# A FAMILY PLANNING PROGRAM IN A LARGE POPULATION GROUP

#### THE CASE OF THE JAPANESE NATIONAL RAILWAYS

### Yoshio Koya, m.d.\*

I N most of our family planning studies we found it both expedient and sufficient to deal with relatively small groups of people. This is one of the reasons why, successful as our programs have been, family planning groups in Asian countries outside Japan have not seen in our techniques and methods a ready means of dealing with the complexities and vastness of their family welfare problems. In Japan, too, we are concerned with the question of how to bring successful contraceptive practice to large groups of people because, although we have set an historical record in the extent and rapidity of the decline in our national birth rate, abortion has played and continues to play too great a role in this phenomenon.

Whereas small family planning programs do not necessarily require a complex formal administrative set-up in dealing with large population groups, the structure and organization of the guiding team are of paramount importance. Thus, in its attempt to spread family planning practice among large segments of the population, the Japanese Government is utilizing the existing public health administrative organization. The basic family limitation plan is formulated by the Bureau of Public Health of the welfare department of the central government, from whence it is passed on, together with a monetary appropriation, to the health department of each prefectural government. To implement the plan the health centers, about 500 in number scattered all over the country, oversee the work of some 50,000 case workers, most of whom are midwives. Be-

<sup>\*</sup> President, Family Planning Federation of Japan; Consultant to Japanese National Railways.

I wish to express my appreciation to Dorothy Nortman, Research Associate of the Population Council, Inc., New York, who reviewed the analysis of the data and drafted the manuscript for publication in English.

cause of budgetary considerations, at present only relief recipients under the Livelihood Protection Law and other persons who eke out a precarious living, receive guidance and family planning instruction by home visits of midwives; other people have to visit health centers and pay the cost of contraceptives.

The contribution of the Japanese National Railways to the family planning set-up of large population groups is therefore of considerable interest. The Japanese National Railways is a public corporation, of a semi-governmental nature. It has some 450,000 employees, comprising approximately 290,000 householders, of whom about 80,000 have received instruction in family planning since I became a consultant to the company in connection with the program. This number is increasing, and the expectation is that in about five years all the 290,000 households will have received guidance.

Some 160 midwives are engaged as full-time case workers. My own role is to advise on all matters concerning family planning and implementation of the program, as well as to evaluate the results of the work—services I have agreed to render without compensation on condition that my advice is faithfully followed. The Japanese National Railways has been most generous in according me cooperation and convenience in special studies and research connected with family planning.

### BUDGETARY APPROPRIATIONS

The Japanese National Railways appropriations for family planning have been increasing from year to year. For the fiscal year 1961 the budget approximated ¥58,000,000, about 1.5 times the amount earmarked annually for similar work by the Japanese Government. Furthermore, effective with this budget, expenses may be defrayed from the fund of the Japanese National Railways Employees' Mutual Aid Association, especially for the purchase of contraceptives.

2

Ċ

This may well prove to be an epoch-making step for two important reasons. One is that by meeting family planning costs

## Family Planning Program in a Large Population 321

through their own Mutual Aid Association fund, instead of the former arrangement whereby the head office bore the cost, employees of the company are experiencing a real awakening to the true aim and meaning of family planning. The second is that the justification for defraying expenses from the fund rests on the provision that the association fund may be used for the maintenance of health. Thus the precedent has been established that family planning is conducive to health. Unfortunately, under existing laws and regulations, the government has thus far not seen its way clear to granting our request that it provide funds to organizations that use their mutual associations for family planning programs. This has been a factor limiting the development of guidance programs by enterprises in the country.

İ

1

1

ũ

Ľ

1È

ji

, . L

1

.....

4

ţĪ

XI

Ņ,

d

k

þ

Ÿ

F

# The Family Planning Committee of the Japanese National Railways

The importance with which the Japanese National Railways views family planning is shown by the structure, organization and composition of the Family Planning Committee. Besides the head office in Tokyo, the Japanese National Railways has nine regional offices and twenty-four operating divisions scattered throughout the entire system. Each of the regional offices of the company has a family planning committee, composed generally of the following personnel:

1. The chief manager of the office, who is the committee's chairman. This implies that family planning carries weight regarded as important by the regional office.

2. Executives of the Japanese National Railways labor union, and sometimes the chief members of the women's society in the area.

3. The head obstetrics and gynecology physician at the Japanese National Railways hospital in the area, whose function is to give technical advice.

4. The chief of the regional office's welfare section, as well as the chief of the health section of each operating division.

1

1

·加 20

3

ß

ار

肋

1

. 11

Pr

帅

lipte

1

zki

liote

ingits

<u>11</u>

ian Anc

419

100

Ż

ŀα

W.

adın adır

Sante Salar

ិយ

34

ł.

ie cu

These people are responsible for the administrative work concerned with the family planning program.

The Family Planning Committee is concerned with implementing the family planning program in its area, selecting the case workers, and directing and supervising their work. In the collection and preparation of the vital data and reproductive histories, the Family Planning Committee is concerned not only with questions on number of pregnancies, stillbirths, live births and abortions, but also with desired number of children and intention to practice conception control.

### **CASE WORKERS**

As a rule, case workers are midwives chosen from those who have passed the state examination on family planning instruction, one case worker for every 400 householders in the area to be covered by the program. Case workers are paid a monthly salary of \$15,000 and are provided with all expenses for travelling relating to their work.

Since it was obviously impossible to give guidance simultaneously to all the 290,000 families of the Japanese National Railways employees, the plan adopted was to begin in areas (1) with a comparatively large concentration of such households, and (2) where especially enthusiastic case workers were to be found.

As stated above, case workers are people who have passed the state examination on family planning. Nevertheless, to orient them for work in so large an organization as the Japanese National Railways, it is considered necessary to give them additional training. This is generally done under the auspices of the Japanese National Railways head office in Tokyo, where experts and authorities can give lectures. In the course of training, special attention is given to the following items:

1. Orientation on the concept of family planning. Each case worker is given to understand that the object of family planning is not so much a matter of population control as it is promotion of family happiness and prosperity. She is further given to understand that family planning is less a question of birth control than of conception control; that is, people are to be helped to avoid conception when they do not desire a birth, so that women will not have to resort to induced abortion, and on the other hand, are to be helped to conceive when they do desire a birth but seem to have difficulty in becoming pregnant.

2. A detailed technical knowledge, imparted to the case workers by the experts.

3. Practical information on the so-called safe period method, misjudgment of which is liable to cause unwanted pregnancy.

# HOUSEHOLD GUIDANCE AND INSTRUCTION

To prepare an area for the Japanese National Railways family planning program, an inauguration ceremony is held, usually attended by the principal staff members of the regional office and noted persons in the area. This produces the desired effect of impressing upon the wives of the railway employees the importance of the program. Immediately after the ceremony, the women in the area (as many as possible), are invited to attend a short course of lectures on family planning, at which films and slides are shown, and pamphlets distributed.

As a second step in the program, the case workers make door-to-door visits to the people who have shown an interest in practicing conception control. During these visits they distribute contraceptive supplies—an average of eight condoms a month, or one diaphragm with some jelly per year, or one case of twelve foam tablets a month or three cases every two months. These supplies, even condoms, are delivered to the housewives. The case workers also note on cards they bring with them, the contraceptive activities assumed and the previous contraceptive experience of the respondent, including induced abortion.

The third step in the program is to give "group guidance" to the contraceptive users. For this purpose the women are divided into groups according to their method, namely the

1.11

. M

3

-1

3

1

ġ

1

j.

bdı

. تق

1

P

ेश

15

TIC

je la

iop Maria

the

condom group, the foam tablet group, the diaphragm group, and so on. At these group meetings, not only do the physician and case workers give advice and answer questions, but the individuals are encouraged to compare notes among themselves. In all groups there is discussion of the so-called safe period method and the consequences of induced abortion. At times information is given on sterilization as related to the principles of heredity.

This kind of guidance is maintained for a year or more, during the course of which a feeling of friendship and confidence develops between case workers and their charges. This relationship greatly facilitates guidance and enhances efficiency. The pregnancy rate and the number of induced abortions usually begin to decline, although the latter may increase at first in response to the family planning stimulus. As the program progresses, women begin to attain their objective regarding desired number of children without physical and economic sacrifice, and their husbands acquire peace of mind about their families which enables them to work at their jobs more efficiently.

### Some Actual Results

At the end of 1961 we were giving guidance in the manner described above to some 80,000 households. To analyze the results, we selected those who had been receiving guidance for 3 years and among whom the wife was under 50 years of age. We found that during the first year of guidance, three fourths of the wives practiced some form of conception control under our direction. Sterility, subfecundity, and a desire to have children, appear to be the major reasons for not using some form of contraception.

It can be seen in Table 1, which gives the age distribution of the two groups, that the proportion accepting conception control was lowest at the younger and older reproductive age groups, and highest at those ages at which women are still fecund but likely to have borne all the children they want.

Family Planning Program in a Large Population 325

_	Contr	ACEPTIVE		Per Cent
Age -	User	Non-user	Total	User
19 and Under	3		3	
20-24	77	67	144	53
25-29	1,273	673	1,946	65
30-34	2,872	842	3,714	77
35-39	1,792	330	2,122	84
40-44	675	235	<b>910</b>	74
45-49	236	207	443	53
Total	6,928	2,354	9,282	75

Table 1. Number of households by age of woman and contraceptive status (as of first year of guidance).

Several observations support the hypothesis that couples interested in avoiding births became users, if not immediately then eventually, and that reasons for not using were mainly current pregnancy, a reliance on subfecundity, or desire for children. These observations are as follows:

1. The high proportion of couples using a method: 75 per cent in the first year, 79 per cent in the second year, and 82 per cent in the third year.

2. The difference in age distribution of the two types of households, noted above.

3. The sustained birth rate from year to year in the households of non-users and the decline in births in the households adopting a method.

4. The appreciable decline in induced abortions, from 10.6 per cent in the first year to 4.1 per cent in the third year, of the non-user couples, indicating movement into the contraceptor group of couples who wished to avoid births. The much slower rate of decline in induced abortions among contraceptors illustrates the relationship between induced abortion and contraceptive failure.

These data are given in Table 2.

The impact of the program on the households as a whole is truly remarkable. As shown in Table 3, the crude birth rate for all the households the year before the program was 40.8. Natu-

Ĩ

11

**1** 

1.0 1.01

Ű,

Ĩ,

 $\mathcal{T}$ 

雍

	First	First Year		Second Year		Third Year	
	Number	Per Cent of Households	Number	Per Cent of Households	Number	Per Cent of Households	
	CONTRACEPTIVE USERS						
Households	6,928	100.0	7,307	100.0	7,645	100.0	
Births	872	12.6	673	9.2	552	7.2	
Induced Abortions	612	8.8	582	8.0	486	6.4	
Stillbirths	58	0.8	48	0.6	49	0.6	
	NON-USERS OF CONTRACEPTION						
Households	2,354	100.0	1.975	100.0	1,637	100.0	
Births	486	20.6	364	18.4	341	20.8	
Induced Abortions	250	10.6	143	7.2	67	4.1	
Stillbirths	36	1.5	32	1.6	11	0.7	

Table 2. Households, births and induced abortions by use status and year of program.

rally this figure is higher than the national average of 18.0 in 1958, because our households consisted of married couples in age brackets where they normally would have children, all the wives being under 50 years of age, 40 per cent of them 30 to 35 years old. It is therefore not surprising that in the year before the program a child was born to about one in five households, suggesting the basis for strong motivation to control births. We would therefore expect a decline in the birth rate in the first year of the program, but the magnitude of the decline, from 40.8 to 30.8, is quite astonishing. Thus the initial impact, on people who had reason to be motivated, was a 25 per cent decline in the birth rate in one year.

By the third year of the program the birth rate was down to

	Year	First	Second	Third
	before	Year of	Year of	Year of
	Program	Guidance	Guidance	Guidance
Number of Households	9,282	9,282	9,282	9,282
Number of Births	1,743	1,358	1,037	893
Birth Rate per 1,000 Population	40.8	30.8	23.0	19.4
Number of Induced Abortions	592	862	725	553

Table 3. Births, birth rates, and abortions of all households, by guidance year

# Family Planning Program in a Large Population 327

19.4, a 37 per cent decline in two years. Of course, not all of this decline can be attributed to the program inasmuch as one would expect some decrease in the birth rate over time in a closed cohort population, even in the absence of contraception. However, considering that at the start of the three year program, 85 per cent of the women were under forty years of age, the time interval involved is too small to have an appreciable effect on fecundity. Thus we are led to the conclusion that a conservative estimate of the impact of the program, after removing the possible influence of motivation stemming from a recent birth the year before the program, is a shrinkage in the crude birth rate of about one-third in two years.

One of the side effects of the program was an initial increase in the number of abortions. It has been our experience, in this as in other studies, that the launching of a planned childbirth program often results in an initial increase in abortion until people acquire the necessary skill and experience for successful contraceptive practice. Based on our experience, induced abortions will decline markedly as the program progresses.

The data suggest that after three years in the Japanese National Railways family planning program, very few undesired conceptions occur. Such results are likely to add to the efficiency of the Japanese National Railways workers, who can devote themselves to their duties without the added cares of unwanted children.