

A Study of the Use of Model Mothers as Family Planning Motivators in a Thai Rural Village

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Introduction

A continuing high population growth has become one of the major problems in many developing countries over the past few decades. Thailand is one country which is still faced with this same problem. This results in social and economic burdens on the country and this prompted the Thai Government to launch a formal National Population Policy in 1970.

As a result of a well organised network of governmental health services which is coordinated with the private sector, and careful development of family planning (F.P.) programme, the annual growth rate has decreased from over 3% in 1970 to 2.5% and 1.9% in 1976 and 1981 respectively (Thailand NFPP, 1982). Thus, whilst the growth rate has gradually declined, the proportion of couples who are of reproductive age is increasing annually. According to a recent report (Kamnuansilpa, and Chamratrithirong, 1985), the acceptance rate of contraception has now reached a higher level, which is around 60% of married women in reproductive age (MWRA). This indicates that 40 percent of such women still do not use any method of birth control. This could perhaps be attributed on the one hand to inadequate motivational and educational efforts, but which on the other hand, could also be caused by the shortage of manpower to deliver F.P. services especially in the rural areas where the majority of the Thai population reside. Because of limited governmental funds, the country may not be capable of employing more personnel to improve service delivery. One way to tackle this problem is perhaps to make use of available resources in the community.

Community participation has already been tested by many countries. Experience has shown that the volunteer workers with appropriate basic training are often capable of delivering family planning service of high quality and are also effective instruments in motivating people in the community (Bailey and Correa, 1975; Davies and Rodrigue, 1976; International Planned Parenthood Federation, 1981; Park et al., 1977; Sidcl, 1972).

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In Thailand, a similar strategy has been employed. Village health volunteers, village health communicators and auxilliary midwives have been utilised to provide primary health care (PHC) including F.P. Although they are effective to a certain extent, they have been unable to encourage a large proportion of MWRA to practice contraception, in the sense that they are not full-time F.P. workers. In fact, their main function has been to deliver PHC services.

Using people in the village to work as F.P. motivators could provide a solution to this problem and enable the programme to achieve more positive results (Leoprapai, 1978; Osborn, 1974; Veravaidhaya, 1977; Zeighami, 1977). For example, a mother in a given community may be involved in encouraging others to accept F.P. She can be more effective in the sense that she will be dealing with people (the other mothers) with whom she is familiar. In addition, she might gain more support from them because they will be tackling a common problem (the consequences of having too many children). This might assist the development of the concept of self-help among them (International Planned Parenthood Federation, 1982; Park et al., 1976).

Based on this idea, it would be relevant to determine whether some mothers in a given community could be utilised to become effective F.P. motivators. The proposed study is to experiment with the use of a number of women in a village, selected on the basis of various criteria, from village residents to work with the programme. They will be called *Model Mothers*. This approach is also influenced by the belief in an old Chinese saying: *Start with what the people know, build on what they have.*

Objectives of the study

The purpose of the study is to determine alternative strategies for helping to improve the performance of the F.P. programme. More specifically, the study has the following objectives:

1. To utilise model mothers as F.P. motivators in the community in:
 - a. encouraging non-users to accept and practise modern fertility regulating methods (FRM).
 - b. encouraging current users to continue to practise modern FRM.
 - c. encouraging current users to use more effective FRM

2. To determine the effectiveness of model mothers as F.P. motivators based on the following criteria:
 - a. increased contraceptive acceptance rates among previous non-users.
 - b. increased proportions of users using more effective methods.
 - c. increased number of mothers whose characteristics satisfy the majority of the criteria of model mother.

Definition of concepts

1. *Model mother* (Ministry of Public Health, 1982)

A woman can be a model mother if she is a mother who has *correct* knowledge, attitude and practice in childbearing, childbirth and childrearing, is healthy and has healthy children.

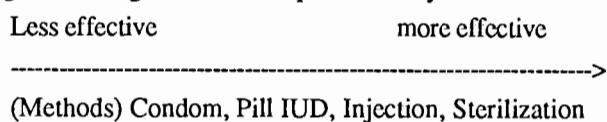
Criteria: The mother.....

1. Was pregnant between the age of 20-30 years.
2. Had at least 2 years of pregnancy-free interval between children.
3. Has no more than 2 children.
4. Had early antenatal care and delivery by health personnel or a trained traditional birth attendants.
5. Had 2 tetanus toxoid injections during pregnancy.
6. Practised self-care correctly during pregnancy, delivery and post-partum.
7. Had newborns with birthweight of not less than 2500 gms.
8. Breast-fed her baby not less than 12 months and gave additional food correctly according to baby's ages.
9. Has babies with normal growth and development, and no malnutrition (normal weight for age).
10. Has children with complete basic immunization

2. A *family planning motivator* is a mother or person who encourages people to practise family planning by talking to them.

3. *Family planning* is the act of postponing and preventing pregnancies by using contraceptive methods.

4. *Contraceptive method* : this refers to the methods below, which are arranged according to their degree of contraceptive efficacy :



5. *Contraceptive acceptance* : this refers to the initiation of use of any modern FRM.

6. *Contraceptive acceptance rate*

$$\frac{\text{the total number of MWRA who are current users}}{\text{the total number of MWRA}} =$$

7. *Contraceptive user* : this refers to MWRA (15-44 years of age) who practise modern FRM.

8. *Village* : this refers to a rural community comprising 1500 people, 300 MWRA and one F.P. clinic. (This is for the purposes of the study).

Methodology

This is a prospective study, using model mothers as F.P. motivators. In order to determine the effect of this intervention, two rural villages were selected, one as the intervention village and another as a control.

Lopburi, a province in the health Region I of Central Thailand and situated 150 kilometres from Bangkok was selected. Two rural villages which had similarity in geographic characteristics, accessibility to, and availability of F.P. were chosen from two similar districts of this province. Delung was the intervention village and Nok Khoa Ploa was the control village.

All currently married women in reproductive age in each village were included in the study.

Seven model mothers were recruited from the intervention village using the MOPH criteria (see definition of concepts). Their ages were 24-29.

Two sets of questionnaires were used, one for the baseline survey and the other for the post-intervention survey. The MWRA in both control and intervention villages were interviewed before and after the intervention.

The data were analysed and statistical test of significance of difference between the intervention and control (Chi - square) was carried out. Measure of central tendency such as percentages were also used in describing the data.

The Intervention

The use of model mothers as F.P. motivators is the intervention in this study.

Training of model mothers

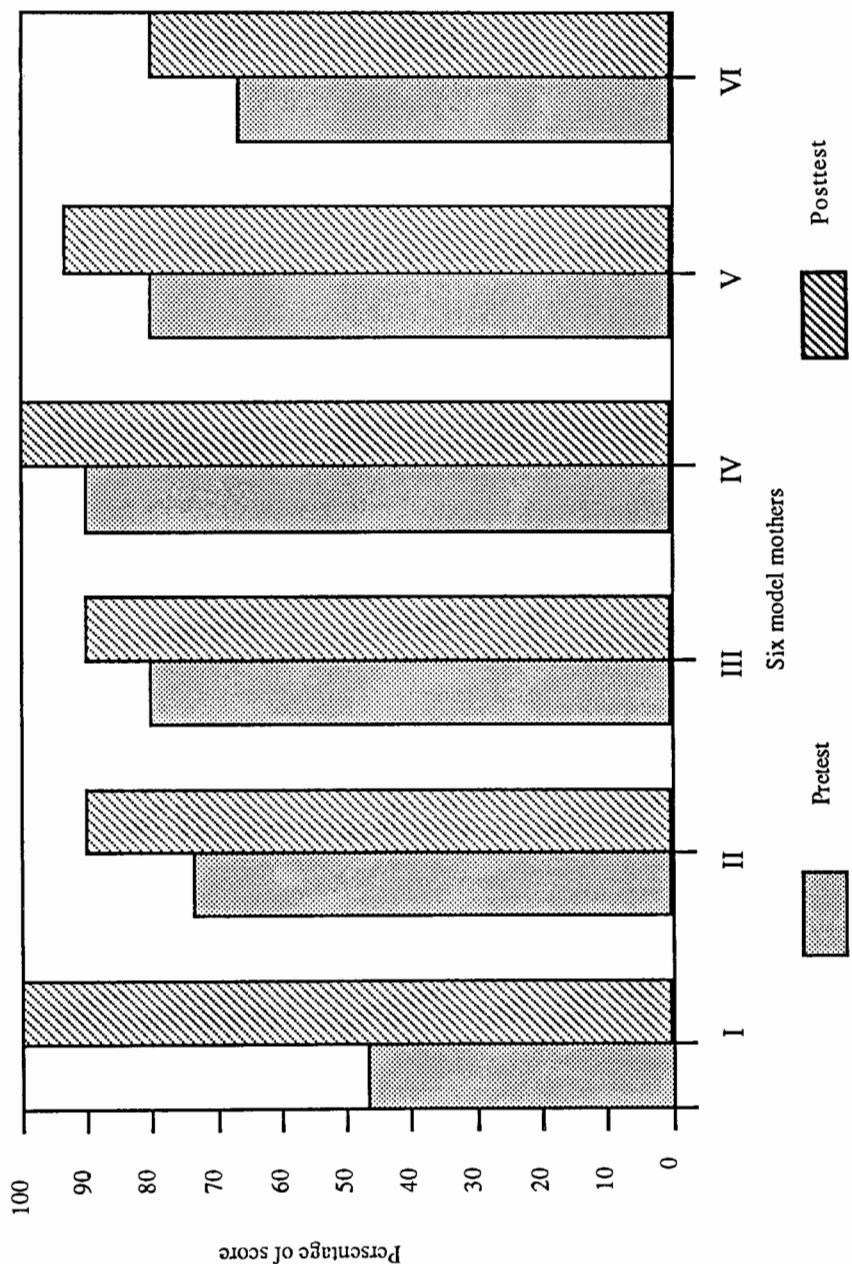
The training was undertaken in the study area. The principal investigator was responsible for such training. However two resource persons were also utilised.

The function of model mothers was mainly to provide information and education about F.P. to MWRA and at the same time to encourage them to use contraceptives in order to limit the number of children born to each. Therefore, seven model mothers have been given a five-day training course in motivation and communication skills with special emphasis on F.P. They were instructed how to record important events that occurred during the field work in the *Respondent's F.P. Record* and they were also instructed in referring the potential users to the F.P. clinics.

The assessment of the training

The pretest and post-test examinations were done at the beginning and the end of the training programme to determine how much model mothers have learned from the course. (One model mother resigned from the training course because she had no time to participate in the programme). It was found that their knowledge in F.P. increased from 72 to 90 percent from the written-examinations. In addition, they were able to talk about F.P. with others. The results of the pre and post-test examination of each model mothers are shown in Figure 1 below.

Figure 1. Pre- & Posttest Examination Score



Model mothers' work plan

Each model mother was responsible for 30-40 currently MWRA in the proximity of her house in the intervention village. One of the model mothers was selected to be the leader of the team. She was the co-ordinator and intermediary between the model mothers and the principal investigator.

Model mothers were assigned to work as F.P. motivators for a period of 12 months. They went from house to house, and talked with the current MWRA following a *Motivation Chart* and recorded in the *Respondent's F.P. Record* about contraceptive use, reason for not using contraceptives, results and problems noted during each visit. Non-users who decided to use contraceptives were referred to the village health centre, (see Appendix) The referral cards were kept at the clinic to check which model mothers who referred the mothers for F.P. services.

Supervision

The principal investigator visited the model mothers 5 times during the intervention for supervision and discussion about their experience in the field. Each model mother's record keeping (a checklist) was checked so that the status of each currently MWRA could be established.

The principal investigator visited the health centre to see the referral cards which model mothers sent with the potential users when they were obtaining the contraceptive methods. It was an indirect way by which to know which model mother could motivate more clients. In addition, this stimulated them to compete with each other in their work.

Results

The baseline and post intervention survey were conducted in both intervention and control villages. The baseline data in Table 1 showed that there were 237 and 262 currently MWRA in the intervention and the control villages respectively. Both groups had low socioeconomic backgrounds. Contraceptive prevalence rates in the intervention and control villages were 79.7 and 83.5 percent respectively. The pill was the most popular method (Table 2).

Table 1. Socio-economic and demographic characteristics of MWRA in the intervention and control villages.

Socio-economic and demographic characteristics	Intervention (percent)	Control (percent)
Marital status		
Widowed/Separated/Divorced	8.1	5.8
Currently MWRA	91.9	94.2
Pregnant	(6.6)	(5.0)
Non pregnant	(85.3)	(89.2)
Total	100.0	100.0
(N)	(258)	(278)
Age distribution of currently MWRA		
15 - 19	8.5	8.0
20 - 24	25.2	1.0
25 - 29	21.1	26.4
30 - 34	17.3	19.8
35 - 39	16.0	15.3
40 - 44	11.8	9.5
Total	100.0	100.0
(N)	(237)	(262)
Educational attainment		
Elementary or below	99.2	97.7
Secondary or below	0.8	2.3
Total	100.0	100.0
(N)	(237)	(262)
Occupation		
Farmer	83.6	87.3
Non farmer	16.4	12.7
Total	100.0	100.0
(N)	(237)	(262)

(Cont.)

Table 1 (Cont.)

Socio-economic and demographic characteristics	Intervention (percent)	Control (percent)
Income (Baht/month)		
<1000	71.7	57.6
1000 - 1499	17.7	29.0
1500 - 1999	5.1	8.4
> 2000	5.5	5.0
Total	100.0	100.0
(N)	(237)	(262)

Table 2. Contraceptive use among currently MWRA in the intervention and control groups

	Intervention (percent)	Control (percent)
Currently MWRA		
Contraceptive users	79.7	83.5
Nonusers	20.3	16.5
Total	100.0	100.0
(N)	(237)	(262)
Distribution of specific methods		
Pill	56.6	58.1
IUD	0.0	0.5
Sterilization	25.4	19.4
male	(5.3)	(11.1)
female	(20.1)	(8.3)
Injectables	17.5	22.1
Condoms	0.5	0.0
Total	100.0	100.0
(N)	(189)	(219)

Table 3 shows that, after intervention, 65.1 percent of previous nonusers in the intervention group and 46.5 percent of previous nonusers in the control group became users of F.P. methods. Contraceptive acceptance rates among previous nonusers in the intervention village (where there were model mothers) were significantly higher than in the village without model mothers (Chi-square = 3.04, $P<0.1$). All new users in the intervention group accepted modern contraceptive methods (Table 4)

Table 3. The status of the previous nonusers in the intervention and control groups during the post-intervention survey

Status	Intervention (percent)	Control (percent)
Previous nonusers		
Became new users	65.1	46.5
Still be nonusers	34.9	53.5
Total	100.0	100.0
(N)	(43)*	(43)

Note : * Exclude 5 previous nonusers who could not be interviewed

Table 4. Distribution of number of new users by specific contraceptive methods (intervention and control groups during the post-test survey)

Methods	Intervention	Control
Pill	(17)	(12)
IUD	(3)	(0)
Injectables	(7)	(6)
TR	(1)	(2)
Vasectomy	(0)	(0)
Condom	(0)	(0)
Total	(28)	(20)

The intervention group women who were most likely to accept F.P. were those in the age groups 20-24 and 25-29 years. (Table 5).

Table 5. Age distribution of the new users by contraceptive acceptance in intervention and control groups. (percent of non users in the specific age group)

Age group	Intervention		Control	
	percent (number)	percent (number)	percent (number)	percent (number)
15 - 19	41.7	(12)	57.0	(7)
20 - 24	85.7	(14)	81.8	(11)
25 - 29	87.5	(8)	30.0	(10)
30 - 34	50.0	(2)	36.3	(11)
35 - 39	60.0	(5)	0.0	(1)
40 - 44	0.0	(2)	0.0	(3)
Total	65.2	(43)	46.5	(43)

They were influenced by the motivation of model mothers (Table 6) and obtained the F.P. services from a government outlet (Table 7). The reasons for not accepting F.P. were : the desire for more children, being pregnant and others (postpartum period, lactation amenorrhea, etc.). Nearly 80 percent of the previous nonusers could understand clearly what model mothers talked about (Table 8). Moreover, they felt confident in methods they decided to use. Generally MWRA had positive attitudes towards model mothers. Most said that model mothers were very helpful in encouraging women to practice contraception (Table 9).

At the end of the study two more model mothers were selected in the intervention village whereas only one was selected in the control village.

Table 6. Influential persons in contraceptive use among users (pre-test and post-test survey in the intervention group).

Influential person	Pre-test (percent)	Post-test (percent)
Husband	9.7	
Mother in law	0.9	
Friends	9.7	
Health officers	79.6	7.1
Model mothers		89.3
Others		3.6
Total	100.0	100.0
(N)	(103)	(28)

Table 7. Source of contraceptive supply among new users in the intervention group

Source	Number of new users
Health center	(25)
Government hospital	(3)

Table 8. How were the previous nonusers understood what model mothers said about F.P. (intervention group)

Understood	Percent
Clearly	79.1
fair	16.2
not clear	4.7
Total	100.0
(N)	(43)

Table 9. Attitude towards model mothers

Attitude	Percent of mothers
Very helpful	93.0
Helpful	7.0
Not helpful	0.0
Total	100.0
(N)	(43)

Summary and Conclusion

From the baseline data it was found that there were 237 and 262 currently MWRA in the intervention and control villages and the contraceptive prevalence rates were 79.7 and 83.5 percent respectively. After the 12-month intervention, a post-intervention survey of the nonusers was conducted in both villages. The data analysis showed that 65 and 46 percent of the nonusers became new users in the intervention and the control group respectively. The contraceptive acceptance rates among previous nonusers in the intervention village where there were model mothers were significantly higher than in the control village (Chi-square = 3.04, P < 0.1).

It was found that all new users accepted modern fertility regulating methods. Pill, Injectables, IUDs and Female sterilization were the methods used. In other words, more effective contraceptive methods were being used. There were no new cases of vasectomy or condom use. The reasons might be due to rumours that vasectomy would affect health and libido and was the cause of bladder carcinoma. Furthermore, women were likely to be more responsible for using contraception than men.

Looking at specific age groups of the new users, it was generally accepted that the previous nonusers of age 20-29 (which was the same age as model mothers) had the highest percentage of contraceptive use in the intervention village. This was most likely because of friendship and intimacy among the same age group. On the other hand, the youngest nonusers who became new users have the least change, because they were just married and wanted to have children. The reasons for less acceptance rate among the elder age group was most likely to be due to their feeling that seniors should

not follow juniors' suggestion. It therefore appears that the generation gap also had a role in the work of model mothers.

All new users received contraceptive supplies from the government services. This was due to the success of the referral system from model mothers to the health centre. As model mothers could motivate women to accept F.P. and refer them to obtain the chosen methods, so model mothers were effective F.P. motivators and could decrease the workload of the health officers in the F.P. aspect in the community.

Although, the percentage of new users in the intervention village was found to be significantly higher than the percentage of new users in the control village, it should be noted that in the control village the contraceptive prevalence rate was already high, i.e., 83.5 percent. The fact that 46.5 percent of previous non users became new users in the absence of additional training and close supervision of model mother could be considered as a significant change. Therefore, the special efforts to strengthen the work of model mothers as family planning motivators may have to be selectively applied to the community where the contraceptive prevalence rate still relatively low.

Lastly, it is rather difficult to find mothers who fit all the MOPH criteria of selecting model mothers. Therefore, the concept of model mothers may have to be modified in order to use them for the purpose of F.P. services. Firstly, the age limit should be flexible or older to reduce the generation gap among those who are nearly 40 or more. Secondly, they must have at least one child but not more than two since the *two child family norm* is already well-established among the new generation of MWRA. Furthermore, they should be satisfied users of modern FRM, as they can then share their own experience with the potential new users or current users of other methods. Finally, they should have a good relationship with others, be able to read, write, talk and communicate effectively with people.

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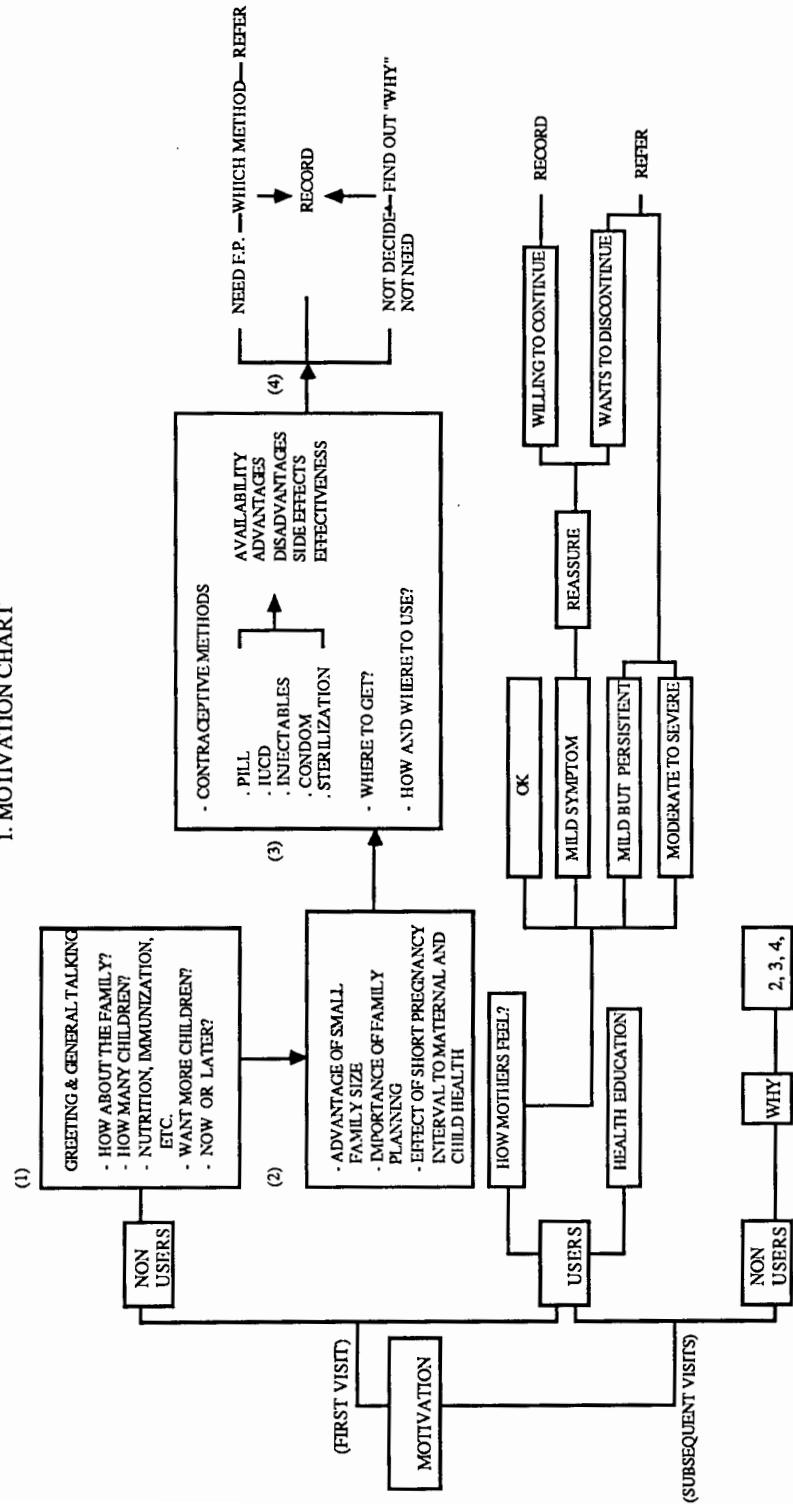
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Appendix
 1. MOTIVATION CHART



2. RESPONDENTS FAMILY PLANNING RECORD

VISIT NUMBER	DATE	CONTRACEPTIVE USE		NOT USING	REASONS FOR NOT USING	RESULTS/PROBLEMS ON THESE VISITS	REFERRED TO
		YES	WHERE OBTAINED				
		STERILIZATION					
		CONDOM					
		INFECTABLES					
		IUCD					
		FIL					