes away from their business.

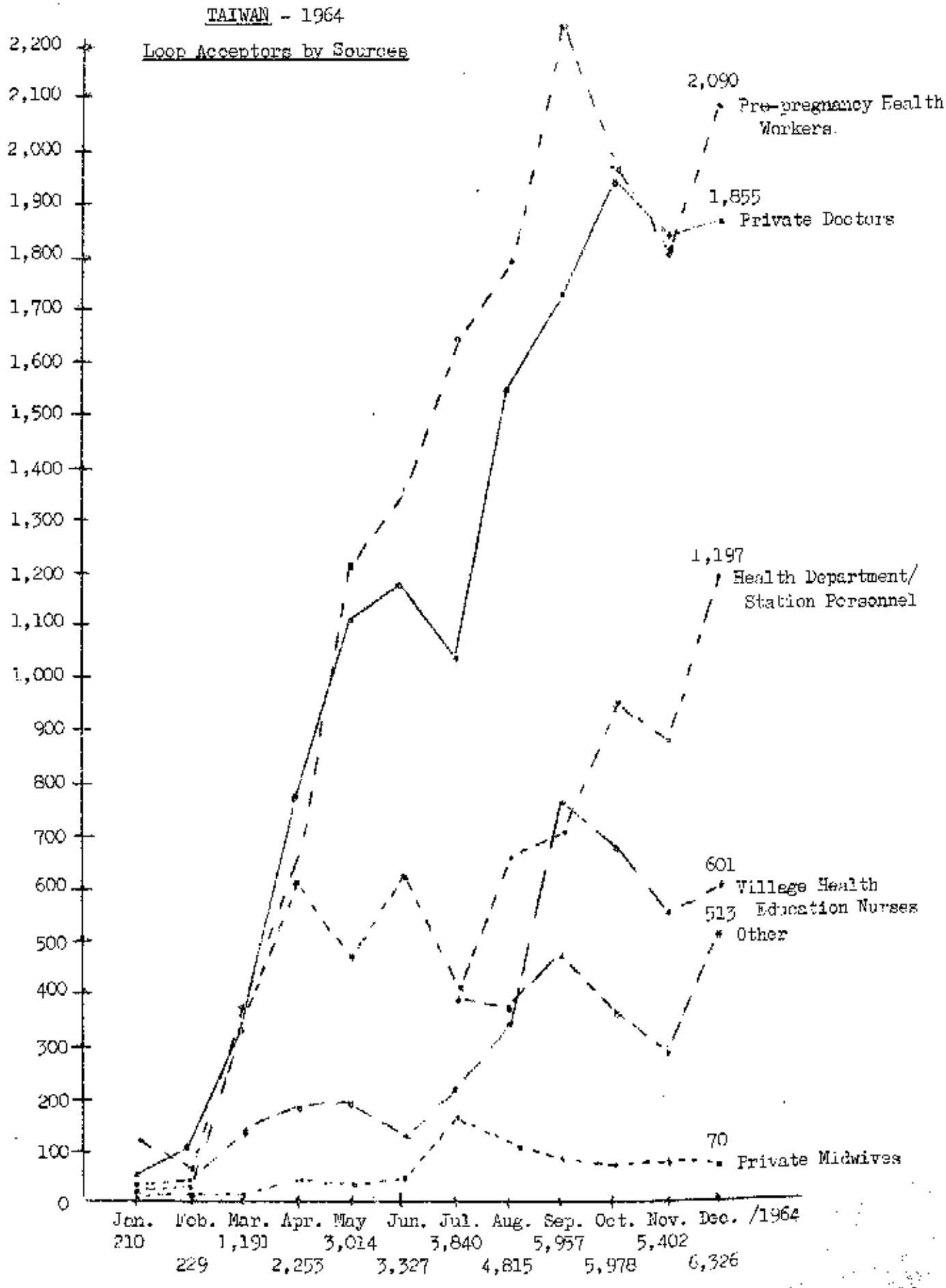
3. During the latter part of the year, 21 military doctors were trained to insert the loop. Also 80 military nurses were trained in loop education and referral.

The large number of young men in the armed services provides an ideal situation for teaching family planning. These young men will start having families when they are released from active duty. The Population Council has prepared some audio-visual aids for this purpose, which are now being used.

E. Word-of-mouth communication:

The Taichung study and the present action program have demonstrated that informal circulation of information about the program is responsible for a large amount of the response, and, it is free. This information is channeled to friends, neighbors, and relatives of the people directly contacted by the mass media, field staff, health and medical participants, and the acceptors themselves.

In one recent survey of women who had accepted the loop, each one claimed to have persuaded 2.2 friends to have a loop inserted.


TAIWAN - 1964
Loop Acceptors by Sources
2,200
2,100
2,000
1,900
1,800
1,700
1,600
1,500
1,400
1,300
1,200
1,100
1,000
900
800
700
600
500
400
300
200
100
0
2,090
Pre-pregnancy Health Workers
1,855
Private Doctors
1,197
Health Department/ Station Personnel
601
Village Health
513
Education Nurses
Other
70
Private Midwives
Jan. Feb. Mar. Apr. May Jun. Jul. Aug. Sep. Oct. Nov. Dec. /1964
210 1,191 3,014 3,840 5,957 5,402
229 2,253 3,327 4,815 5,978 6,326

IX. STATISTICAL EVALUATION AND POPULATION STUDIES

A. The Population Studies Center:

The Population Studies Center was established in September 1961, with an initial grant from the Population Council of US$60,886, under the supervision of the Taiwan Provincial Department of Health.

The Center became affiliated with the University of Michigan Population Studies Center. Dr. Ronald Freedman, Professor of Sociology at Michigan, acted as Co-Director, Dr. Freedman, one of the most distinguished demographers in the United States, has given a generous amount of assistance to the program. Dr. John Y. Takeshita, also from Michigan, acted as Resident Co-Assistant Director. Dr. Takeshita returned home in June, 1964, after a two-year stay here. Both Drs. Takeshita and Freedman are now acting as consultants.

During the first six months of 1964, under Dr. Takeshita's direction, the Center was concerned primarily with the Taichung action-cum-research study. At this time, the Center was instrumental in having the Department of Civil Affairs of the Provincial Government compile and publish an annual "Demographic Fact Book". Other projects included the construction of abridged life tables for 1958 to 1960 and an evaluation of the PPH program in a county where this work had been first started. Since the Center's studies are being published separately, this review will cover the Center's activities only during the last half of 1964.

Since June 20, the Center has been under the direction of the Commissioner of Health, Dr. T. C. Hsu. The responsibility of research and operation of the Center, however, rests on Dr. L. P. Chow, who is a graduate of the Taihoku Imperial University Medical College and who obtained postgraduate degrees of Doctor of Medical Science from the Kagoshima University Medical College in Japan, Diploma in Public Health from the University of Sydney, Australia, and Doctor of Public Health from the Johns Hopkins University in the United States. He is senior specialist in the Rural Health Division of the Sino-American Joint Commission on Rural Reconstruction and is on loan to the PHB to serve as Senior Medical Advisor to the Commissioner of Health. He concurrently serves as the Secretary General to the Maternal and Child Health Association and has recently been appointed by the Commissioner to the Committee on Family Planning as Executive Secretary. Along with these responsible positions and the direction of the Center, he has participated in the training of all the doctors on the island who are now inserting loops. In short, Dr. Chow is kept very busy. He is ably assisted by his research associate, Mr. H. C. Chen.

This section has been written from the figures reported by the Center, the Family Planning Extension and Maternal and Child Health Association monthly report.

B. What has been evaluated and studies?

The evaluation of the action program, based on Dr. Freedman's recommendations, has been measured in five ways:

1. From records of acceptors of loops and traditional methods, by reference source and location.

2. By the volume of work accomplished by the VHEN's - lin meetings, home visits made, and coupons distributed. This information was gathered from the monthly reports of the VHEN's.

3. Crude birth rates for each township, birth rates per hundred women 20-39, and age specific birth rates.

4. By questionnaires. Over 14,000 questionnaires were conducted by the VHEN's and tabulated by hand at the center.

5. By the coupons returned. Data have been provided on the age of the acceptors, the number of children they have, number of sons, education, and location of the respondents.

The main complication in evaluation the program has resulted from the unexpected impact of the PPH workers, health station personnel, and the doctors. For this reason, the Center has emphasized the evaluation of the PPH workers and has conducted a follow-up survey of loop acceptors and coupon holders. Each month, thousands of figures are added and sorted into relevant categories. The quantity of work accomplished and how it is accomplished is determined by the significant relationships between the figures reported. This review attempts to outline the significant of the figures reported during the last 6 months of 1964.

A projection of the population, based on the target for loop acceptances, has been calculated by Dr. L. P. Chow.

C. By whom were loop respondents most influenced?

In an area where both PPH workers and VHEN teams were located, a follow-up survey of women who had the loop inserted was conducted. The purpose of surveying 602 sample respondents was to discover who most influenced the acceptors.

Of the women acceptors, a full 45% had first learned about the loop from neighbors or friends.

The lesson learned: satisfied loop wearers are the best sales-women.

The VHEN's, PPH workers, and doctors were credited with 15% of the cases each and health station personnel with 8%.

Although the PPH workers had issued about twice as many coupons to the respondents as the VHEN's, the women had heard about the loop as often from the VHEN's as from the PPH workers in this area. A few women in the village where the VHEN's had been working had decided to accept the loop after the VHEN's had left. They then had gone to the PPH worker permanently located in the area or to the doctor to obtain their coupons. This was one of the two reasons for the coupons returned

by the PPH workers and the doctors being higher than expected. Another reason for the lower rate of coupon return by the VHFN's is that they only spend half their time on family planning work. A correction factor was therefore calculated to estimate the actual impact of the two types of workers. Applying the correction factor, the VHFN's would be credited with 9.19% and the PPH workers with 17.5% of the total referrals in contrast to VHFN's 6.8% and PPH workers 35.7% based on the return coupons for the whole island.

Even with this reappraisal of the coupons returned, the PPH workers are credited with almost twice as many referrals as the VHFN's. The reasons seem to be apparent. The PPH workers have lived in their areas and have received the respect of those people who wish to plan their families. Twenty-six per cent of the referrals have come from their caseload of traditional method users. Since the PPH workers are older and usually married they seem to be more influential with potential acceptors. Also, they have concentrated their efforts on women with at least three children and one son. They work with a population of about 33,000 and they work closely with community organizations, where many women interested in family planning are likely to be found and influenced.

The conclusion seems to be that the stationary worker, such as the PPH worker, is more influential than a mobile field worker, such as the VHFN's who concentrate their efforts in a limited area for a limited time.

On the other hand, the mobile team can generate more word of mouth communication and can eventually cover a broader area and contact more people.

D. Acceptance of traditional supplies:

After the introduction of the loop by the PPH workers, only 15.9% of the new acceptors of all contraceptives during 1964 chose traditional supplies. This is because the PPH workers had already offered methods that required sustained motivation. Of the reported 65,000 cases accumulated by the PPH workers from the middle of 1962 to the end of 1964. 38,000 were considered to be present contraceptive users. This figure was determined by a follow-up survey of the women who had accepted supplies. The preferences of methods on the active case load are as follows: foam tablet - 42%, condom - 33.0%, diaphragm - 2.5%, other traditional supplies - 10%. Most of the remaining 13% had switched to the loop or the Ota Ring or had been sterilized.

From May to 31 December 1964, approximately 2,100 cases have switched from traditional methods to the loop or only 6% of the traditional case load. Although month by month the transfer from traditional methods has been on the increase, this portion of the total PPH referrals has declined from 40% in April of 1964 to 19.7% in September.

The VHFN's offered condoms, foam tablets, and jelly at the beginning of the program, but this was discontinued. The workers, moving around, found it difficult to carry supplies and most of the women

contacted preferred to go to the doctor to obtain a loop. If there was a PPH worker, the names and addresses of women wishing traditional supplies were given to her. If there was no PPH worker the woman was told to go to the drug store. Of the 358 acceptors of traditional methods from the VHEN's, during the first 3 months, 57% chose the condom, 27% the foam tablet, and 16.2% the jelly.

To avoid troublesome follow-up in the future, supply depots will be established in selected townships to give the people in the communities easy access to the traditional methods. (This is further discussed in the Changhua Projects, Section XII.)

E. A fertility survey and characteristics of women returning the coupon:

By the end of November, over 14,000 short questionnaires had been completed and returned. The questionnaire was discontinued in September because the reported data varied only slightly from month to month.

The survey was very time-consuming for the VHEN's who conducted it, and no direct guide lines for action could be taken as a result of the survey. (The data have been hand tabulated, because this method is cheaper in Taiwan.)

The survey covered a cross section of the women on the island. Although the VHEN's were originally employed to work in the more depressed segments of the population, they were assigned in the townships where there were OBC doctors. (The promotion of the loop made this necessary.)

This polarity between the intended and assigned areas resulted in a sampling of the women in the small cities and rural villages - about 85% of the women on the island as a whole.

1. Birth limitation and the choice of methods:

The women surveyed were between the ages of 20 to 39 and married. At some time in their lives 24% of them had practiced contraception. Of the total users, 35.9% used the Ota Ring, 8.8% used foam tablets, 72.% the rhythm method, 5.0% the condoms, and 3.7% had already had a loop inserted. A full 27.8% of the women reported having had their tubes tied.

Because the permanent and semi-permanent methods of contraception are overwhelmingly preferred, the present users of all methods were a full 21.2% of the women, a drop of only 3.8% from the proportion of married women who have ever used contraception. Most contraceptives have become popular in the urban areas, and their popularity is spreading to the rural areas. In the rural areas, sterilizations reported by women dropped after the 40th year to only 3.54%. In the urban areas, 12.9% of the women over 40 had been sterilized.

Although abortion is illegal, 10.5% of the women surveyed reported at least one abortion.

Taking the women surveyed as a base, it can be estimated, that 227,000 couples are currently practicing contraception with traditional methods, 146,000 have an Ota Ring, and 109,000 have been sterilized.

2. The Taichung survey and a comparison with the island survey:

There is surprisingly little difference between the results of the island survey and the Taichung survey. The slight difference can be attributed to the more urbanized character of the women in Taichung, the fourth largest city on the island.

In Taichung, 8.0% of the women were sterilized, compared with 7.3% in the island wide survey. 16.9% of the Taichung couples were currently practicing contraception with traditional supplies, compared with 14.1% in the island wide survey. Those who had ever practiced contraception came to 30.1% in Taichung, compared with 24% in the island survey. Abortions were reported as 10.5% for both surveys.

3. Comparison of age, number of children, and education among women surveyed and women accepting the loop:

As mentioned previously, the island-wide survey represents a cross section of women on the island as a whole. This cannot be said of the survey of women who have accepted the loop: they have tended to have above average incomes and live in the urban areas within reasonable access to doctors. For these reasons, the women who have accepted the loops in 1964 are not representative of the women to whom the program hopes to appeal in the future.

A comparison, however, brings out some interesting points:

i. The women returning the coupons for loops tended to be older than the women surveyed in the island survey.

ii. In the island survey 46.5% of the women had less than three children with no sons. However, only 11.2% of the women returning coupons were in this category. This justifies the procedure whereby the field workers spend time in the registration office copying the names of women with at least three children and one son and then make home visits to these women.

iii. Women with no education prefer the IUCD compared to women with a high school education who generally prefer traditional methods. Abortion increased with the education of the women.

iv. The number of living children varied with the educational level of the mother. Those with no education had 3 or 4 children compared with 2 or 3 for those who have completed high school.

v. Women in the cities tended to have more children at a younger age than those in the rural areas. However, they also had smaller families. The rural women averaged 6 children when

they had finished child bearing, compared with 5 for the urban women.

A larger more representative island-wide survey is being considered.

F. Follow-up survey of a sample of loop acceptors:

Although the women who have a loop inserted are told to return to the doctor after one month, six months, one year, very few return unless they have complaints. Since it would be impossible to follow-up all acceptors, a sample was taken. Public health nurses from the Population Studies Center visited loop acceptors at random in 7 townships, sampling women from every fourth lin. The sample included 1,034 women who have the loop I (25 m.m.).

The interval between the time the woman accepted a coupon for a loop and the time she actually went to the doctor was as follows: one month - 54.4%; two months - 18%; three months - 15.8%. The remaining 11.8% delayed more than three months. This indicates that the best time to follow-up women who have accepted a coupon but not a loop is after three months.

At least 6 cases followed-up claimed that the doctor had never inserted a loop. Apparently, the doctor had filled out coupons by himself in order to collect the US$.75 from the MCHA. If this is representative of the island as a whole, less than 1% of all coupons returned are not correctly filed.

The 1,034 loop acceptors had an accumulated 4,423 months of use. Of these women, 6.33% had expelled the loop; 12.0% had had it removed. There were 3.8 pregnancies per 100 woman-years of exposure. Therefore, 83.5% of the total group were continued users.

Expulsion of the loop occurred most frequently in the first month (28%) and in the second month (33%). The loop was most frequently expelled during menses (83%). Among the 36 women who expelled the loop, 4 had had it reinserted.

Of the 135 women who had the loop removed, 88.1% had it removed by the doctor who had inserted it, 11.9% had it removed by another doctor or by themselves. As with the expulsions, the removals occurred early: the first month (45.6%), the second month (23.8%), the third (17%), the fourth (10%).

A woman satisfied with the loop after 3 months does not usually have it removed until a pregnancy is desired or menopause takes place. Of the 135 women, 3 had it removed because pregnancy was desired, 13 because they became pregnant with the loop in place, and 118 because of side effects.

Frequency and Type of Side Reactions of 118 Cases of Removals of Side Effects

Side Reaction	Mild	Moderate	Severe	Total	Per Cent (%)
Bleeding or spotting	26	32	19	77	36.5
Increased amount of mens.	13	17	-	30	14.2
Abdominal pain	17	9	4	30	14.2
Psyco-somatic complaints	13	11	1	25	11.9
Leucorrhoea or discharge	9	7	3	19	9.0
Irregularity of mens.	12	1	-	13	6.2
Lumbago or backache	3	4	-	7	3.3
Others	3	3	1	7	3.3
Infection	2	1	-	3	1.4
Total	98 (46.4%)	85 (40.3%)	28 (13.3%)	211 (100.0%)	100.0

It cost US$.50 per person to do a follow-up interview. The interview is an effective way of evaluating the progress of the overall development of the loop program.

G. Follow-up of coupon holders:

In the same area where the loop acceptor follow-up was conducted, a follow-up of coupon holders was also conducted. There were 275 women who had accepted the coupon, presumably intending to have a loop, but had not yet done so. The survey was made approximately eight months after the VHEN's had distributed the coupons. It is estimated for the whole island that twice as many women accept coupons as get loops inserted. The various reasons or excuses given for inaction provide guide lines for improved education and administration. (This type of analysis can also be used to measure resistance to other contraceptives.)

Each of the 275 coupon holders, who had not responded, had as an average, 1.7 reasons for not going to the doctor. The 459 reasons have been grouped into 14 categories. There seems to be nothing that can be done for three of the categories. The barriers which could be lowered by improved administration are as follows:

Barrier	Improvement
1. Husband objects to the wife having a loop inserted. (21)*	The field worker contacts the husband and supplies specific reasons why the loop would be to their advantage. If he refuses, she offers him condoms or informs him about sterilization.

* Number of times this reason has been given.

2. Physicians, nurses, or midwives do not advise loop insertion. (13)	Official support of the program is made known to the medical and para-medical profession and the results of insertions is being more widely distributed.
3. Cannot afford to pay the NT$30. (4)	Free loops are inserted at some hospitals. The workers should notify the patients.

Other barriers, such as distance to doctors, transportation facilities, type of doctor desired are discussed in the field evaluation. (Section X).

The barriers which could be lowered by improved education include:

Barrier	Education
1. The woman is lactating (68)	The women should be informed that lactation is not an effective contraceptive. It is advised that a loop can be inserted 6 weeks after the birth of a child.
2. The woman is waiting to see if her friend or neighbor is satisfied with the loop. (60)	When the loop is offered free for a limited time only, it helps the women to make their decision more quickly.
3. Satisfied with traditional contraceptives. (40)	They should be informed that the loop is usually more effective and cheaper.
4. Some of the women thought they were pregnant. (34)	If not, they should be encouraged to act as quickly as possible to avoid it.
5. The woman believes the loop will harm her health and she will not be able to work (34), or she associates wearing the loop with loss of weight or appetite. (32)	The loop will not interfere with the daily routine. Increased marital happiness is also a good point: she will be free from the fear of pregnancy. The loop does not cause a loss of weight or appetite.
6. Neighbors or relative (20) or women who have had the loop removed (24) advised the woman against it.	Generally, women who had had a bad experience with the loop are quite vocal in their disapproval. Fortunately, their number is small. It should be stressed that some women cannot comfortably wear the loop, but that the number is small. More information should be given

	about the expected side effects and how the body has to adjust to a foreign body.
7. The woman thinks that she has passed menopause. (10)	Further education should be given about menopause, and the women should be told that they can become pregnant if they are not entirely sure.
8. The woman was too shy to go to a male doctor. (6)	At least one female doctor should be trained in the area, and her name should be given to all the women along with the male doctors.

There is not much that can be done if the woman claims that she is too busy (41), her husband is away (3) or that she has changed her mind and wants more children (28). However, the field workers are advised to approach the farmers' wives when they are not too busy in the fields.

A further analysis of why the women do not return after receiving the coupon from the *FPH* workers is given in *Field Evaluation*. (*Section X*)

E. How the loop will effect Taiwan's birth rate?

To obtain the target for the next 5 years of 600,000 loop acceptors, about one third of all the married women will have to accept the loop. In Japan, about half the women 25 to 30 are practicing contraception. Since similar socio-economic conditions are gradually coming about in Taiwan, the target seems feasible. With improved standards of living, higher education, couples marrying later, industrialization, and the desirability of smaller families, the conditions for a lowering fertility exist on Taiwan. As the program advances, younger women will respond, and fewer women will be pregnant or lactating, thus, increasing the potential acceptors. Also, many women will be changing from the traditional methods to the loop. The loop is ideal for the major portion of the women, who prefer to have the desired number of children in a short time and then completely stop child birth. The major impact of the program will be on women over 30.

With these conditions considered, three fertility assumptions were made. The high fertility assumption is based on the present fertility decline, without the family planning program. The medium assumption includes some success in the program; the low assumption assumes that the 600,000 loop target will be met.

However, not all acceptors will be continuous. It has been assumed that 20% will discontinue. If there is an 80% continuation, 5 loops inserted will prevent one live birth.

The next step was to determine the percentage distribution of

loop acceptors by age, based on experience, then to calculate what effect the target set for each year would have on the number of births of the women in these age categories.

To summarize the results, the crude birth rates are used. The crude birth rate is determined by dividing the population at a given mid-year by the number of births. This ratio is per thousand population. The crude death rate is calculated in the same manner. The natural increase is the difference between the two.

Fertility Assumption	1962-67	1968-72	1973-77	1978-82	1983-87
			Crude Birth Rates		
High fertility	34.1	31.7	32.2	32.7	31.1
Medium fertility	33.1	25.6	23.2	22.7	20.3
Low fertility	32.1	25.6	23.2	22.7	20.3
			Crude Death Rates		
High fertility	6.1	5.4	5.0	4.8	4.6
Medium fertility	6.0	5.4	5.0	4.9	4.9
Low fertility	6.0	5.3	5.0	5.0	5.2
			Natural Increase		
High fertility	28.0	26.3	27.2	27.9	26.5
Medium fertility	27.1	33.4	22.3	20.5	16.5
Low fertility	26.1	20.3	18.2	17.7	15.1

It is estimated the total population without family planning will be 15,336,000 by 1972 and 23,081,000 by 1987. With a successful program, however, the estimate is 14,730,000 by 1972 and 19,002,000 by 1987. This means a difference of only 606,000 in nine years, but of 4,079,000 in 25 years. Even with a successful program, the population will still increase considerably.

The density of population in Taiwan is already high. The projected future population will further increase the density as follows:

Density of Population by Three Fertility Assumptions
(Per Square Kilometer)

Fertility Assumption	1962	1972	1987
High	325	427	642
Medium	325	419	563
Low	325	410	528

Described in one of the Confucian classics is the sage thought, "Be the producers numerous but consumers few, and be the production fast, but the consumption slow. Then there will always be surplus of

good." With an intensive family planning program, this saying will be realized. The proportion of the population in the unproductive age category below 20 will decrease. This age group provides most of the dependency age burden. The burden is the economically inactive consumers below 20 in the population and also the economically inactive consumers over 65.

Assumption	Per Cent of the Total Population			Dependency Burden
	Under 20	20-64	Over 65	
1. Taiwan constant fertility and mortality (1963)	54.2	43.3	2.6	131
2. Intensive family planning program (1987)	37.6	57.3	5.1	74
3. Japan (1961)	39.1	55.0	5.9	82

The Taichung study showed that birth rates could be lowered in an action-cum-research program. If the target of loop acceptors is reached, this will be the first time a planned family planning program has ever lowered birth rates on a national scale.

X. FIELD EVALUATION

A. Field evaluation includes:

1. Discovering the organizational and administrative problems in the field and finding solutions for them by testing promising courses of action.

2. Determining significant relationships between the reported statistics and the actual field operations.

3. Increasing the working efficiency of the field staff.

4. Providing the workers with the most effective educational aids.

5. Outlining, implementing, and evaluating research projects to provide guide lines for action.

6. Increasing the morale of the workers.

The reference material for this section has been provided by Mr. Gillespie's Field Trip Reports, Program Outline, and other papers*. With the exception of the administrative and educational phases of the program, the content of these references has been included in other sections of this report. Mr. Gillespie has been accompanied during field work by Dr. K. K. Chang, Laura Lu, and Jessie Huang.

B. Testing and evaluation administrative procedures:

During the first three months of 1964, the most important objective was to discover and outline administrative routines for the overall operation. A large part of the program was laid out by Dr. Bernard Berelson and Dr. S. C. Hsu before the end of 1963.

Many of the solutions to the following questions were provided by suggestions made by Dr. Berelson.

1. Could the health station personnel be utilized?

The health station personnel were provided with coupons, and they referred cases to doctors. The County Nurse Supervisors were selected to represent the Maternal and Child Health Association and to supply private doctors with loops, inserters and stipends.

2. Should the workers approach women with few or many children?

Since the largest proportion of respondents proved to have three or more children, it was decided that the workers were to concentrate their effort on them.

* Coupon Follow Up Procedures and Analyses, 24 Policy Questions and Recommendations, Barriers Between the Intended and Actual Acceptors, Working Capacity and Efficiency of the Field Staff.

3. How could the working capacity of the VHEW's be improved?

The VHEW's were given larger population group with which to work and they were given incentives, such as prizes. They were also given larger, more realistic targets for lin meetings. By dividing their lin meeting "capabilities" (50) into the total number of lins in a township (200), they were able to cover a population of 30,000 in four months instead of 8,000 formerly.

4. How could the public be informed by an inexpensive, but effective written medium?

Leaflets explaining the most important points about the loop and containing the location of doctors ready to insert the loop were distributed.

5. How could the effectiveness of the loop progrsm be determined?

A follow-up survey, based on the Taichung project, was made on a sample of loop acceptors. From this, estimates of the rates of expulsion, removal, and pregnancy were made. It also helped to find out how long it took a woman to respond and whether the doctors were actually inserting a loop for every coupon they returned.

6. Who should receive the coupons?

It was decided that only non-pregnant women who promised to go to the doctors within six weeks were to be given coupons.

7. What can be determined by following-up coupon acceptors?

From this follow-up, the barriers which prevent a woman who had accepted a coupon, saying that she would accept the loop, but has not done so, can be determined and improved education and administration can be implemented.

8. What supply depots can be established in a community to provide easy access to traditional methods?

A successful field project was conducted, revealing that many supply sources can be used such as the private midwife, village leaders, Farmers' Association, and other existing community institutions and leaders.

9. Are lin meetings alone more effective than lin meetings and home visits?

A field project was conducted, which showed that more people could be informed about the loop by conducting lin meetings. Consequently, the VHEW's dropped their home visits for the most part. They tripled the number of loop cases they referred.

As the questions were raised, solutions were found and the workers

applied the findings in the field. As a result, their efficiency increased beyond expectations.

The most important precaution to be taken in drawing conclusions is to base decisions on a wide range of experience in varying settings.

C. Way of improving administration and education:

Some of the barriers preventing women from accepting the loop have been discussed in Evaluation (Section IX). In contrast to the VHEN follow-up of coupon holders, this section deals with the questions asked the PPH workers themselves. It was found that these questions were most helpful in obtaining specific guide lines for action. The questions were as follows:

1. How can the administration of the program be improved? In what way do you feel that your time is best utilized in recruiting cases?

2. What should be the content of the educational aids and what aids are most effective?

3. What are the reasons, in your opinion, that women accepting a coupon do not get a loop inserted?

Several barriers revealed in the VHEN follow-up survey are similar to those revealed by the PPH workers and will not be repeated (Section IX). Some of the barriers which can be lowered by improved education are as follows:

Barrier	Education
1. Waiting for menstruation	The loop can be inserted at any time. The preferable time is two to four days after menses. It is advisable for the couple not to have intercourse beginning five to six days after the last menses or to use a contraceptive after this time.
2. Fear of ectopic pregnancy.	The chances of this are decreased considerably when a loop is in place.
3. Had a friend who had bad side effects from the Ota Ring.	The loop is both easier to insert and remove than the Ota Ring, and there are fewer side effects.
4. Afraid of cancer.	This is no evidence that the thousands of women who have had a loop have ever had cancer as a result.

5. Women think that they have to have 4 or 5 children in order to have 3 survive.	In the past this was true because of the many communicable diseases. It is no longer true. Few children die nowadays.
6. Many women feel that it is a part of their Chinese heritage to have large families and that they are alone in not wanting any more children.	Over 90% of the women in Taiwan are in favor of family planning. Over 6,000 women every month are doing something to plan their families on Taiwan.
7. A few women believe that they are being used as guinea pigs.	The loop has been tested for years. Although similar devices have been used for years by millions of women around the world, only recently has the device been perfected.

Barriers which can be lowered by administration are as follows:

Barriers	Ways to lower them
1. The women does not know where the doctor is located.	A flier has been made with the names and addresses of the doctors on it. Sometimes the worker has taken the woman to the doctor.
2. The woman prefers a woman doctor to insert the loop.	At least one woman doctor's name has been included on every flier.
3. The woman prefers, and it is more convenient, to go to a general practitioner whom she trusts.	Several hundred general practitioners will be trained in 1965 to insert the loop. This will provide from 1 to 3 doctors in each township where there are no specialists.
4. The women in the villages do not have confidence in the field workers' advice because they are outsiders.	The field staff have been told to contact the community leaders in the areas where they are working. They then use the prestige of these leaders to accredit the program. The leaders, both official and non-official, are used in group meetings to give their support. They also support the women who need family planning services.
5. The doctor said that the loop was not effective.	A review of the medical follow-up of loops inserted in Taiwan has been sent to all doctors, along with current findings in other parts of the world. The doctors who are not cooperative are taken off the list of doctors who are recommended.

6. The women are hesitant to accept as individuals and need the support provided by group acceptance.	Working with the community organizations is an essential part of the field worker's obligation. She arranges with the heads of these organizations when and where she can give a lecture.

D. Field evaluation: questions unanswered:

Many questions have yet to be answered. By designing field projects, questioning the field workers, and conducting surveys of acceptors and non-acceptors, it is hoped that more guide lines for action will be provided and that a better understanding of the program will be realized.

1. How can the administration of a program be improve to quicken the transition couples go through, from accepting traditional supplies, to switching to permanent and semi-permanent methods? How can we get more loop acceptors who wish to space, rather than limit their families?

2. What is the actual increase in acceptors when educational and administrative barriers are lowered?

3. What is the ideal diffusion of the field staff effort, given the population, working capacity of the staff and time allocated?

4. Do couples have to be taught the benefits of "why" family planning is important or do they already know? Does explaining the reproductive process help the couple with their discipline in using the methods chosen? What is the comprehension of the women being educated? What audio-visual aids are most effective and what should the content contain?

5. What is actually communicated by word-of-mouth, by satisfied and unsatisfied users? How accurately and persuasively is this information communicated and through which channels?

6. How can the women satisfied with the loop be brought into the program? Incentive payments for referral? Distributing fliers? Support at group meetings?

7. To what extent can you use existing community leaders and organizations to assist with the program? Which leaders can be used inside and which outside? Which branch organizations in the townships where the workers are located need national approval? Can these leaders and institutions distribute literature? Contraceptives? Coupons? Or give public support?

8. What are the advantages and disadvantage of mobile teams vs. resident field workers? How can efficiency and working capacity of both be increased?

9. What sales and marketing techniques can be employed to increase loop and traditional method acceptance?

10. Through which channels can traditional methods be distributed? Condom vending machines? Mail order appeals? Door-to-door salesmen? Doctors? Midwives? Drug Stores? Herbstores? Barbers and beauty parlors? Health Station? Community leaders and organizations? etc.?

11. Through which channels can the loop be used? Post partum clinics? General practitioners? Hospitals? Health Stations? Midwives?

12. How can a couple be assisted in making a decision to respond? Limited-time-only offers? Making specific appointments with the doctors? etc.

13. After the high parity couples have responded what administrative procedures should be innovated to obtain those women or men who intended to respond but did not actually accept a method?

14. What phases of the program can be applied to other countries? Training of doctors? Distributing supplies? Incentive payments? etc.

These are very broad questions often overlaping and interrelated. The major difficulty of investigating conditions in the field is: findings are often problematic, tentative and not applicable. However, when a finding is conclusively obtained, it provided specific guide lines for the national program.

XI. THE FAMILY PLANNING ASSOCIATION OF CHINA

In August, 1954, the Family Planning Association was chartered by the Ministry of Interior. Mrs. Shu-Kan, Secretary General of the Association, has provided the leadership from its beginning. She also has been appointed advisor to the national pre-pregnancy health program. The purposes of the non-profit organization are:

1. To provide family planning guidance and service
2. To provide service for infertile couples
3. To place unwanted children in homes where they can be afforded and given proper care.
4. To give gynecological services to those who cannot afford it.

Although the funds of the F.P.A. have been limited, a cumulative total of 60,141 couples have been given family planning guidance during the last 10 years. About 8,000 couples are currently using the facilities to obtain contraceptive supplies.

The Association has worked with industrial and government organizations to provide services to the people working in these organizations. In total, there are 23 organizations with 139 branches or outlets for contraceptive services. Some of the organizations are: The Taiwan Power Company, Taiwan Sugar Corporation, Petroleum Company, the Fishing Association, and Salt Bureau. The midwives or nurses from these organizations come to the FPA for a two-day training period. When they return, they are provided with educational materials and contraceptives, primarily condoms. There are about 2,500 current users in this program, although the cumulative total acceptors is 7,000. From a survey of cumulative acceptors, 1.45% pregnancies occurred, indicating that many of the initial acceptors received additional supplies from commercial sources.

In June, 1963, a family planning project was started in three slum districts in Taipei city. The project was assisted technically by Dr. Clarence Gamble of the Pathfinder Fund and financially by the Asia and Brush Foundations. During the first year, 5,222 home visits and 3,441 follow-up visits were made. After a year, 2,302 persons received supplies at their homes or from the slum supply depots.

From June, 1962 to July, 1964, the field worker conducted 20,477 home visits with 3,126 acceptors from the Association center. Schering Pharmaceutical Company in Germany donated 30,000 pills of Anavlor to the Association. During one year, this generous offer assisted 104 couples continuously using the supplies. Dr. Jack Lippes visited the Association at the beginning of the year and as a result, loops were added to the contraceptives offered. During 1964, there were 84 loop cases. More emphasis will be placed on the loop in 1965.

During the 10 years of its existence, the Association has helped

1,381 infertile couples and placed 247 children in homes. Of the babies given to the Association, 85% are girls. They are given away or abandoned because their parents cannot afford to feed or provide for the basic necessities. Three fourths of the parents leaving their babies have four or more children.

Part of the success of the program can be attributed to the publicity it has received. From June, 1963 to July 1964, about 800 articles covering the Association's activities were published. The newspapers and the Association made 161 radio broadcasts and announcements.

The F.P.A.C. has worked with the colleges and the universities to help instruct several hundred midwives, doctors, social workers and nurses on how to work with the people's "felt needs"; family planning being one of the most important.

XII. TWO DEMONSTRATION PROJECTS CONDUCTED IN CHANGHUA COUNTY

The two projects executed in Changhua County were not research projects. They were established for demonstration purposes. The hypothesis was that the loop and traditional methods could be provided through existing medical and community resources and that people could referred to these services by fliers and persons given incentive payments. The objective was to obtain as many acceptors as possible in a short time, with a minimum of effort and expense in terms of personnel and materials. They were also aimed at closing the gap between the large proportion of couples who say that they would like to space or limit their families and the small percentage of these same couples who actually take advantage of the existing contraceptive services. The projects were designed to lower the resistance of the potential respondents. The criteria of the design were:

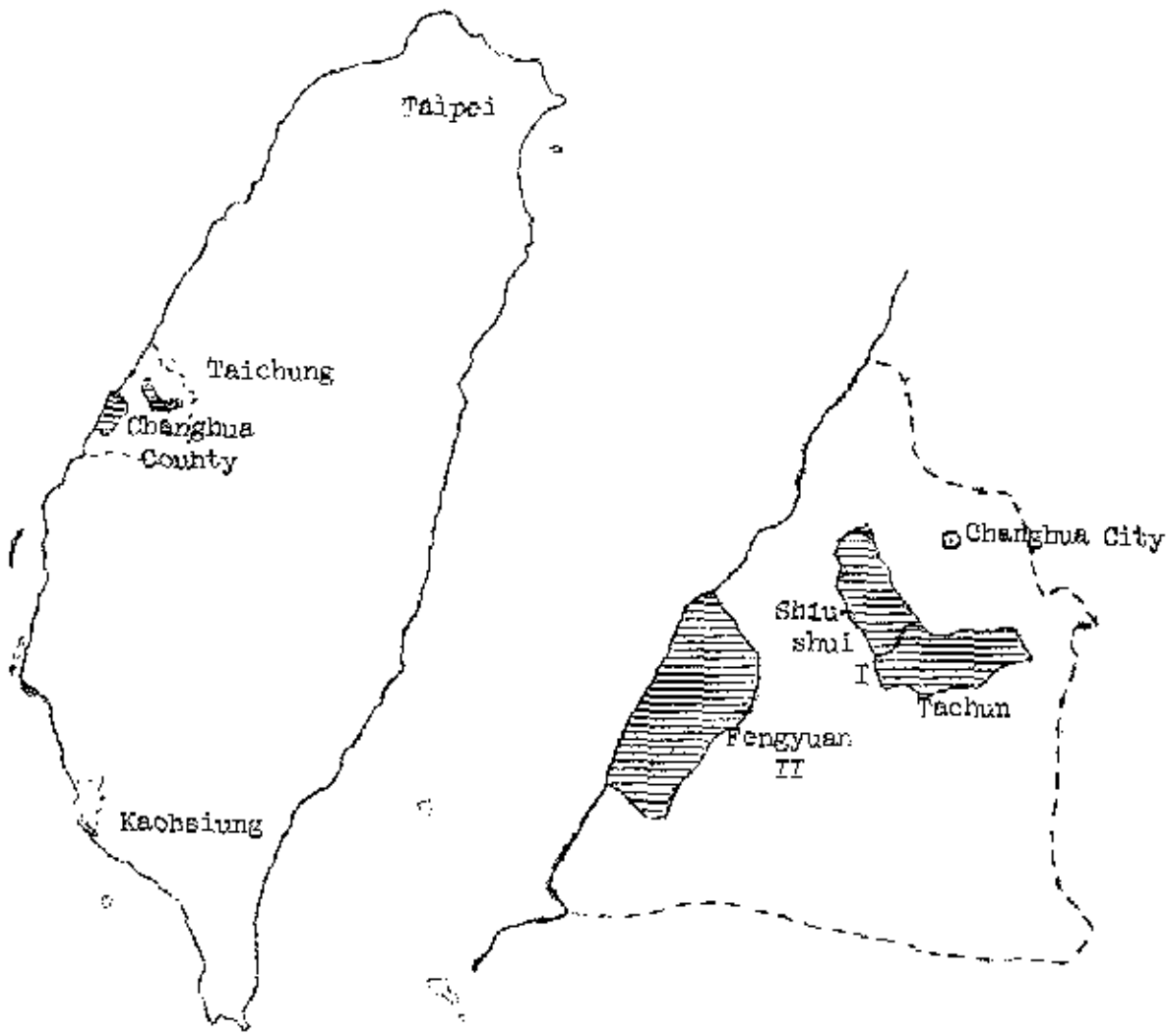
1. The population in the project areas had to be large enough to provide indicative results - the minimum population being 45,000.

2. The action phase had to be completed by the field staff within two to three months and 95% of the couples had to be approached in this time.

3. The cost of the projects had to be absorbed within the allocated budget and a budget had to be available for the expansion of the projects if they were successful.

4. Nothing could be included in the design unless the results provides specific guide lines for action on a national scale.

TAIWAN



I Loop and traditional supply channels.

II Loop insertion by G.P. and incentive payment for loop referrals.

A. Loops and traditional methods supplied through existing medical and community facilities;

1. Hypothesis:

The hypothesis for this project was that loop and traditional supplies could be channeled through existing health and community facilities - the health facilities being the local township health stations and the private doctors, and the community facilities being organizations and people who were normally known, seen and respected by the people in the community. By providing contraceptive services through these channels, the people would have the feeling that the use of contraceptives is a normal part of life.

The project was originally designed for Hong Kong by Mr. Robert Gillespie, who received assistance in the design of the project from Dr. Donald Bogue, Dr. J. Mayone Stycos, Dr. Clarence Gamble and Dr. John Wyon*. The project was modified for execution in Taiwan with the assistance of Drs. Bernard Berelson, Ronald Freedman, L. P. Chow, and Mr. H. C. Chen.

2. The staff:

Six VHEN's were loaned to the project to distribute fliers. They were given a one day briefing on the program.

The townships were chosen and the supply depots were established by Dr. Chow, Mr. Chen and Mr. Gillespie. Mr. Wu, County Health Director for Changhua County, was responsible for the loop insertion in the two township health stations. Two IUD clinics were established on Thursday and the other on Friday afternoons. The results were tabulated at the Taiwan Population Studies Center. The health station nurses kept the depot supplied with traditional contraceptives.

3. Cost:

Excluding the salaries of Dr. Chow and Mr. Gillespie, the total expense for the project was US$ 2,100. The cost to inform all the household by use of a flier was US$800 or 10¢ per household.

*Dr. Bogue, Professor of Sociology, Chicago University and Director of the Community and Family Study Center.

Dr. Stycos, Professor of Sociology, Cornell University and Director of the International Population Program.

Dr. Wyon, Assistant Professor, of Population Studies, Harvard University.

Dr. Clarence Gamble, Research Associate, Harvard University, Director of Pathfinder Fund.

Each loop case cost $1.50, each condom case (12 condoms) 36, and each foam tablet case (16 tablets) 44¢. The total cost per case referred was about $1.80.

4. The setting:

Two townships, Shuisuai and Taohan, located in the northern section of Changhua County were chosen for the project. They have a combined population of 50,016, with 8,080 households, averaging 6.2 people per household. The two townships contain 34 lis or villages and 468 linc or neighborhood units. Each lin has, on average, 17 households.

Both the townships are predominantly rural, with 84% of the household owners in farming. The major crop is rice. Most of the women have had no formal education (60%) and 53% of the women are illiterate.

There had been no contamination to these townships by the island wide program. No FPA workers, VHEN's, doctors inserting the loop or health personnel had previously been in the area. However, some word of mouth communication had penetrated from outlaying areas. But, only 0.1% of the women in the child bearing age had a loop before the project started.

These townships were an ideal location for a family planning project because contraceptive practice was very low and almost entirely confined to the Ota Ring. The practice of contraception was low in comparison to the island as a whole. With the exclusion of sterilizations, 11.5% of the married women surveyed in the project area were currently practicing, about 4% to 5% below the average for the island. The Ota Ring was being used by 9.6% of the women in the project area and was preferred by 84.5% of all the women who were using a method of contraception. The occurrence of abortion (2.3%) and the occurrence of sterilization (3.8%) was low compared to island wide figures. For the island as a whole, 10.5% of the women have had an abortion and 6.1% of the couples are sterile or have been sterilized.

5. Action:

The objective of the action phase was to interest the women in family planning, inform them of the methods available and help them to make a decision to respond.

i. Interest was stimulated by the field worker during her home visit. The women were informed that having babies was a matter of choice and that they had the opportunity to join the many women, like themselves, who are having children only when they are wanted.

ii. The women were given an informative flier which explained the loop, condom and foam tablet, their advantages and disadvantages, and how they could be obtained.

iii. The couple was assisted in making a decision quickly, because the contraceptives were being offered free for only one month from the date of the field worker's visit.

The loops were conveniently available. They could be obtained from both the township health stations, during a specified half day of the week. The women were also given the alternative of going to the cities of Changhua or Yuanlin, both 20 to 30 kilometers away, where eight private practitioners were available.

Supply depots for the condoms and foam tablets were chosen from community organizations and leaders who were in daily contact with the people in the area, who believed in the importance of family planning, and who were respected by the people in the community. The selection of these depots helped to legitimate the program and contraceptives were made as available as food, clothes and other essentials. The depots selected included: health stations, private general practitioners, private midwives, Farmers' Association, drugstores, herbalists, community service centers, village leaders, one beauty parlor and one clothes salesman. Each depot was supplied with 20 dozen condoms and 40 tubes of foam tablets, containing 16 tablets each. When the supplies ran out, an order slip was sent to the local health station nurse who replenished them. A small stipend of US$.05 was given to the supply depot personnel for each initial acceptor and for each successive sale of 12 condoms or one tube of foam tablets.

With the exception of 10% loss on the contraceptives being sold, there was no further supply cost to the program. The local health station nurse kept the depots stocked with little time and effort.

Full use was made of the mobile workers, who were concentrating on a limited population for a short time. One team of three nurses was assigned to each of the two townships. Word of mouth communication was generated to a large degree, because all the households were informed about family planning and the methods available. As the community became saturated and the social support of the people was gained, the program helped the married couples to make a decision, because the contraceptives were offered for a limited time only. It was feared that the concentrated effort might backfire in this rural area, where traditional norms were so prevalent, but because the contraceptives were offered through channels already respected by the community, this was averted.

This approach provid a uniform stimulus at a low cost. The home visit procedure was very simple. The nurse explained she was from the Provincial Health Department and wanted to assist the couples who wished to space or limit their births. She determined the women's interest and knowledge of family planning by asking a few questions, concerning her family size, and fer-

tility attitudes and behavior. This information was recorded on a questionnaire form which was used for baseline information.

The nurse then explained how family planning would help the woman obtain her aspirations and what three methods were available. The woman was given a flier with a coupon attached, which the nurse had marked with the date of her visit and the expiration date. On the average, the visit took no more than ten to fifteen minutes.

After the free offer expired, the patient had to pay US$.75 for a loop, $.22 for a tube of foam tablets, and $.36 for a dozen condoms.

6. Educational materials:

The flier contained the answers to the questions most frequently asked about the three methods offered. The loop was given special emphasis. Attached to the flier was a coupon which entitled the recipient a free loop, 12 condoms or 32 foam tablets. The offer expired one month from the date of issue. Also listed on the flier were the names and the location of the private doctors, the health stations, and other supply depots.

Because condoms can be reused, a little more than twice as many foam tablets were offered. Sampoon foam tablets from Japan were used. An experiment was conducted in Japan to test the use-effectiveness. Only 4 pregnancies occurred per 100 woman years of exposure. This is relatively low compared to the high failure rates recorded for foam tablets tested elsewhere. The foam tablet has the advantage over other traditional methods, because there is nothing to remove, wash or dry, and can be put in the vaginal canal as long as 15 to 20 minutes before intercourse.

The condoms chosen were also Japanese. The strict testing procedures insured good quality. The condom is usually more effective than the foam tablet and has an appeal in those societies where the male is dominant.

7. Research design:

The indices were calculated from the initial action to sustained use of the method chosen. These indices were divided into 4 categories.

i. The time it took to respond.

ii. The distance to the contraceptive source.

iii. The sex of the respondent.

iv. The preferred supply depot.

v. The sex of the distributor of supplies.

vi. Choice of method.

vii. The proportion of couples intending to accept and those who actual accepted.

viii. Word of mouth communication within and without the township.

ix. A comparison of the respondents with all the women surveyed with regard to: age, number of living children and sons, occupation, education, current contracdptive practice. From this will be determined new users and method switch.

x. Proportion of respondents to all couples.

xi. Cost per person approached, per method obtained, per respondent and distributing source.

xii. A follow-up survey of respondents will determine continuous use of the methods chosen, method switch and the impact the program had on acceptors.

xiii. What impact the program had on local contraceptive sales.

xi. The effect on the birth rate.

The significant relationships between most of these indices have been tabulated and analysed. The actual impact will not be known until the follow up survey is conducted.

Each person who accepted a flier could be identified by the number on the flier and the coupon. This number was later recorded by the doctor or the supplier to whom the acceptor gave the coupon in exchange for the contraceptive. These numbers were used to identify all the women surveyed and the acceptors. Because each family accepting a flier could be identified by a number, the possibilities of one family receiving more than the initial free offer of supplies was diminished. All the numbers recorded were cross checked with the women surveyed to make sure that no one received more than the initial offer. The people at the supply depots could not sell supplies until the period of free supplies was over, because the supplier would always have as many coupons as free supplies issued. This involved procedure was necessary for research purposes. On an expanded scale, all that would be necessary would be a running inventory of supplies on hand, received, issued, and the balance. If a sale is made, only the amount received and the stipend need to be recorded.

The distance factor, as it affected acceptors, was determined differently for loop and traditional supplies. There was about 25 kilometers difference between the location of the private doctors and the health stations, the health stations being in

the project area. Traditional supply depots were centrally located within the townships, so the variable would be the preferred source rather than distance to the source. Distance as a barrier was determined by the number of kilometers the person had to go to the depot within the townships.

Circulation effect was calculated, in part, by the number of people responding from outside the townships and the number of people responding without a coupon. A more true understanding of word of mouth communication will be determined by a follow-up survey, investigating the impact of friends, neighbors and relatives on the respondents. Because every household was approached, the word of mouth communication was not used to inform, but to legitimate.

8. Results:

i. The flier distributed at the home visit:

It took the six nurses six weeks to visit 93% of the households in the township. On the average, one worker visited 30 households in one day and distributed 28 coupons. Considering the rural setting, this is quite an accomplishment. Although the target number of women were in the ages of 20 to 39, most of the women in the child-bearing ages were between 20 and 44. In the first category, there were 5,600 women in the latter, 6,447. Of the 93% of the women 20 to 44 who were contacted by the workers 87% received fliers. The 13% of the women who did not receive fliers were either in menopause or sterilized.

ii. Total acceptors:

After three months, 20.3% of the women 20 to 39 responded and 17.5% of the women 20 to 44. If the number of women satisfied with their current practice of contraception, pregnant, sterilized or believed sterile, and lactating is subtracted from the total number of women 20 to 44, then 63% of the eligible women responded.

When the free loop supply was discontinued, only 9 women responded. However, by this time, there was a higher proportion of acceptors to total population than any other two townships on the whole island.

iii. The popularity of the loop:

The largest proportion of the acceptors chose the loop (61%) 90% of the loop acceptors chose to go to the two township health stations, conveniently located in the center of the townships and well known, rather than the private doctors, who were a farther distance away. Distance was not a barrier within the townships, because as many women responded within

one kilometer of the health stations as those within five or six, on the outskirts of town. On the other hand, transportation was a problem in using the private doctors because they were located 20 to 30 kilometers out of town.

iv. Loop and traditional supplies acceptance in the two townships:

Although both townships have almost the same number of married women between 20 to 44 (3,228 and 3,219) and a similar number of respondents (601 and 548), the methods preferred in the two townships varied considerably. In Shiushui 44% of the acceptors chose loops, compared to 80% in Tachun. There are two background factors which help explain this.

Before the program began, more women in Shiushui had the Ota Ring (355) or were sterilized (140) than in Tachun, where 227 women had the Ota Ring and 59 women were sterilized.

In Tachun, there were more women who needed a semi-permanent method, like the loop.

Two years ago, the Family Planning Association of China provided free contraceptives at the Tachun Health Station. However, the free supply of contraceptives was discontinued and almost none of the acceptors were continuous users. This is one of the reasons for the high number of loop acceptance. Many couples had already tried traditional contraceptives, the stepping stone to semi-permanent and permanent contraceptives.

Another reason for the high acceptance of traditional supplies was that the midwives at the Shiushui health station visited several families and gave them free contraceptives in exchange for the coupons. This is the major reason the health station was recorded as the preferred supply depot.

Before the project began, the use of traditional methods was very low in both townships (15 in Shiushui and 7 in Tachun), So this cannot account for the large difference in response.

v. The time it took to accept a method:

The first fliers distributed began on August 6, 1964 and ended on September 23. The last fliers distributed expired on the 23rd of October. Most of the loop acceptors had responded by the second or third week after the coupon was issued. Most of the traditional supply acceptors responded by the fourth week, probably because they were less highly motivated. This is illustrated by the large number of loop acceptors in September, compared with the steady increase of traditional supply acceptors.

	Tachun		Shiushui		Total	
	Loop	Trad.	Loop	Trad.	Loop	Trad.
August (50% coupons)	43	16	34	69	77	85
September (50% coupons)	241	40	166	83	407	123
November	7	0	2	6	212	236
Subtotal	441	107	264	337	705	444
Total	548		601		1,149	

The drop in November shows the impact the free offer had in acceptance.

In the future, all coupons issued in a township will expire on the same date, to obtain the maximum social support generated by word of mouth communication.

vi. Traditional supply acceptors:

Of the 444 acceptors of traditional supplies, 51.5% chose the condom. How many of the acceptors will be continuous users will be determined by a follow up survey, conducted after eight months. The switch to permanent or semi-permanent methods will also be discovered.

The women obtained the supplies in 74% of the cases. Both men and women tended to accept supplies from those of their own sex. The high proportion of female respondents can be attributed to the fact that most of the supply depots where frequented daily by women and had women handing out the supplies. In contrast to the clinic approach, there was a definite appeal to the men in the community.

Respondent/Method	Condom	Foam tablet	Total
Male	52	42	94
Female	131	144	274
Not recorded on coupon	46	29	75
Total	229	215	444

vii. Distance as a barrier to acceptance of traditional supplies:

There was a direct relationship between the distance to the depot and acceptance of traditional supplies. This was determined by calculating acceptors per li and then the kilometer distance from the li to the supply depot.

Approximate distance	0-1	1-2	2-3	3-4	4-5	Over 5
Acceptors	138	98	76	58	57	17

The large proportion of acceptors within one kilometer can be attributed to the fact that the largest proportion of the population lived where the depots were. The acceptance pattern outside one Kilometer shows the supplies should be in as convenient a location as possible because there was an equal dispersion of the population in the one to five kilometer ranges.

viii. Some facts about supply depots:

Each supply depot has various advantages and disadvantages, in the project setting and as they exist in various villages elsewhere. There is no village in the world so rural or remote, that it can't be supplied contraceptives through some channels. Mail systems alone reache 90% of the world's population. Contraceptives can be supplied with such items as clothes, food, or other essentials. In some countries, contraceptives are restricted to pharmaceutical, medical, para-medical personnel or licensed retailers. However, this is not usually the problem.

a. Health stations accounted for 36.7% of the women accepting traditional supplies. This is partly because health station personnel solicited cases outside of the health station. Most of the problems associated with the station clinics were eliminated. Usually, the woman are charged a small fee, asked a few embarrassing questions, given a complete medical exam, and then provided with an ultra-protective method like the diaghragm, which is taken home and rarely used. This has been found a disadvantage in many countries. Especially in those where the family planning effort was channeled through clinics. In this study, all the respondents had to do was to pick up their supplies.

b. The private midwives distributed 17.2% of the traditional supplies. It is a popular misconception that midwives will not cooperate with a family planning program because it takes away from their business. The midwives can be utilized, if they are organized and given a small incentive for their participation. The midwives are respected by the mothers and as a result, their use legitimates the program.

c. The Farmers' Association, like the Parent-Teachers' Association, religious and military groups, has meetings and organized activities in which family planning can be integrated. The Farmers' Association provided 11.7% of the traditional methods. Combining family planning with their community development program makes use of the allegiance and trust that the people already have and helps approach the people in their daily lives.

d. The hairdressers and barber shops gave supplies to 11.3% of all the acceptors. Condoms were primarily distributed.

e. The village leaders distributed 9.2% of all the supplies. They were educated, older, enjoyed a good standard of living and were respected.

f. The local political office or service station was chosen by a small monority of 5.6 of the respondents.

g. Although not very very popular in the project areas, the drug stores, or chemists shops, have, in most parts of the world, distributed more contraceptives than government and volunteer programs combined. They are convenient, often run by males, offer a minimum of embarrassment to one who is obtaining supplies, and they are trusted. In this project, only 4.6% of the respondents preferred to go to the drug stores. However, on the island as a whole, the drug stores are the major distributors of contraceptives.

h. The herbalist, the traditional curer of ills, was even less popular (1.3%), although his advice is adhered to by the people who frequent the herbs stores. The confidence a person has in an herbalist, a quack witch doctor, or curer of all ills can be used to obtain the proper discipline in the use of a method. The full use of the quasi-healer has yet to be fully investigated.

i. Neither of the general practitioners in the project areas were cooperative. They preferred to insert the Ota Rings and generally advised against the less effective condoms and foam tablets. Only six people received condoms from them.

ix. Some supply depots that were not used:

These channels were discounted either because the respondent could not be identified, or the depot was not available.

a. The condon vending machine. Although they offer a 24 hour service and a minimum of embarrassment, they were not available. Placed in a position of privacy, but in public view, to avoid vandalism, they can be very effective. These machines can be adjusted for any coin size, and cost about US$30. By using a coin worth about US$.025, the vendor will have to issue 60 gross before the machine pays for itself.

b. Mail. As previously mentioned, the mail services reach about 90% of the world's population. In selected townships, where mail order approach will be used, each house hold will receive, by bulk or occupant mail, a

self addressed post card. All the recipients will have to do is make a mark in the box for foam tablets or condoms, and place the card in the mail box. He or she will receive the initial free supply by return mail and only the post man will know who is receiving supplies. Postal money orders will be used to pay for the cost of future supplies. This study will be used as a baseline to determine what influence the field worker had on response.

c. Factories. The Family Planning Association of China and Japan have successfully used factories as a channel for contraceptive distribution. Both management and labor are often convinced of the direct benefits. The increase in the use of contraception decreases the loss of valuable working time among married women. When the men have children they can feed, clothe and educate there is less dissatisfaction with wages.

d. Registration office. This is a good channel for literature and supplies. Not only the newly married couples, but those with new babies can be approached.

e. A study will be conducted to see what advantages there are in using satisfied loop patients and traditional method users. It is known that the loop patients are probably the most effective persuaders. Incentive payment to loop wearers has been effective in a project which is outlined in this section. Traditional supply users, on the other hand, are usually less highly motivated.

f. Door to door salesman. They were excluded from these projects, because all channels of supply relied on the initial response. This approach usually required a difficult follow-up procedure and the women accepting supplies do not often use them. However, the supplies are conventiently available and this procedure will be further tested.

g. There are many other approaches to providing people with contraceptive services. The channels outlined here are common and can be found in other countries of the world. One of the ways to find a channel is to find in item used by a large protion of the people, like cigarettes, or soap and then distribute the methods through the existing channel.

X. Tentative lessons:

The tentative findings point to the following conclusions in the project setting and as they might be applied to other areas.

a. When a team of field workers concentrates its effort with a limited population, for a short time and concurrently, word of mouth communication is generated to obtain social support for the program, a large group of eligible couples will make a decision to respond, if they feel they are receiving a special offer. When the felt need is less strong, a bonus is useful. In general, the best approach is the one which obtains the maximum response with a minimum of time, cost and personnel.

b. All medical and non-medical methods should be channeled through the existing institutions. The medical methods, like sterilization, the loop and the oral pills should be provided by the medical and para-medical personnel, within the limits of their capabilities. The existing health machinery has been a significant advantage to the project and the national program. There should be no barriers to the extension of the traditional supplies and most families can be reached through some existing channel.

c. For the distribution of traditional supplies, time consuming records are not necessary.

B. The use of general practitioners for loop insertion and incentive payments for persons referring cases:

1. Background and development of project:

There are no obstetricians or gynecologists in 2/3 of the island's townships, where 3/4 of the island's population is located. If the national program is to be successful, the loop will have to be introduced in these areas. This will make it necessary to use the general practitioners for insertions. A small demonstration project was established as the first step toward using general practitioners on a large scale in areas where there are no specialist. There are several reasons why the use of the general practitioners is important. The doctors are conveniently available to a larger section of the population than the specialists. The women in the townships trust or are more familiar with the local doctors. The doctors have a large private case load from which cases can be referred. The doctors, as active participants, legitimate the program and are more likely to support it. The cooperation and participation of all the practitioners will be needed for the contraceptives which are now in the research stages of development and will be used in the future.

Because of the high cost of referring cases by the field staff, this project was also designed to test ways in which a large number of cases could be referred by selected reference sources, at little cost. To this end, small monetary incentives were given to the persons who referred the cases.

Dr. L. P. Chow was responsible for the design and execution of the project.

2. The setting:

Fengyuan township is located in Changhua County. It is on the west coast, about mid-point in the island. The population is 45,209 with 6,932 householders, averaging 6.5 persons per household. The number of married women 20 to 39 is 1,515. It has 285 lins and 27 lis.

Fishing is the livelihood for most of the people, although there is some agriculture and secondary industry.

3. The action program:

A general practitioner was chosen and given a two day instruction by Dr. Wu, the Changhua County Health Director. The doctor was then added to the list of specialists who are supplied by the county nurse supervisor with loops, inserters and record forms.

Cases were referred to the doctor by a selected group of persons who were in daily contact with the people in the township. A meeting was called and attended by these people. Each participant

was given a book of 25 coupons, especially marked for the project, and was asked to refer cases. For each accepted case referred, the person was paid NT$10 (US$.25) at the end of the month. No educational supplies were provided these people, but they were given a thorough briefing.

3. Results after four months:

At the end of 7 months, 299 women had gone to the general practitioner for a loop. This comprised 6.4% of the women 20 to 44 in the county. There were no complications as a result of using a general practitioner and the cost per case referred was very low. Each case referred cost US$.25, compared to US$1.00 to $30.00 per case referred by the field staff. The average cost being US$10.00.

The cases were referred by: travelling saleswomen (32.5%); the G.P. doctor, (24.7%); loop cases, (16.5%); trachoma project workers, (9.3%); billage chiefs and clerks (6.0%); health station nurses, (4,4%); a private midwife, (1.1%) and other (5.5%).

The project benefited significantly by the techniques used by the 3 travelling saleswomen. As well as selling the mothers household items, they were able to convince them of the advantages of the loop and earn a small sum for themselves.

The doctor's caseload accounted 1/4 of all respondents, illustrating one of the main advantages of using the private practitioners.

The most important influence was made by the satisfied loop cases on the women they contacted.

The remaining sources of referral illustrates the advantages of using the existing health workers and the civil service personnel. The midwife in the community was somewhat less than enthusiastic about the program.

4. Plans for the future:

Based on the experience of this project and with the thought that the general practitioners have been inserting and removing the Ota Ring for years, large scale training of the general practitioners has been planned. From one to three will be trained in 1965 in each township where there are no OBGYN specialists. The total number will amount to about 400 to 600. These doctors will be specially selected by the County Health Directors and given three days training in their County Loop Demonstration Clinics.

To investigate the actual contribution of the medical and paramedical profession to family planning, a survey will be conducted for a sample of all types of practitioners on the island. The sample will be drawn from specialists, general practitioners, midwives,

nurses, etc. Questions will relate to their present participation, the methods they advise and use, the complications which have resulted from their use and various skills of the practitioners. Since abortion is illegal, it will not be included in the survey. Further potential use of the medical profession will be explored.

The incentive payments will be provided in selected townships where loop acceptance has been low. A further study of alternative reference sources will be made.

XIII. THE DISTRIBUTION OF CONTRACEPTIVES THROUGH COMMERCIAL CHANNELS

A. The sale of contraceptives during 1964:

Based on the government figures for the import of contraceptives, the volume of sales by eight local manufacturers and eighteen importers of contraceptives, and a survey of sales at the local drug and herb stores, approximately, 72,000 gross of foam tablets, 84,000 gross of condoms, 8,000 tubes of jelly, 66,000 packets of 20 oral pills and 60,000 Ota Rings were sold during 1964.

In Taiwan, as in most other non-communist countries, enterprising businessmen have been able to supply the public with more contraceptives than the government and voluntary efforts combined.

It is difficult to relate the volume of sales with the surveys of couples practicing contraception because of variables such as coital frequency, re-use of condoms, number of foam tablets used at one time, and prophylactic and medicinal use of condoms and oral pills. If we assume that the survey of 14,000 women is representative of the island as a whole, then each couple uses 91 foam tablets a year. A certain percentage of condoms are used for the protection from disease or are reused. However, if 20% are employed for prophylactic purposes, each couple uses 134 condoms a year. Assuming that one pack of oral pills is used in one month and that 10% of these are used to increase fertility or help regulate menses, then 5,000 women are using oral pills. This roughly corresponds to the estimate of 6,000, based on the survey.

B. The public is informed by mass media:

Newspapers, radio stations, pamphlets, billboards, fliers, slides in movie theaters, television and bulk mail have been used to inform the public about contraceptives. Contraceptive distributers claim to have spent about US$100,000 on advertising.

A typical newspaper advertisement runs once or twice a week in eight 10 leading newspapers. At first a half or a quarter page ad is placed, followed by five to six column inches. Syn-A-Gen foam tablets use a naked girl explaining the merits of the product.

The radio and T.V. advertisements are usually made between programs and are about ten to thirty seconds long. Most distributers do not use the radio and T.V. unless they have a variety of pharmaceuticals which can also be advertised.

Combined, the distributers have printed over a million fliers, 700,000 pamphlets, and 60,000 posters. These are sent to the island's drugstores, medical practitioners, and, by bulk mail, all over the island.

Billboards are rarely used. However, slide advertising in the movie theaters is used by ten of the distributers.

The importers and manufacturers of foam tablets spend the most on advertising. There seems to be a direct relationship between the amount of money spent on advertising and the proportion of the market controlled by the distributer.

C. The import of contraceptives:

1. How a distributer is chosen:

If a manufacturer wishes to market his items in another country, an agent or distributer has to be chosen. He obtains the names of importers and trading firms from various sources. For U.S. citizens, very extensive trade lists are available from the Bureau of International Commerce in Washington. There is a trade list for almost every country in the world at the cost of US$1.00. They are entitled, "Medicinal and Toilet Preparations - Importers, Dealers and Manufacturers." Trade lists can also be obtained from the Chamber of Commerce or the Embassy in most countries.

To find out which agent is the best, the manufacturer must write a letter to find out how many distributing outlets, such as drugstores, doctors, hospitals, a potential agent has. The manufacturer prefers the importer to have salesman on salary, with a bonus for incentive, rather than salesman on commission. He prefers a stock distributor to an indent agent. He wants one who will advertise the product. He also wants an imaginative distributor who will market the traditional methods through as many channels as possible and who will market the medical methods to all medical and para-medical practitioners within the limits of their capabilities. With these conditions in mind, he also checks into character and credit references to make sure that the distributor is reliable.

The F.O.B. or C.I.F. price is then negotiated.

2. The cost of importing contraceptives:

In Taiwan, the import duty is very high. On the first shipment a tax is levied based on the CIF price. On subsequent shipment, the tax is 32.5% on foam tablets, 52% on oral pills, and 45% on condoms, based on the retail value. Including the defense tax and the handling charges, the final price to the distributor is usually double the CIF cost.

After the contraceptives are cleared through customs, they are stored in a warehouse by the distributor.

D. The manufacturing of condoms in Taiwan:

There are two manufacturers of condoms in Taiwan. Together they produced 60,000 gross of condoms in 1964. The condoms are manufactured by a cement process. Glass forms, mounted on racks are dipped into latex mixed with sulfur, zinc oxide, accelerator, blending material and some ingredients to prevent decay. The condoms are heated for three minutes at 70°F and then redipped and reheated. Then the racks are passed on to the next worker, who rolls the base of the condom, so that there is a rim at the base of each condom. The condoms are placed in a large oven and heated at 100°F for thirty minutes. Workers roll the condoms off the glass forms and test them for water leakage. About 10% of the condoms do not pass this test. When they are dried, powdered by the worker, and rolled, they are placed into paper envelops, twelve to a box.

Because of the high import duty on rubber, condoms cost about US$1.00 a gross to produce. All the equipment costs about US$3,000.

E. Manufacturing foam tablets and jelly on Taiwan:

There are six local manufacturers of foam tablets, two of whom also produce jelly. The manufacturers buy the ingredients in bulk, mix them together and press the mixture into tablet form, often in the shape of a ring. The spermacidal agent used most frequently is phenylmercuric acetate.

F. The marketing of contraceptives:

All the importers and five of the manufacturers have a sales staff varying from six to fifteen. The salesmen are located in the large cities and they spend most of their time supplying the island's 5,000 drugstores and herbalists.

The local manufacturers who have a line of pharmaceuticals or rubber products have these marketed along with the contraceptive items.

Some of the agents sell their condoms or foam tablets on commission to the Farmers' Association, midwives or other large groups. Condoms and foam tablets are also marketed with toiletries such as toothpaste or soap, which are sold in all villages, no matter how remote.

About half of the Ota Rings are sold to private practitioners, the other half to midwives.

Door to door salesmen often are on commission to sell contraceptives along with cosmetics and clothes.

G. The export of contraceptives from Taiwan:

Two of the eight manufacturers export to other countries. Because there are laws barring the import of contraceptives, usually

in Catholic countries, the foam tablets are exported as "vaginal hygiene suppositories", the condoms for protection from disease, the pills for hormone regulation, and the IUD as an item for medical research.

The total volume of export is very small.

H. The problems and questions which arise:

1. What standard testing procedures should be required of manufacturers and importers of condoms and foam tablets before they are allowed to sell their product?

2. How can the national program benefit from the distribution methods used by the agents and manufacturers? How can the agents and manufacturers be assisted by Government?

XIV. THE APPENDIX

A. The Taichung Study:

1. Outline of the first year of the program:

Taichung City, an area both rural and urban has a population of about 320,000, including about 36,000 married women 20 to 39 years old. The city as a whole was exposed to two aspects of the program - a distribution of family planning posters and a series of meeting with community leaders to inform them about the program, get their advice and enlist their support. The objective was to learn how much family planning could be achieved at how much cost in money, personnel and time.

Taichung City contains about 2,400 lins or neighborhoods units, each with about 14 to 25 families. These lins were given various degree of family planning effort. In certain lins nothing was done, in other lins only family planning literature was mailed to the high parity and newly married. The rest of the lins were divided into areas where personal contact was made with husbands and wives.

These treatments were divided into three areas. Field workers gave home visits to $\frac{1}{2}$, 1/3 and 1/5 of the households in the areas.

The program used the eight health stations in Taichung to supply the contraceptives and provide a location for loop insertion.

The respondents had a wide variety of methods from which to choose, all at moderate cost. The choice of methods were: the intrauterine device, condom, foam tablets, jelly and inserter, withdrawal, the oral pills, the diaphragm and rhythm.

After 13 months the action program enlisted 5,292 acceptors, 4,007 of whom were women living in Taichung proper. In order to appreciate this figure we must realize that at any given time somewhere between $\frac{1}{2}$, and 3/4 of the women between 20 to 39 are not prospective customers: women who are sterilized or believed sterile, who are satisfied with the present contraceptive methods they are using, who are pregnant or lactating. If these women are eliminated only about 55% of the 36,000 women 20 to 39 were eligible. Almost half of the eligible women do not wish any more children, so the number of currently eligible women is only 10,000. Those who have taken up contraception in the city of Taichung during the first 13 months come to about 40% of this truly eligible population.

"The impact of such a program was not felt immediately or at one time evenly." The program advanced fairly rapidly once word-of-mouth communication was generated by home visits and group meetings. After about four months, the program had gained a great of

momentum.

The word of mouth communication channels - friends, neighbors, relations, proved to be very important means of informing a large number of people, in a short time, at little cost about the available family planning methods. 19% of all acceptors came from outside the city where there was no formal effort. 50% of the acceptors heard about the program without direct contact inside Taichung City. During the program, 74% of the IUCD acceptors came without benefit of direct contact and 89% after the close of the program.

The density of effort in the three areas of Taichung City showed that approaching 1/3 of the lins was about as effective as approaching 1/3. Although reaching 1/2 showed a significant increase in the precentage of respondents, the costs were high and probably not justified. The higher returns in the heavy density sector were almost completely from the neighborhoods where direct effort was made.

The mailings were rather ineffective - they did little better than nothing, but they were not directly keyed to the intra-uterine devices. Visiting the husband, as well as the wife, made little difference, probably because the most popular method appeals only to the wife.

A large part of the success of the program can be attributed to the introduction of the polyethylene intra-uterine devices. It is inexpensive, effective and can be inserted without anaesthetic. But intra-uterine contraception is not new. Many women have heard of or are using a Japanese device called the Ota Ring. This is more difficult to insert and remove.

The impact of the program can be partly measured from the case records. When the program began 16% of the married women 20 to 39 in Taichung were practicing contraception. This has increased to 28%. The Before and After survey showed that before the program began 14.2 of the women surveyed were pregnant and afterward only 11.4 of these women were pregnant--a decline of about 1/5. From the vital statistics recorded at the registration office, the birth rate in January & February, 1964 fell 17% from the figure for the proceding Jan. and Feb., compared a decline of 10% for all of Taiwan.

Dr. Bernard Berelson, Vice President of the Population Council summarized the success of the program by saying, "When interest in family planning is already widespread in a population of some literacy and considerable energy, and given an effective means of contraception like the IUCD, and a supporting health network, then a deliberate effort can have a measurable impact on the birth rate within a year and do so without creating any administrative, policy or political problems for the program leadership."

2. Continuous results during 1964:

After 2 years 6,148 women responded, or 17.7% of the women 20 to 39 inside Taichung. A full 78% preferred the IUCD. Some of these cases were referred by eight PPH workers in Taichung who spend about half their time conducting a follow-up study of acceptors. The other half of their time they have conducted lin meetings and home visits in order to refer cases.

3. Tentative plans for the third year:

Drs. Freedman and Takeshita discussed the possibilities for a "Second-Round" action program in Taichung. The success of the second round effort will be determined simply by the total number of acceptors.

Some of the suggestions for increasing acceptances have been:

i. The field staff should go to the "nothing" and "mail" areas since many of these people have had no direct contact with the program.

ii. The records of the Taichung study show a large number of women who intended to accept a method of family planning but didn't. These women will be approached for a second time.

iii. When mothers return for a post-partum check up at the Taichung Hospital, they will be given information about the loop. Because women are susceptible to the idea of family planning at this time, a special effort will be made to refer women who have just delivered babies.

iv. The private practitioners will be trained to insert the loop. This will open up the possibilities of the doctor's private practice being referred.

v. For the first time, an organized plan will be drawn up to use the newspapers to inform the public about the IUD and about the location of doctors inserting loops.

vi. To help increase response, specific appointments with the doctors will be used and possibly a free offer for a limited time only.

RECEIPT

No. _____

Name of Case _____

Address _____

Date _____

CASE RECORD

No. _____

Name	Age
Taiwanese or Mainlander	Occupation of husband
Address	
Education	
Children	Male Female Total
Reference source	Name
Circle one	WHEN PPH CBG Health S.
Other	

Insertion date	
Kind of IUCD	

Name of Doctor _____

Address _____

Date _____

INTRODUCTION

No. _____

Please give _____ a loop upon request.

Name of reference source _____

Name of Doctor _____

Address _____

B. THE COUPON

C. INSTRUCTIONS FOR THE INSERTION OF AN INTRAUTERINE LOOP

Jack Lippes, M.D.

A pelvic examination (including Papanicalaou smear, if desired) is made to determine the direction of the uterus, to discover whether it is anteverted or retroverted and to detect possible.

Contraindications such as:

1. The presence of large fibroids
2. Acute or subacute pelvic inflammatory disease
3. Carcinoma
4. Pregnancy
5. A history of recent menorrhagia or metrorrhagia is also a contraindication.

It is important to avoid insertions in the presence of any infections. Gonorrheal infections, even though known to have given no symptoms for six months or more, have occasionally been stirred up.

The time of insertion is preferably the last one or two days of a menstrual period or the next two days following the last day. This prevents the disturbance of an early pregnancy. There is also less bleeding following insertion if it is done at this time. Insertion should not be sooner than 60 days after a delivery or an abortion. In lactating patients with amenorrhea, insertion should be 60 days or more postpartum. In non-lactating patients, the end of the second postpartum menstruation is a convenient time.

Sterilization of the inserter and the loop can be done by immersion for 18 hours or more at room temperature in a 1/750 aqueous solution of benzalkonium chloride (Zephiran, Monocide, Cetylcide, Radiol). The compound in Oystan tablets is similar to benzalkonium chloride.

To assure the placing of the loop in the frontal plane of the uterus (right to left), the inserter is oval in cross section and the direction of the oval is shown by the two indicators or flanges. When the loop is extruded into the uterus the larger diameter of the tube should be in the front to back (sagittal) plane of the patient. The first indicator is 1-3/4 inches (4.5 c.m.) from the tip and the tube is inserted until the indicator lies against the cervix.

The cervix is visualized with a sterile speculum and cleaned with a sterile cotton ball dipped in the aqueous solution of benzalkonium chloride. It may be sprayed with Betadine.

A sterile sound is inserted to learn the direction and depth of the uterine canal. Occasionally a tenaculum is required if the canal needs to be straightened or a cicatrized cervix must be dilated. For dilation, a sterile Hank's dilator should be used, rather than a Hegar's. Dilation to a Hank's 16 to 18 is sufficient.

The loop is placed in the inserter with sterile gloves or well scrubbed hands. The large end is inserted first into the proximal or vaginal end of the tube. Continue to feed the loop into the tube until the small end is within the tube with the suture extnding out of its proximal or vaginal end. The plunger is then pushed one or two inches into the tube. As the loop tends to straighten if kept in the tube, it should be put into the tube just before use, not more than one minute before.

The inserter is pushed into the uterus for 1-3/4 inches, a distance indicated by the position of the first indicator. It is then rotated until the longer cross sectional diameter is in the antero-posterior line of the patient's (front to back). In this position the loop, when extruded, will enter the uterine cavity in the correct frontal plane (right to left), that of the cornua. The plunger (which previously has been put one or two inches into the inserter tube) is now pushed in all the way, pushing the loop into the uterine cavity. The plunger is then withdrawn completely, to prevent its binding or pulling on the suture, after which the inserting tube is pulled out of the uterus.

The suture should extend into the vagina, about 3 c.m. to be visible. As the suture is soft in the moist vagina, husbands have not felt it. It has, however, been possible to teach patients to feel its presence for re-assurance that the loop is still in position. Subsequent speculum examination can also confirm the loop position. Patients should be instructed to examine themselves daily until they learn to feel the suture. Once this is learned, a weekly examination will give the patient confidence that her loop is in place.

Instructions to the patient: The patient should be told that some bleeding is to be expected in the first month, and that the first or second menstruation may be larger than usual in amount. When this is large she should lie down for an hour a day with an ice bag on the abdomen. Vitamin K (Hephyton) 5 mg. three times a day for five days may be helpful.

Warn the patient that there may be cramps after insertion, more frequent in those who have not had children. Localized heat, aspirin and codeine in 1/2 grain doses are helpful.

The possibility of the loop's falling out should be explained to the patient, together with the fact that it is more apt to occur at the time of menstruation. Menstrual pads should be examined. Many patients can learn to examine with a finger in the vagina for the suture to determine if it is present at the end of the cervix and of the original length.

Follow-up: The patient should be examined one or two months after insertion and again after 12 months and perhaps annually.

Equipment needed:

1. Plastic loop stored in 1/750 aqueous solution of benzalkonium chloride

2. Inserter, sterilized in above solution
3. Sterile Gloves
4. Sterile Speculum
5. Sterile long Forceps
6. Sterile Sounds
7. Tenaculum - single tooth
8. Hank's dilators
9. Curved scissors (Ferguson's scissors with serrated cutting edges is preferable)
10. Bowl of aqueous solution of benzalkonium chloride or Betadine
11. Sterile cotton balls

Please Note: Insertion will be easier if the devices are used in the dry state. If the loops and inserters are taken out of the sterilizing solution an hour or two before anticipated use and wrapped in a sterile towel, they should be relatively dry for your use.

LOOP SIZES AND APPROPRIATE USE:

Loop I - 25 m.m. For nulliparous females only

Loop IV - 27½ m.m. Reserved for women who have had premature pregnancy losses and multiparous females whose uteri sound out less than 2½ inches.

Loop III - 30 m.m. For women with one child only and as a replacement for Loop II when such has been responsible for severe cramps.

Loop II - 31 m.m. Suitable for 95% of all multiparos females. For women with one or more children. Loop II should be used 90 to 95% of all insertions.

MEDICAL RECORD FORM FOR I.U.C.D.

1. Name	2. Age	3. Coupon No.

4. Address

5. Who referred the case

a. From coupon PPH VHEN OBG Health Station personnel Other

b. First information about Loop mark "A", most influential source mark "B", if the same mark "AB"

PPH VHEN OBG Health Station personnel G.P. Midwife Relative Neighbor Friend Newspaper Other

Did you attend a lin meeting where loop was discussed _____

6.

	Case background	Husband background
Education		
Literate		
Occupation		
Years of marriage		

7. Reproductive and contraceptive history

a. Number of pregnancies _____ number of live births _____ still birth _____ natural abortion _____ artificial abortion _____

b. Past use of contraceptive method: Yes _____, No _____
Type of method: O.R. C. F.T. J. D. R. C.I. O.P.*

c. Present use of contraceptive method
Type of method O.R. C. F.T. J. D. R. C.I. O.P.*

8. First visit

a. Menstruation: Regular _____ Irregular _____
b. Duration of menses period _____
c. Amount of flow: little _____ moderate _____ large _____
d. Menorrhalgia: slight _____ moderate _____ severe _____
e. Intermenstrual pain: backache _____ hypogastric pain _____ other _____
f. Intermenstrual bleeding: none _____ spotting _____ bleeding _____
g. Date of onset of last menses _____
h. Date of termination of last pregnancy _____ never pregnant _____
i. Outcome of last pregnancy: birth _____ abortion _____ ectopic_____
j. Position of uterus: Anteflexio _____ retroflexio _____
Size: Normal _____ large _____ small _____
Shape: Normal _____ abnormal _____ tuyoma _____
k. Adnexia: Normal _____ hyperplastic _____ succeptive to pressure _____
l. Erosion Yes _____ no _____
m. Secretion Yes _____ no _____
n. Pap smear made

*C. = Condom; F.T. = Foam Tablet; J.= Jelly; O.R.= Ota Ring
D. = Diaphragm; R.= Rhythm; C.I.= Coitus Interruptus;
O.P.= Oral pills.

o. Type of I.U. inserted
p. Insertion: easy _____ difficult _____
q. Date of insertion _____
r. Next appointment _____
s. Remarks _____ Doctor's signature _____

Return visits	Date	Date	Date	Date
I.U. still in situ				
Expelled (noted by case)				
Removed (who)				
Pregnant (when)				
Complaints				
Type and severity of side reaction				
Reinsertion				

INTRA-UTERINE CONTRACEPTIVE DEVICE STUDY

SUMMARY RECORD

1. Name of study _____ 2. Study No. _____
3. Hospital or clinic No. _____ 4. Device: Type _____ Size _____
5. Name of patient _____

1 Date of Visit	2 Inser-tion	3 Expul-sion	4 Remo-val	5 Preg-nancy	6 Months (total)	7 Months (current)	8 Remarks

Reason for closing: _____

Instructions for Columns 2-7

Col. 2 Enter X for each insertion.

Col. 3 Enter X for each expulsion. Show under "Remarks" (Col. 8) whether expulsion was noticed by patient or not.

Col. 4 Enter X for each removal. Show reason for removal under "Remarks".

Col. 5 Enter X for each pregnancy; show under "Remarks" whether pregnancy occurred after expulsion noticed by patient of after removal. If pregnancy doubtful, enter X?

Col. 6 Enter total months of use from first insertion to date of expulsion, removal, conception, or last visit, whichever is earliest. If expulsion unnoticed by patient was followed by conception, use date of conception; if not followed by conception, use date of last prior visit.

Col. 7 Enter months of use since last insertion.

F. LOOP FOLLOW-UP QUESTIONNAIRE

County/City _____ Village/Township/District _____
Name of Interviewer _____

No. of lin											Total
Name of respondant											
Items											
1.	Date of referral										
2.	Date of insertion										
3.	Date of follow-up										
4.	Condition of loop:										
	a. Loop still inserted										
	b. Does not know if it in place										
	c. Expelled										
	d. Reinsertion										
	e. Removal										
	f. Taken out by original doctor										
	g. Other doctor										
	h. By herself										
5.	*Reason for removal:*										
	a. Opposed by husband										
	b. Accidental pregnancy										
	c. Children desired										
	d. Separated from husband or dead										
	e. Change contraceptive method										
	f. Side effect										
6.	Side effects:										
	a. Bleeding										
	b. Spotting										
	c. Stomach-ache or cramps										
	d. Backache										
	e. Menses increase										
	f. Menses irregular										
	g. Leucorrhea										
	h. Inflamation										
	i. Psyco-somatic (weak or dizzy)										
7.	*Judgment of loop by patient*										
	a. Satisfied										
	b. Unsatisfied										
	c. Loop recommended to others (no.)										
8.	Pregnancy:										
	a. Date of latest menses										
	b. Loop in place										
	c. Expelled										
	d. Natural or artificial abortion										
9.	Sources of knowing loop:										
	a. Newspaper, magazine, movie ad., broadcasting										
	b. Neighbor, relative, friend										
	c. VHEN's										
	d. PPH										
	e. Practitioner or midwife										

10.	The most influence people:										
	a. VHFN										
	b. FPH										
	c. Health station personnel										
	d. Practicing midwives										
	e. Practitioners										
	f. Neighbor with loop inserted										

To be explained at No. 6: severe +++
medium ++
light +

G. FOLLOW-UP OF COUPON HOLDERS: TO FIND OUT WHY THE WOMEN WHO INTENDED TO RESPOND DID NOT GO TO THE DOCTORS

Name of township ______________ Name of worker ______________ Date ______________

Date coupon issued to person / Reason or excuse																			Total
1. Woman never intended to respond																			
a. Accepted coupon to be polite																			
b. Sterilized																			
c. Satisfied with current practice of contraception																			
d. Pregnant																			
e. Lactating (less than 60 days)																			
f. Wants more children																			
2. Educational barriers to acceptance																			
a. Waiting for her period																			
b. The woman believes the loop will harm her health or she will be unable to work																			
c. Woman associate the loop with loss of weight or appetite																			
d. The woman had a bad experience with traditional supplies																			
e. The woman is waiting to see if her friend or neighbor is satisfied with loop																			
f. The woman has been lactating longer than 60 days																			
g. The woman thinks she is in menopause																			
h. The woman is too shy to go to male doctor																			
i. A friend or neighbor with bad side effects, advised the woman not to go																			
j. The woman fears a pregnancy occuring outside the womb																			
k. Afraid of cancer																			
l. The woman thinks she has to have 4 or 5 children in order for 3 or 4 to survice																			

m. The woman feels it is part of her Chinese heritage to have a large family																			
n. The woman believes she is being experiiented on																			
3. Administrative barriers																			
a. The husband objects to the wife having the loop																			
b. The woman's doctor or midwife were against the loop																			
c. The woman could not afford the NT$30																			
d. The woman does not know where the doctor is located																			
e. The woman prefers to insert the loop: a general practitioner																			
specialist (OBGYN)																			
midwife																			
f. The woman is hesitate to accept as an individual and needs the support provide by a group																			

H. FIELD STAFF RECORDS

1. Daily Record for Field Workers

C. = Condom F.T. = Foam Tablet J. = Jelly

Date	Lin Meeting Time	Lin Meeting Attendance	Home Visit New	Home Visit Old	Survey Taken	Traditional Methods C.	F.T.	J.	Other	Total	Coupons Given
Total											

2. Supply and Sale Record

County
Township
Village

Name of field worker

Date	On Hand C.	F.T.	J.	Received C.	F.T.	J.	Issued C.	F.T.	J.	Balance C.	F.T.	J.	Needed C.	F.T.	J.
Total															

I. EVALUATION AND SUPERVISION OF FIELD STAFF AND THEIR ATTITUDES CONCERNING THE FIELD WORK

We would like to help you with your work. If you will fill out the following questionnaire, it will help us improve the family planning program. This information will be checked for accuracy with your records.

1. Name of worker _____
2. County _____
3. Township _____
4. Total population in township _____
5. Total number of li (villages) _____
6. Total number of lin (neighborhoods) _____
7. Total number of households _____
8. Is area mostly: city district _____, small village _____ farming _____
9. Major source of income in county _____
10. What is your highest educational level: middle school ____ high school _____ college _____ nurse _____ midwife _____ nurse-midwife _____
11. What is your age: 15-17 ___ 18-19 ___ 20-22 ___ 23-25 ___ 26-28 ___ 29-30 ___ 31-33 ___ 34-36 ___ 37-39 ___ 40-42 ___ 43-45 ___ 46-48 ___ 49-51 ___ 52-54 ___ 55 or over ___
12. Are you presently married? yes ___ no ___ If you are not married do you think it is detrimental to your work? yes ___ no ___
13. What is your total traditional case load _____
14. What is your total number of loop cases _____
15. What is your average loop case referral per month _____
16. How many on your total traditional case load have switched to sterilization _____, Ota Ring _____ loop _____
17. What is total number of women, you think, you will refer from your area in 1965 _____
18. How much of each method do you distribute at one time; condoms _____ foam tablets _____ Jelly _____ per person.
19. Do you advise a condom to be reused? yes ___ no ___ how often ___
20. How many foam tablets do you advise to be used at one time _____ how long do you suggest they wait before intercourse _____ how long after the foam tablet is in place do you feel it is reliable _____
21. How many of your traditional method cases go to the drug store ____ herbstore _____ doctors ____ midwife _____ other _____ for more supplies?
22. How many coupons have you distributed? _____
23. How many of these coupons have been returned to doctors for loops?
24. List the 3 main reasons the woman who intended to accept the loop, by accepting a coupon, have not responded
    a. _____
    b. _____
    c. _____
25. Give 3 ways you think couples can be persuaded from using the traditional supplies and will switch to the loop
    a. _____
    b. _____
    c. _____

26. What are 3 ways you believe you can obtain more loop cases?
    a. _____
    b. _____
    c. _____
27. In what 3 ways do you believe the administraion of the program can be improved?
    a. _____
    b. _____
    c. _____
28. About how many home visits can you make in one day, urban _____ rural _____
29. Do you make home visits to everyone or do you approach primarily the high parity? Everyone _____ high parity _____
30. Which do you believe is more effective approach? Everyone _____ or high parity _____
31. How many group meetings do you conduct in one month? _____
32. Do people understand the physiology of reproduction at lin meetings? Yes _____ no _____ usually not _____ most times _____
33. Do they understand how the condom and foam tablet prevents conception? Yes _____ no _____ usually not _____ most times _____
34. What are the questions most frequently asked by the women attending the meeting?
    a. _____
    b. _____
    c. _____
35. How much time do you spend in an average group meeting? _____
36. Do you have a lin or li leader make an introductory talk? Yes _____ no _____ sometimes _____
37. Which educational aid holds the audience attention most? flip charts _____ filmstrips _____ flash cards _____ demonstration of methods _____ other _____
38. Who are the leaders and most influential people in your community?

	Would they give support at group meetings?	Will they distribute fliers?	Do they support family planning
a. School principal			
b. Li leader			
c. Lin leader			
d. Buddhist monk			
e. Health station doctor			
f. Local doctor			
g. Midwife			
h. Herb doctor			
i. Drugstore			
j. A grandmother			
k. Person with loop			
l. Birth and marriage registration clerk			
m. Other			

39. In your community are there people who belong to organizations or come together in groups? Check the organizations or groups in your community, which ones you have given a lecture to, and how often

	Which ones have you given meetings?	How many times?	Which organization has been difficult to work with?	Can it distribute fliers?
a. Farmers' Association				
b. Parent Teachers Asso.				
c. Missionary groups				
d. Military groups				
e. Women's Association				
f. Factory (which type)				
i.				
ii.				
iii.				
g. Other				

40. Do women dislike receiving coupons and traditional supplies at the meetings? Yes _____ no. _____
41. Is there anything you do to avoid this problem?
    a. _____
    b. _____
    c. _____
42. Do you try to have a group discussion with all the attendants at the meetings? Yes _____ no _____
43. Do you have a loop wearer, known by the women in the group, give a favorable testimony? Yes _____ no _____
44. Do you combine health education with family planning? Yes ___ no ___
45. What do you believe the content of the educational marterial should be?
    a. _____
    b. _____
    c. _____
46. Do you believe mothers need education to explain why family planning is important or do they already know that family planning will benefit them? Yes _____ no _____
47. What do you do when a husband opposes his wife obtaining a loop?
    a. _____
    b. _____
    c. _____
48. Do you offer hii condoms _____ or refer him to doctor for sterilization? _____
49. Do you give press releases _____ radio announcements _____, how many of each? press _____ radio _____
50. Through what channels are traditional methods available locally? Drugstores _____ herb stores _____ doctors _____ other _____
51. What is price at drugstore? Condom for 12 _____ foam tablets (one tube) _____ jelly (one tube) _____

52. If a reward, any reward, could be given to the mothers if they accept family planning, what do you believe that reward should be?

53. Would it be possible for you when you are distributing a coupon to make a specific appointment with a doctor for the women accepting a coupon? This means arranging with a woman a time and place when she will go to a doctor? Yes _____ no _____

J. REVISED QUESTIONNAIRE SCHEDULE

Serial No. _____ Date _____

1. Name _____
2. Address _____
3. Age (last birthday): 20-24 _____ 25-29 _____ 30-34 _____ 35-39 _____ 40 or up _____
4. Original residence: Mainland _____ Taiwan (Fukien) _____ Taiwan (Kwantung) _____ Other _____
5. Education: None _____ some primary _____ primary graduate _____ junior middle school _____ Sr. middle school _____ college _____
6. Year of marriage _____
7. Original residence of husband: Mainland _____ Taiwan (Fukien) _____ Taiwan (Kwantung) _____ Other _____
8. Education of husband: None _____ some primary school _____ some senior middle school _____ senior middle school graduate _____ college _____
9. Occupation of husband (specify) _____
10. No. of live birth in the past _____ of which how many are male _____
11. No. of living children _____ of which how many are male _____
12. Do you want more children? No ___ don't know ___ yes ___ boys ___ girls _____
13. Are you pregnant now? _____ (If yes) when you expect the delivery? _____
14. Past experience of induced abortion? _____ never _____ ever _____ (specify the methods) _____
15. Are you or your husband sterilized? No _____ wife sterilized _____ husband sterilized _____
16. Do you approve of doing something to keep from having unwanted babies? Yes _____ no _____
17. Ever practised contraceptive methods Never _____ ever _____ (specify the methods) _____
18. Current practise of contraceptive methods Yes _____ no _____ (specify the methods) _____
19. Where did the person learn about present knowledge of contraceptives? Relative _____ friend _____ neighbor _____ health worker _____ practitioners _____ newspapers _____ magazines _____ meeting _____ other _____
20. Have you become pregnant while using a method? No ___ yes ___ (which method) _____
21. Are you satisfied with the current method you are using? Yes___ No___
22. What has been your main problem in using the method? Cost_____ too difficult _____ forget to use _____ no confidence _____ difficult to store in house _____ to dispose of _____ no privacy _____ other _____
23. Where do you buy supplies? Health center ___ drugstore _____ doctor _____ midwife _____ field worker _____
24. Who buys the supplies? Wife _____ husband _____ both _____ other _____
25. How much is spent a month _____
26. How could obtaining supplies be improved? _____

27. Have you talked about family planning with your husband? Yes_____ No_____. Is he in favor or not in favor of family planning? in favor_____not in favor _____
28. Have you ever heard about a contraceptive called the "loop"? Yes_____ No_____
29. Is what you heard good or bad? Good_____ bad _____
30. Have you received a coupon? Yes ___ no ___ (If yes, why have you not gone?) _____
31. Are you interested in contraceptives because you want to space the number of children or stop having more? Stop ____ space ____
32. Would you like to practice contraception in the future? Yes _____ No _____ currently using ____ sterilized _____ wants more children____ other _____
33. Do you believe the Taiwan Government should provide a service for mothers so they can have children only when they are wanted? Yes _____ no _____
34. What do you want most for yourself? _____
Your husband? _____
Your children? _____
35. Who would you prefer to insert a loop? OBGYN ____ Midwife ____ general practitioner _____ health station doctor _____
36. Would you like the person to be a male or female, familiar to you or someone you do not know? Male _____ female _____ familiar _____ not familiar _____
37. Do you read a newspaper? Never _____ once in a while _____ everyday _____
38. Do you plan to depend upon your children in your old age? Yes____ No _____
39. Do you own any of the following:
    a. Electric iron
    b. Electric fan
    c. Radio
    d. Electric
    f. Clock and watch
    g. Private lavatory
    h. Running water
    i. Sewing machine
    j. Radio with record player
    k. Refrigerator
    l. Newspaper
40. Farm background:
    a. Wife only
    b. Husband only
    c. Both wife and husband

Name of Interviewer: _____

K. This is a circular or flier distributed from door-to-door by the VHE teams and PPH midwives. This circular and other pamphlets are also distributed by existing information channels - factories, doctors, office, chemist or druggist, Farmers' and Women's Associations, Health Stations, community leaders, volunteers, movie houses, religious leaders, etc., etc.

1. Do you want better educated children, a nice house to live in, more and better food or a fan to keep you cool during the hot summer? Now that you can have children only when you want them, you can practice family planning and afford a better life for yourself, your wife and children.

2. With family planning there are many benefits to the father and mother.

   i. With 2 or 3 children the father can afford a better education for his children. Because the children will be healthier and better educated they will be able to provide more for their father & mother when they are older.

   ii. The pleasures of married life are increased because you will not have to worry about having an unwanted pregnancy.

   iii. The more mouths to feed from a wage means less food for each mouth. The more minds to educate from a wage, the less schooling. The more children in a home the less to spare for each member of the family. The more crowded the living conditions the poorer the health.

3. There are also many benefits for the children.

   i. Because children bring the most amount of happiness into our lives, they should be planned and wanted. The children that are planned will have better health, better social status, more security, more food, more schooling, better jobs, and most important, more love and happiness.

   ii. With todays better public health facilities fewer children now die. There is no longer the need to have many children for fear some will die.

4. Our Government wants happy health families where each family has more housing, jobs, schooling, food, public sanitation and less poverty, crime, crowded living conditions and abortions.

5. The loop is one of the most effective devices for contraception.

6. About 6,000 mothers in Taiwan are going to specially trained doctors to get loops. Everyone is talking about the loop.

7. The insertion takes only a few minutes and doesn't hurt. Hence the mother is not put to sleep or given a shot.

8. The best time for insertion is within four days of the end of menstruation. If the visit to the doctor must be delayed, the couple should not have intercourse during those days or should use a condom to aboid pregnancy.

9. A woman ordinarily doesn't feel the loop at all. She can do her work as usual, happier for knowing that she will not have an unwanted child.

10. It produces few side effects - mostly additional bleeding for one or two menstrual periods, which does no harm. In the few cases where the loop proves unsuitable, the doctors simply removes it.

11. Occasionally the loop comes out by itself. At least once a week the mother should make sure it is in place by feeling with her finger for the two threads attached to the loop.

12. Careful tests have shown that the loop does not cause cancer, pregnancies outside the womb, or infection. The loop is made of plastic.

13. The loop can be left in indefinitely. If the mother wants another child, the doctor simply removes the loop.

14. The doctor, especially trained for this work, gets NT$60 for an insertion plus any aftercare necessary. But you pay only half; the Maternal and Child Health Association pays the rest.

15. The closest doctor is listed below; also the name of the nearest woman doctor. Right now, there is a special offer, so good as soon as possible to the doctor.

16. Show this paper to your friends and neighbors who want help in planning their families.

Names and addresses of doctors