

have been examined when possible. The results of reexamination of the long-term users (there are 91 women with 40 or more treatment cycles), including the endometrial biopsies, Papanicolaou smears, cervical biopsies, and laboratory analyses, will be presented at a later date.

POPULATION CHARACTERISTICS AND PROCEDURES

Women, many of them post partum, were admitted to the study from the Ryder Hospital outpatient department. Some were enlisted in their homes. Women under 40 years of age, of demonstrated fertility (having had two or more living children), and living with a sexual partner were eligible for inclusion. The average characteristics of the 838 women who used the method for a month or more are given in table I. These women averaged 5 pregnancies each, a rate of 61 per 100 couples per year of married life. After deducting 10 months for each full term delivery and four months for each abortion the rate of pregnancy was 117 per year of exposure. The average interval between pregnancies had been 20 months.

After preliminary pelvic examination those women with lactation amenorrhea received a bottle of 20 pills to be started immediately. The other patients were instructed to return to the clinic while menstruating to start the pills on the fifth day of the cycle, to be completed on the twenty-fourth day. It was emphasized that the pills must be taken daily and that if one was forgotten two should be taken the following day. Withdrawal uterine bleeding usually occurred 2 to 4 days after the last pill. The users were instructed to return with the "menses" each month to start a new series of pills on the fifth day of the cycle. In the absence of withdrawal bleeding the pills were to be restarted 8 days after the last pill had been taken. Some of the patients have been followed in their homes by monthly visits of the social worker. Patients who had used the pills without difficulty for several months were often given two months supply.

TABLE I.—POPULATION CHARACTERISTICS AT START OF STUDY

Number of women.....	838
Age range.....	16-46
Average age.....	26.9
Average years married.....	8.2
Pregnancies (averages):.....	
Children now alive.....	4.2
Born alive but died.....	.4
Stillborn.....	.05
Abortions.....	.34
Total pregnancies.....	5.0
Pregnancies per 100 married years.....	61
Pregnancies per 100 years of exposure ¹	117

¹ "Years of exposure" are the total years married less 10 months for each full-term delivery and 4 months for each abortion. Periods of separation though appreciable for a few families was not enough for the whole to warrant consideration in the calculation.

Rate =
$$\frac{\text{Total number of conceptions} \times 1,200}{\text{Total months of exposure}}$$

TABLE II.—SUMMARY OF EXPERIENCE

	Total	Active users	Discontinued
Number women.....	838	395	443
Treatment cycles—all doses.....	15,150	10,472	4,778
10 mg.....	3,947		
5 mg.....	10,498		
2.5 mg.....	705		
Woman-years.....	1,165		

For the first two years we used 9.85 mg. of norethynodrel with 0.15 mg. of the synthetic estrin, ethynyl estradiol-3-methyl ether. In the spring of 1959 the dose was reduced to 5 mg. and 0.075 mg. of the two compounds respectively. In the fall of 1960 we began to give new patients 2.5 mg. and 0.1 mg. of the two. These reductions in dosage were designed to reduce the expense and the side effects without impairing the effectiveness.