

Use of Mothers' Class in Promoting IUD Acceptance and Its Effectiveness

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ABSTRACT

This paper is a result of experimental studies on family planning in Koyang county, a rural setting of Korea. The Koyang experience has shown that the acceptance of IUD is heavily dependent on two factors: the distance from the village to the IUD service clinic and the extent of side reactions: and unfavorable rumors about its use in the community. While the problem of distance was solved by sending out mobile teams or by establishing new clinics in the villages, the problem of side reaction and unfavorable rumors still remained.

This study was set up to see whether the organization of mothers' classes could be a means to promote the acceptance and retention of IUDs. The mothers' class was organized in each village (hamlet), and the membership was opened to every women in the village. It was hypothesized that the mothers' class with the proper educational materials will work as an adequate educational program to offset rumors and to make a favorable social climate for accepting and retaining the IUD. The field experiment

was conducted according to the "before-after" design with a control group. It was found that the educational program in the mothers' class was effective in promoting the acceptance and retention of contraceptive practice, particularly the IUD.

INTRODUCTION

The Koyang Family Planning Action-cum-Research Project has been conducted for about 5 years among a rural population by the Department of Preventive Medicine and Public Health, Yonsei University, College of Medicine with the technical and financial assistance of the Population Council, New York.

IUD services have been arranged to test several factors influencing IUD acceptance, over the period from May 1965 to July 1966.

As a result of these field experiments it was discovered that the IUD acceptance rate improves when IUD services are offered near by the village through establishing a stationary clinic or by sending mobile teams, also there is no trouble with male-physician insertions in terms of shyness, also insertion at any time of the menstrual cycle promotes the acceptance rate; also a trained nurse

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can be used safely for doing insertion without medical difficulty apart from the legal-medical regulations.

The Koyang experience indicates that acceptance of the IUD is heavily dependent on two main factors; first the distance from the village to the IUD service and secondly the extent of side reactions and bad rumors about its use in the community (village).

While the distance problem was solved by sending out mobile teams or by establishing new clinics in the villages, the problem of side reaction or/and bad rumors which create an unfavorable atmosphere still remained. This led to the mothers' class experiment.

Total IUD acceptance rates as of July 31, 1966 were from 16.5% to 28.1% in 6 townships. The cumulative life-table rate of termination was 33.2 and 52.0 at the end of one year and two years respectively, in Koyang.

Mothers' classes were organized, as adequate educational program for the public with the proper educational materials, to offset rumors and to make a better atmosphere for accepting and retaining the IUD. They emphasized the advantage of continuous use of the IUD, even granting its side effects, over the disadvantage of induced abortions for unwanted pregnancies after IUD removal. This two-sided approach, frankly comparing IUD drawbacks with the actual alternatives to its continued use, increased the number of satisfied IUD users in the community.

Areas and Selection of Villages

The universe of this special project (mothers' class) is the population of Koyang County including 143 villages (76, 810 population), which have been exposed to different

degrees of programming depending upon the amount of stimulus given by the Yonsei University project and the national program.

Out of 143 villages in Koyang County, 58 villages (27 experimental, 31 villages for control) were selected using the following sampling procedures.

As the village is considered to be optimum unit of population for organizing and conducting the programme, all villages in the county were divided into two strata. If the IUD acceptance rate of a certain village was lower than the average rate of its township, then that village was put into the lower stratum; otherwise it was put into the higher stratum.

Experimental and control villages were selected randomly from each stratum, with probability proportionate to the number of villages in the township and taking into account the geographic location to avoid concentration of sample villages in one area in a township.

In 13 (A area) out of 27 villages, special education was conducted by the family planning workers with pictorial charts stressing the two sided communication explained above on advantages and disadvantages of the IUD, and with mild fear-arousing content on the side effects of induced abortion. In the 14 villages of B area, general education for family planning and MCH was given.

Study Procedure

FP workers were given MCH training for month, conducted by the National Institute of Health, before the project was started. In organizing the mothers' classes, each of the 6 county level FP workers was responsible for villages in one of the 6 townships. In addition, each township-level assistant F-

Table 1. Basic Design

	Low Area		High Area	
	No. of Villages	No. of Eligible Women	No. of Villages	No. of Eligible Women
Experimental:	15	1,853	12	939
A	7	529	6	460
B	8	1,324	6	479
Control:				
C	18	1,993	13	953
Total	33	3,816	25	1,892

A: Mothers' class with special educational program.

B: Mothers' class with general educational program.

C: No mothers' class.

Low or High Area: IUD acceptance rate of the village women was lower or higher than average rate of the township women, as of July 31, 1966

P worker helped the county level FP worker.

Key leaders for mothers' class consisted of a head leader and one to four sub-leaders. These were selected among those women who were married and 25 to 45 years old, with higher education than average in the village and favorable to family planning (preferably satisfied IUD users), and who had lived there long enough to know the villagers and be trusted by local people.

Before making the final selection, the family planning workers contacted leaders in community organizations, such as the county and township offices, churches, agricultural cooperative office, women's club, etc. to get consultation and recommendation for proper selections. Membership in mother's class was open to all women living in the community.

The mothers' class was an organization to give education to village women. Its leaders were authorized to hand out coupons for IUD service to women who want insertion and to women who had IUD side reactions. They also arranged the mobile IUD service when they had more than five IUD clients in a village, and encouraged those who had minor side reactions to the IUD to retain it longer or to change to another method instead of

stopping family planning.

RESULT

Before the study program the IUD acceptance rate in the experimental areas was 17.8 per 100 eligible women versus 20.5 in the control areas. However, this rate increased up to 31.6 in the experimental areas after the program while in the control areas it was 29.9 per 100 eligible women.

When we classify the experimental areas by educational program conducted during the study period, we find the experimental areas with special education on IUD has been reached the highest rate, 38.9 per 100 eligible women. In the experimental areas with general education the IUD acceptance rate was 27.5%.

The above findings indicated that mother's class areas have a some what higher IUD acceptance rate than the control. Such increase is mainly attributed to the increase of IUD insertions in the experimental A areas. There special educational program was conducted to teach about both advantages and disadvantages of IUDs, with a fear-arousing content about induced abortions.

Table 2. IUD Acceptance Rate per 100 Eligible Women Before and After the Educational Programme by the Study Design

	Low Area			High Area			Total		
	Before	After	Total	Before	After	Total	Before	After	Total
Experimental:									
A:	13.8 (3)	21.5	35.3	31.7	11.3	43.0	22.1	16.8	38.9
B:	11.4 (4)	11.5	22.8	26.9	13.4	40.3	15.5	12.0	27.5
Total:	12.1 (1)	14.4	26.5	29.3	12.4	41.7	17.9	13.7	31.6
Control C:	13.8 (2)	7.1	20.9	34.2	14.1	48.3	20.5	9.4	29.9

Before: As of July 31, 1966.

After: August 1966- July 31, 1967.

(1)-(2): $P < 0.001$ (3)-(4): $P < 0.001$

However, in assessing the effectiveness of the program, we have to consider the IUD acceptance rate before the program. Then experimental and control areas were classified according to the acceptance before the program, taking into account the average insertion rate in each township, and table 2 was constructed. Table 2 shows that the highest IUD insertion rate was obtained in the low acceptance areas after the IUD educational program, showing 21.5 insertions per 100 eligible women during the one year study period. In other areas there has been about the same level of IUD insertions regardless of the previous level of IUD acceptance rate. This indicates that the special educational program was more effective in the low acceptance areas, recruiting those women who were weakly motivated for the insertion of IUD.

This effect, in the low acceptance A areas, was more marked in the early 6 months following the IUD educational program as shown in table 3 (14.7 insertions per 100 eligible women). It is also noted that there were some residual effects in areas showing higher insertion rate (6.8 insertions per 100 eligible women) even during the late 6 months of the study period.

Table 3. IUD Acceptance Rate by Early and Late Study Period

	Low Area			High Area		
	Early	Late	Total	Early	Late	Total
Experimental						
A:	14.7	6.8	21.5	5.7	5.7	11.4
B:	8.8	2.7	11.5	8.4	5.0	13.4
Total:	10.5	3.9	14.4	7.0	5.4	12.4
Control C:	4.0	3.1	7.1	7.8	6.3	14.1

Early: 6 months (August 1, 1966- January 31, 1967)

Late: Late 6 months (February 1, 1967-July 31, 1967)

Table 4. Termination Rate of IUD Inserted During Study Period

	A	B	C
Number of Women IUD Accepted	166	215	273
Average month of	5.8	5.0	5.0
Months after insertions	Total Termination Rate		
3	15.1	24.2	19.8
6	21.7	32.5	30.2
9	32.3	37.5	41.3

This educational program has not only accelerated the rate of IUD acceptance but also decreased the termination rate. As

Table 5. Termination Rate of IUD Inserted During Study Period by Reasons

Months after Insertion	Pregnancy			Expulsion			Removal		
	A	B	C	A	B	C	A	B	C
3	0.7	1.5	—	5.9	10.7	4.3	8.3	12.0	15.5
6	1.6	2.8	0.6	7.4	13.7	8.3	12.6	16.0	21.3
9	2.8	2.8	1.7	9.7	15.6	9.0	19.8	19.1	30.6

Table 6. Attitude of IUD User Toward the Side Reaction

	Immediately remove when side reactions occur	Like to keep as long as tolerated	Don't know	Total
Experimental				
A Area:	(1) 20 (9.6%)	(2) 166 (79.4%)	23 (11.0%)	209 (100%)
B Area:	(3) 59 (28.9%)	(4) 137 (67.1%)	8 (4.0%)	204 (100%)

$P < 0.001$ (1)–(2), (3)–(4).

shown in table 4, termination rate was lowest in the areas where the experimental message was emphasized on the greater side effects of induced abortion on unwanted pregnancies following IUD removal.

In this connection, table 5 indicates that in the experimental A area there was the lowest removal rate among all groups.

Table 7. Practice Rate of Contraception

	Experimental A		Experimental B		P
	No. of Eligible Women	%	No. of Eligible Women	%	
Traditional Method	37	6.7	37	4.7	<0.025
IUD	95	17.0	98	12.5	
Oral Pill	18	3.2	30	3.8	
Surgery	16	2.8	11	1.4	<0.005
No Practice	391	70.3	609	77.6	
Total	557	100.0	785	100.0	

When we asked respondents whether they wished to have IUD removed as soon as they had any side reactions, 80% of women in

the experimental A areas stated they would like to keep the IUD as long as they could tolerate it while 67% in the experimental B areas without special education program gave the same answer.

Table 7 indicates practice rate of family planning on "After Survey" in experimental area.

IUD practice rate is 17% of eligible women in experimental A area, which is higher than in B area, with significant difference and also total practice rate of various contraceptives is significantly higher in A area than in B area.

Therefore, the educational program in mothers' class areas to promote the IUD acceptance as well as its retention rate proved to be successful.

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