

THE PREVENTION OF UNWANTED PREGNANCIES IN A JAPANESE VILLAGE BY CONTRACEPTIVE FOAM TABLETS

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VAGINAL foam tablets which produce carbon dioxide when moistened by semen or vaginal fluid have many qualities desirable in a contraceptive method. They are inexpensive, easy to use, and easy to learn to use. One user can instruct another without the cost involved in an examination by an especially trained person. No advance preparation is necessary, and there is nothing to remove or wash or dry. The small tube in which the tablets are packed (1.5 cm. in diameter and 8 cm. long) is readily concealed from curious observers.

Because of the advantages of the method and its appropriateness for a public health program to control family size, it seemed worthwhile to make a quantitative test to determine the pregnancy rate among users of foam tablets. This report summarizes the findings of a four year period of observation.

THE POPULATION STUDIED

The test was made in Kajiya Mura, a village with a population of about 1,500 near the seacoast, 40 miles south of Tokyo.

We chose this village as we were informed that many people there could not afford to buy contraceptives even though they wanted to practice birth control. It was thought that they would use foam tablets if they were provided free of charge.

After due arrangements were made we visited this village in December, 1954, assembled as many wives as possible in a hall and gave them talks on the importance of family planning as we formerly did in other places. The number of women attending was fairly large at the beginning. It decreased after the

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second visit when we announced that we could not provide any contraceptive except foam tablets free of charge.

At the end of the first experimental year (1955) there were 39 wives who had used foam tablets for at least one month. This number increased to 64 in the second year. It was 56 in the third year and 57 last year (1958). The total number of wives who had used foam tablets for at least one month during the four year period of study was 82.

PROCEDURE

Chosen for the study was a contraceptive foam tablet, Sampoo, made in Japan, which had previously been found to reduce the pregnancy rate (1). It weighed 0.55 grams and was made from the formula:

	<i>Per Cent</i>
Phenylmercuric Acetate	0.2
Potassium Bitartrate	53.0
Sodium Bicarbonate	20.0
Calcium Carbonate	1.0
Boric Acid	1.0
Starch	20.3
Talcum	3.5
Eggwhite	1.0

To protect the tablets from moisture before use, they were packed in small glass vials, each holding 16. The stopper was of rubber, 5 mm. thick. Instructions for the use of the tablets were simple. The wife was told to keep the stopper in the bottle except during the brief opening necessary for the removal of a tablet. She was told to place the tablet with her finger as far into the vagina as possible, just before intercourse. No subsequent procedure, such as douching, was prescribed.

The tablets were offered as mentioned above without charge to families in which the wife had not reached the menopause. The offering began January 1, 1955, and each family that used foam tablets was followed until December 31, 1958.

EFFECTS OF THE PROGRAM

We recorded the numbers of pregnancies, births, induced abortions, miscarriages, etc., only for the tablet users, as this study was planned just to learn the effectiveness of the foam tablet, and not to learn the acceptance by the community for any contraceptive. We also recorded similar data for tablet users in previous years because it was desired to compare the results before and after using the foam tablets.

As seen in Table 1, the number of couples using foam tablets for more than one month varied by year. The pregnancy rates of the users declined from 15.3 (per 100 years of exposure with this method) in 1955, to 9.5 in 1958. For the 82 women who used foam tablets for one month at any time during 1955-1958, the pregnancy rate was 11.9 per 100 years of exposure to the risk of pregnancy. Accordingly, the average number of months of use for a wife was 22.1, with its standard deviation 1.6.

It is interesting to study the reproductive performance of

Table 1. Pregnancy rates and termination of pregnancies among users of contraceptive foam tablets in a Japanese village. Data relate to periods of use during 1955-1957 and to five years preceding use (1950-1954).

YEAR	EXPERIENCE DURING USE OF FOAM TABLETS						Pregnancy Rate Per 100 Years of Exposure (Stix-Notestein)
	Number Wives Using Foam Tablets More Than One Month	Number Months Exposed to Pregnancy	Number Pregnancies	Terminations of Pregnancies			
				Births	Induced Abortions	Others	
1955	39	313	4	0	4	0	15.3
1956	64	516	6	1	5	0	13.9
1957	56	476	4	1	3	0	10.0
1958	57	504	4	0	3	1	9.5
1955-1958	82	1,809	18	2	15	1	11.9
EXPERIENCE FIVE YEARS PRECEDING USE							
1950-1954	82	2,908	128	101	19	8	52.8

the 82 women before they began using the foam tablets. The table shows that they had 128 pregnancies during five years preceding the study (1950-1954), corresponding to a pregnancy rate of 52.8. This rate suggests that the majority of these couples did not use any contraceptives in the earlier period during which only 19 of 128 pregnancies had been terminated by induced abortion, compared with 15 among 18 during 1955-1958. The pregnancy rate of 11.9, brought about by the use of foam tablets in the succeeding four years is somewhat lower than the rate for condom, 13.1, shown in our studies of six experimental areas in Japan (three villages and three settlements of coal miners) where 46 pregnancies had occurred during 5,143 couple-months of exposure (2).

SUMMARY

Eighty-two couples in a Japanese village used contraceptive foam tablets for at least one month during the observation from 1955 to 1958. The pregnancy rate during periods of use was 11.9 per 100 years of exposure, while the corresponding rate in 1950-1954 when no contraceptive was used, was 52.8. The rate while using foam tablets is somewhat lower than the rate for condom obtained from our previous studies.

Considering these findings we reached a conclusion that the foam tablet (Sampoon) is effective enough to be recommended to the people at large. Its potential value increases when the ease of use is considered.

ACKNOWLEDGMENT

Thanks are due to the National Committee on Maternal Health, New York, for a contribution of part of the cost of the study.

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