BIRTH CONTROL IN A MIDWESTERN CITY

A STUDY OF THE CLINICS OF THE CINCINNATI COMMITTEE ON MATERNAL HEALTH

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III. AN APPRAISAL OF CLINIC SERVICE[2]

INTRODUCTION

THE primary function of the maternal health clinic is to advise its patients how to prevent pregnancy when, for reasons of health, pregnancy is contraindicated. Since accidental pregnancy may seriously affect the health of the patient, clinic policies must be directed toward providing each patient with a contraceptive that is both acceptable to her and effective for her.

In most birth control clinics in the United States the occlusive vaginal diaphragm with a spermicidal jelly has been the contraceptive method of choice. Clinic experience has shown this to be a highly effective type of contraception when used with approved techniques. For the woman who could not be fitted with a diaphragm the usual alternative has been a feminine contraceptive method such as cervical cap or jelly alone, which afforded as nearly as possible the same type of protection as the diaphragm and jelly.

In the years 1930-1934 the clinics of the Cincinnati Committee on Maternal Health prescribed diaphragm and jelly for all of their patients who could possibly be fitted with diaphragms. For the 2 per cent who could not be fitted with diaphragms, they prescribed spermicidal jelly alone.[3]

[1] From the Milbank Memorial Fund.

[2] The first article in this series: I. "Contraception and Fertility Before Clinic Attendance," was published in the Milbank Memorial Fund *Quarterly,* January, 1939, xvii, No. 1; the second article: II. "The Effectiveness of Contraception After Clinic Attendance," in the April, 1939, *Quarterly,* xvii, No. 2.

[3] The proportion of patients fitted with diaphragms was higher in these clinics than in some other clinics. The proportions given diaphragms in other clinics, for which figures are available, varied between 80 and 99 per cent of the patients prescribed for.

The Cincinnati clinics are organized to give each patient as much time and service as is necessary to insure complete understanding of the technique of use of the single method prescribed. A careful history is taken when the patient first attends the clinic; she is examined, fitted, and instructed in the use of the diaphragm by a physician, and then given supplementary instruction by a trained nurse. She is requested to return within a week so that her technique of use may be checked by the examining physician. If the technique is difficult to master, she is encouraged to return as often as is necessary until she is sure of it. Each patient is expected to return every six months for reexamination by the physician, and for recheck on her technique of use of the diaphragm.

Such intensive care should insure the best use of the prescribed contraceptives and should encourage the confidence of the patient in them, but, in spite of the encouragement and help given, a substantial proportion of the women interviewed, in the study conducted by the Milbank Memorial Fund, had given up the use of the diaphragm and jelly by the time they were followed up.

The loss of a large number of patients, in spite of a well-conducted clinic organization with service at little or no cost to the patient, suggests the need for changes in clinic policy. However, if changes in policy are to be made, they must be preceded by detailed study of the factors involved in the loss of patients and careful evaluation of the suitability of the type of contraception prescribed, for couples with differing fertility and different social and economic backgrounds.

THE ACCEPTABILITY OF THE DIAPHRAGM AND JELLY[4]

The suitability of a given contraceptive for a couple or for a group of couples depends on two factors: (1) its acceptability to the couple or to the group, and (2) its effectiveness when used by that couple

[4] In the subsequent discussion the term "diaphragm and jelly" will be used to cover all clinically prescribed contraceptives. The number of women for whom jelly alone was prescribed was too small to permit of separate classification.

or group. The evaluation of the acceptability of the contraceptives prescribed by a clinic has great significance for the formulation of clinic policy. The most effective contraceptive can be effective only for people who like it well enough to use it, and some other provision must be made for those who do not find it acceptable.

The proportion of couples in any large group who use the contraceptives prescribed for them for any given length of time is a measure of the acceptability of those contraceptives to the group. Three factors may affect the proportion of patients using the prescribed contraceptives: (1) the number of couples in the sample who gave them up because sterility or broken marriage ended their need for all contraception; (2) the number of couples who, though they still had occasion to use contraception, discarded the methods prescribed for them because of dissatisfaction with the contraceptives themselves; and (3) the length of time during which it was possible for each couple to use contraception, i.e., the number of elapsed months between the initial clinic contact and the follow-up interview during which the wife was exposed to the risk of pregnancy.

About 9 per cent of the patients who applied to the Cincinnati Maternal Health clinics for advice were widowed, divorced, separated from their husbands, sterilized, or in the menopause before they were interviewed. Of the patients who first came to the clinic in 1930, nearly 12 per cent were sterile or widowed before the end of the first year following their initial clinic visit.[5] The proportions of patients coming in the four later years, whose exposure ceased within twelve months of the initial contact, varied between 4 and 7 per cent. The exposure of an additional 2 to 4 per cent of patients was ended by sterility or broken marriage in the second year following their initial clinic contact.

[5] A large proportion of the first year's patients were relief recipients, referred because of illness of the wife or husband or because of too frequent pregnancies. In a number of instances the wife was a candidate for a sterilizing gynecological operation or the husband was fatally ill at the time of the first clinic contact.

Table 23 and Figure 9 show, for the patients attending the clinic for the first time in each of five years, the proportions who were using the prescribed contraceptives at the end of one month, three months, six months, and successive six-month intervals after their first contact with the clinic.[6] The proportions of women using the

Table 23. Proportion of women coming to the clinic in each of five years who were using the prescribed contraceptives at the end of each specified period following the initial contact with the clinic.

Number of Months Following Initial Clinic Contact	Year of First Contact				
	1930	1931	1932	1933	1934
	Number of women[1]				
	96	179	286	402	447
	Per cent using at end of each period				
1 Month	82.3	78.8	85.0	87.8	86.4
3 Months	74.0	67.0	79.0	84.3	82.1
6 Months	65.6	61.5	73.8	78.9	77.0
12 Months	52.1	52.5	63.3	70.9	66.7
18 Months	46.9	44.7	57.0	63.4	
24 Months	39.6	36.3	51.7		
30 Months	38.5	34.1	50.3		
36 Months	36.5	30.2			
42 Months	35.4	28.5			
48 Months	33.3				
54 Months	33.3				

[1] 1,410 cases. The following were excluded from the table: 146 cases who gave up the ClB because they were widowed, divorced, sterilized, or past the menopause and no longer needed a contraceptive; and 65 cases whose exposure to pregnancy subsequent to clinic contact was less than the longest period of use entered for that year's patients. These cases were distributed as follows:
1930: Eight cases whose total postclinic exposure to pregnancy was less than 54 months
1931: Fourteen cases whose total postclinic exposure to pregnancy was less than 42 months
1932: Seventeen cases whose total postclinic exposure to pregnancy was less than 30 months
1933: Eight cases whose total postclinic exposure to pregnancy was less than 18 months
1934: Eighteen cases whose total postclinic exposure to pregnancy was less than 12 months
The experience of women who used the ClB intermittently was entered as follows:
(*a*) Those whose use was intermittent because they were out of exposure because of pregnancy, abstinence, or separation, were entered as using the ClB over the whole period until they were interviewed or until they gave it up for another type of contraception; and
(*b*) Those whose use was intermittent because they used another type of contraception temporarily and then returned to ClB, were entered only for the first period of use of the ClB.
These adjustments are based on the position that women may be considered users of the prescribed contraceptives if they use them during all periods in which they are in need of contraception, and that they may be considered not to be users of the method prescribed after they once give up that method, even though they may subsequently return to it. Any bias inherent in one type of adjustment runs counter to that inherent in the other.

[6] All interviewed cases were included, except those who gave up contraception because they were sterilized, past the menopause, widowed, or separated from their husbands, and a few cases whose exposure to pregnancy subsequent to clinic contact was less than the

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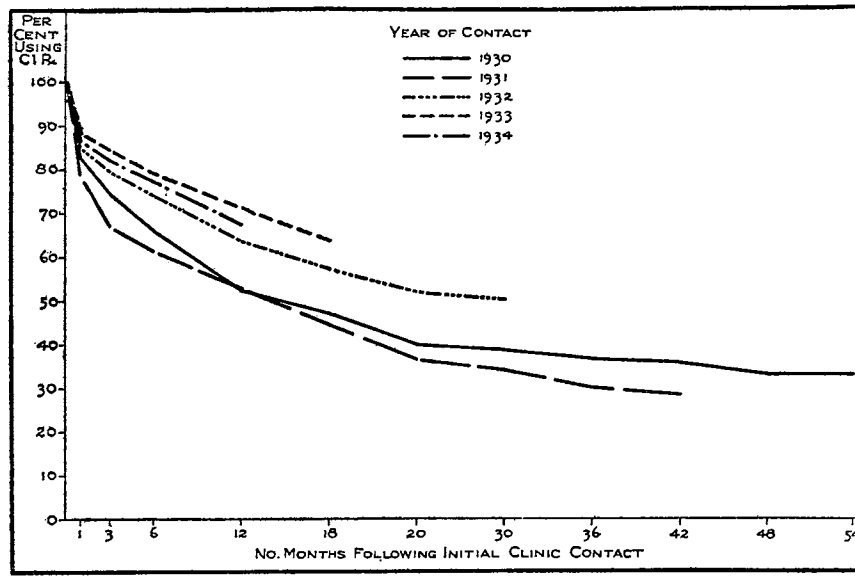

Fig. 9. Proportion of women coming to the clinic in each of five years who were using the prescribed contraceptives at the end of each specified period following the initial contact with the clinic.

diaphragm and jelly at the end of each period were higher among those who first came to the clinic in the years 1933 and 1934 than among those whose first clinic visits occurred in the three earlier years.[7] The most rapid loss of patients occurred within four months of the first clinic visit. Three months after the initial clinic contact between 67 and 85 per cent of the patients advised were still using the diaphragm and jelly, as prescribed at the clinic, and a year after the first visit between 52 and 71 per cent were using them.[8]

longest period of use entered for that year's patients (for example, patients registered in 1930 who were exposed to the risk of pregnancy for less than fifty-four months after they attended the clinic, and who could not, therefore, have used the prescribed contraceptives for as long as fifty-four months, even though they had used them during their entire post-clinic exposure to pregnancy).

[7] At least two factors probably were involved in this difference: (1) the proportion of indigent patients was high among those who first came in 1930 and declined consistently in each subsequent year; and (2) the establishment of new clinics in areas accessible to the more crowded sections of the City probably made it easier for women who came in 1933 and 1934 to maintain contact with the clinic.

[8] An additional 3 to 5 per cent of all patients were using part of the prescribed contraceptives or using them part of the time, in each period.

There was considerable improvement in clinic-patient cooperation in the first five years after the clinic was established. However, the loss of even 30 per cent of the patients still in need of contraception, within thirteen months of their first application for birth control advice, leads to the conclusion that there is opportunity for further improvement. Investigation of the characteristics of patients who continued to use the diaphragm and jelly, as compared with those of patients who discarded them, should reveal some of the underlying conditions associated with use or non-use of the prescribed contraceptives. Such information may serve as a basis for the formulation of new clinic policies.

Anatomical abnormalities affecting the fit of a diaphragm are frequently thought to influence the acceptability of that method. The occlusive vaginal diaphragm is thought to be best suited to the woman whose vaginal walls are firm and whose cervix is readily palpable. There may be difficulty in retaining a diaphragm when the vaginal walls are relaxed or when they are distorted by fecal impaction, and difficulty in placing it when the cervix is not readily accessible or when obesity or short fingers or arms prevent the pa-

Table 24. Proportion of women with and without anatomical abnormalities which might interfere with the fit or placing of a diaphragm for whom diaphragm was prescribed.

Type of Anatomical Abnormality	Number of Women	Per Cent Fitted With Diaphragm
All Women[1]	1,990	98.3
Women with No Anatomical Abnormalities	942	99.5
Women with One or More Pelvic Abnormalities	1,009	97.2
Cystocele and/or Rectocele	288	97.2
Fecal Impaction	61	100.0
Malposition of Uterus	456	98.7
More Than One Pelvic Abnormality	204	94.6
Women with Obesity, etc., with or without Pelvic Abnormalities	39	89.7

[1] All women who attended the clinic in the period studied, "lost" as well as interviewed cases, with the exception of 26 women for whom the type of prescription was unknown, and 7 women for whom no pelvic examination was noted.

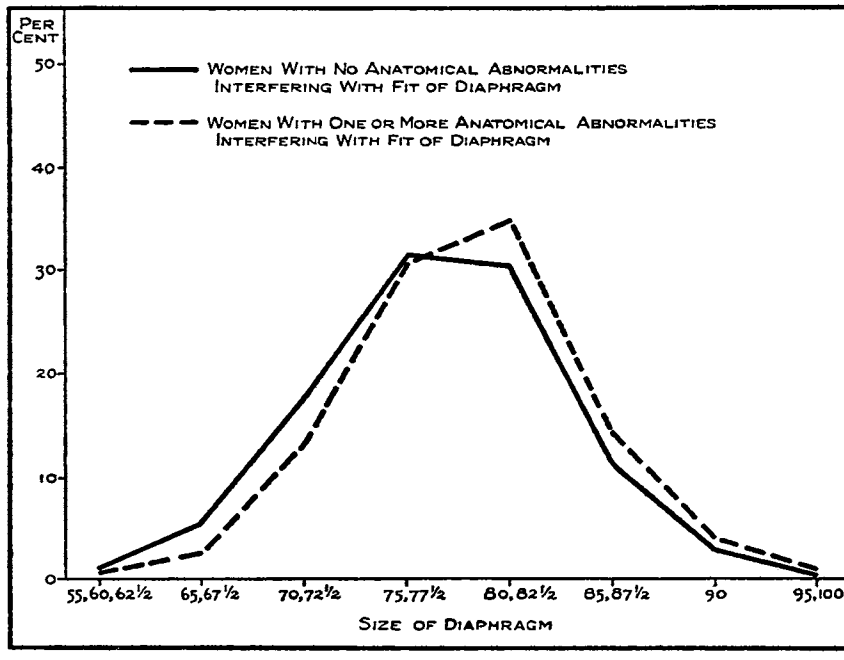

Fig. 10. Distribution of sizes of diaphragm prescribed for women with and without anatomical abnormalities which might have been expected to interfere with the fit of a diaphragm.

tient from feeling the cervix with ease.[9] More than half of the women who attended the Cincinnati Maternal Health clinics had one or more anatomical abnormalities which might have been expected to make the use of a diaphragm difficult, but 97 per cent of those who had such abnormalities were fitted with diaphragms (Table 24).

The sizes of diaphragm prescribed ranged from 55 to 100, with 75 and 80 the two sizes most frequently fitted. Women who had pelvic abnormalities were fitted with sizes larger than those prescribed for women who had none. The distribution of sizes prescribed for both groups is shown in Figure 10.

The proportion of women with anatomical abnormalities which might be expected to interfere with the fit or placing of a diaphragm,

[9] Dickinson, Robert L.: CONTROL OF CONCEPTION. Baltimore, The Williams and Wilkins Company, 1938, p. 179.

who discontinued the use of the prescribed contraceptives before the fourth month of use, was not significantly different from the proportion of those whose records showed no abnormalities (Table 25). About 66 per cent of women without abnormalities and the same proportion of women with malposition of the uterus, fecal impaction, or more than one pelvic factor used the diaphragm and jelly for thirteen months or more. Fifty-nine per cent of the women who might have been expected to have difficulty in placing a diaphragm and 62 per cent of those with relaxed vaginal walls used the prescribed contraceptives for more than a year.

The economic and social status of the patient, the amount of education she had had, the degree of crowding in the home, and the availability of private sanitary facilities were definitely associated with the acceptability of the diaphragm and jelly. All these factors were of course interrelated. Patients with little education came most

Table 25. Length of use of clinically prescribed contraceptives according to factors interfering with fit or placing of diaphragm.

Length of Use of CLB	Type of Anatomical Abnormality Interfering with Fit or Placing of Diaphragm				
	Total[1]	None	Malposition of Uterus, Fecal Impaction, or More Than One Pelvic Factor	Cystocele and/or Rectocele	Factors Other Than Pelvic[2]
	Number of Women				
	1,449[3]	681	536	198	32
	Per Cent Using CLB for Specified Number of Months				
Total	100.0	100.0	100.0	100.0	100.1
Used 3 Months or Less	20.0	19.2	20.5	21.2	18.8
Used 4-12 Months	14.6	15.0	12.9	17.2	21.9
Used 13 Months or More	65.4	65.8	66.6	61.6	59.4

[1] Exclusive of 146 women sterilized, widowed, divorced, etc., plus 26 with exposure to pregnancy less than 13 months. For all cases, excepting the 26 noted, thirteen months was the longest elapsed period between the initial clinic contact and the follow-up interview common to all patients. In this and subsequent tables relating to the length of use of the prescribed contraceptives, in which the experience of the patients coming to the clinic in all five years has been combined, all use of the clinic prescription for more than a year has been aggregated under the heading "Used 13 months or more."

[2] Women with obesity, short fingers, etc. A few had pelvic abnormalities also.

[3] Includes 2 women with unknown factors interfering with fit.

Length of Use of CLR	Number of Persons Per Room				
	Total[1]	Less Than 1 Person Per Room	1 or More Persons But Less Than 2	2 or More Persons But Less Than 3	3 or More Persons Per Room
	Number of Women				
	1,449[2]	217	739	374	101
	Per Cent Using CLR for Specified Number of Months				
Total	100.0	100.1	100.0	100.0	99.9
Used 3 Months or Less	20.0	15.7	18.0	24.1	26.7
Used 4-12 Months	14.6	12.0	13.4	15.5	27.7
Used 13 Months or More	65.4	72.4	68.6	60.4	45.5

[1] Exclusive of 146 women sterilized, widowed, divorced, etc., plus 26 with exposure to pregnancy less than 13 months.
[2] Includes 18 with unknown housing.

Table 26. Length of use of clinically prescribed contraceptives by housing.

frequently from indigent or low-income families living in crowded quarters. More than three-fourths of the patients who lived in crowded quarters had no access to a bathroom, and nearly half of them shared toilets or privies with other families.

The dominant factor associated with the acceptability of diaphragm and jelly was the degree of crowding in the home. Where crowding was excessive (three or more persons per room), 27 per cent of the patients gave up the diaphragm and jelly before they had used it for three months, and only about 45 per cent used it for more than a year. On the other hand, about 70 per cent of the patients who lived in houses in which there were less than two persons per room used the prescribed contraceptives for thirteen months or longer (Table 26).[10]

Both the degree of crowding and differences in social class were associated with acceptability (Table 27). As has been shown pre-

[10] The differences were as follows: Less than one person per room not significantly different from one or more persons but less than two: Difference = .038 ± .037.

One or more persons per room higher than two or more persons but less than three: Difference = .082 ± .030.

Two or more persons per room but less than three higher than three or more persons: Difference = .149 ± .053.

Length of Use of Clr	Total[1]	Couples Not on Relief		Couples on Relief
		White-Collar Workers	Manual Workers	
	TWO OR MORE PERSONS PER ROOM			
	NUMBER OF WOMEN			
	475	30	253	192
	PER CENT USING CLR FOR SPECIFIED NUMBER OF MONTHS			
Total	100.0	100.0	100.0	100.1
Used 3 Months or Less	24.6	33.3	21.7	27.1
Used 4-12 Months	18.1	—	19.8	18.8
Used 13 Months or More	57.3	66.7	58.5	54.2
	LESS THAN TWO PERSONS PER ROOM			
	NUMBER OF WOMEN			
	956	207	617	132
	PER CENT USING CLR FOR SPECIFIED NUMBER OF MONTHS			
Total	100.1	100.0	100.0	100.0
Used 3 Months or Less	17.5	13.0	18.0	22.0
Used 4-12 Months	13.1	11.6	13.0	15.9
Used 13 Months or More	69.5	75.4	69.0	62.1

[1] Exclusive of 146 women sterilized, widowed, divorced, etc., plus 26 with exposure to pregnancy less than 13 months.

Table 27. Length of use of clinically prescribed contraceptives by housing and social class.

viously,[11] the wives of white-collar workers found the diaphragm and jelly more acceptable than the wives of manual workers, and the wives of manual workers used them for longer periods than did the wives of relief recipients. In each social class the proportion of patients who continued to use the diaphragm and jelly for more than a year was between 8 and 10 per cent lower among those who lived in crowded quarters than among those who lived in homes in which there were less than two persons per room.[12]

[11] Table 17.

[12] Differences by housing and social class were as follows: Less than two persons per

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Length of Use of Clinic	Grade Completed				
	Total[1]	6th Grade or Less	7th or 8th Grade	1-3 Years High School	4 Years High School ± College
	Two or more persons per room				
	Number of women				
	475[2]	122	242	109	
	Per cent using clinic for specified number of months				
Total	100.0	100.0	100.0	100.0	
Used 3 Months or Less	24.6	30.3	21.9	23.9	
Used 4-12 Months	18.1	16.4	19.8	16.5	
Used 13 Months or More	57.3	53.3	58.3	59.6	
	Less than two persons per room				
	Number of women				
	956	120	386	297	153
	Per cent using clinic for specified number of months				
Total	100.1	100.0	99.9	100.0	100.0
Used 3 Months or Less	17.5	20.0	19.9	17.2	9.8
Used 4-12 Months	13.1	18.3	14.5	12.1	7.2
Used 13 Months or More	69.5	61.7	65.5	70.7	83.0

[1] Exclusive of 146 women sterilized, widowed, divorced, etc., plus 26 women with exposure to pregnancy less than 13 months.
[2] Total includes 2 women whose education was unknown.

Table 28. Length of use of clinically prescribed contraceptives by housing and education.

There was a direct association between the amount of education the patient had had and the length of use of the diaphragm and jelly, but when housing conditions were held constant (Table 28), it was found that, for women living in crowded homes, differences in education appeared to have little effect on the acceptability of the prescribed contraceptives. The proportions of patients who lived in the more crowded homes (two or more persons per room), who

room—white-collar workers higher than families on relief: Difference = .133 ± .051.
Manual workers—less than two persons per room higher than two or more persons per room: Difference = .105 ± .035.
All other differences were less than twice their standard error.

used the prescribed contraceptives for more than a year, varied from 53 per cent of those who had completed the sixth grade or less, to about 60 per cent of those who had gone to high school. On the other hand, among women who lived in homes in which there were less than two persons per room, 62 per cent of those who had had less than seven years of elementary education were using the diaphragm and jelly a year after they first attended the clinic and the proportions using increased with increasing education to 83 per cent of those who had completed high school.[13]

A complex contraceptive technique is especially difficult to use in a crowded home, where it is almost impossible to secure any degree of privacy. The fact that sanitary facilities in most of such homes are inadequate, only enhances that difficulty. Where crowding is less, other factors begin to have more weight. The woman with a high school or college education, who lives in a fairly comfortable home and has some privacy, is perhaps more willing than her less educated sister to assume the responsibility for a complex contraceptive, because she is confident that it will protect her against pregnancy when she wishes or needs to be protected.

In every group, however, some women gave up the prescribed contraceptives. Six hundred eighty-three women, or 46 per cent of those who were still exposed to the risk of pregnancy at the time of interview, had rejected the diaphragm and jelly before they were interviewed because they were dissatisfied with them as methods of contraception. The total was made up of different proportions of the three social class groups. It included 37 per cent of the wives of

[13] All differences between educational groups among women living in homes in which there were two or more persons per room were less than twice their standard error.

Among women living in homes in which there were less than two persons per room only the following difference was significant:

Women with four years of high school ± college higher than women with one to three years high school: Difference = .123 ± .046.

All differences by housing for each educational group were less than twice their standard error, with the following exception:

Women who had attended high school—less than two persons per room higher than two or more persons per room: Difference = .153 ± .051.

Reasons for Rejecting Cl R	All Women	Nonrelief Wives of		Wives of Relief Recipients
		White-Collar Workers	Manual Workers	
	Number of women rejecting Cl R because of dissatisfaction			
	683	87	406	190
	Per cent rejecting Cl R for each reason			
All Reasons	100.0	99.9	100.1	99.9
Difficulty of Renewing Supplies	33.5	25.3	34.0	36.3
Difficulty in Placing Cl R or Discomfort	26.4	24.1	28.6	22.6
Cl R Esthetically Unacceptable	11.4	17.2	9.9	12.1
Cl R Too Much Trouble to Use	9.5	14.9	7.9	10.5
Patient Afraid to Use Cl R	4.7	4.6	5.7	2.6
Patient Pregnant in Spite of Use	8.6	9.2	8.1	9.5
Other or Unknown Reason	5.9	4.6	5.9	6.3

Table 29. Distribution of reasons given for the rejection of the prescribed contraceptives by women in three social classes.

white-collar workers, 47 per cent of the wives of manual workers, and 56 per cent of the wives of relief recipients who were still in need of contraception at the time of interview.

The patients gave a variety of reasons for discarding the diaphragm and jelly, but most of these fell into a few broad categories. The most frequent complaints of women of all social classes concerned the difficulty of finding the time or money to come to the clinic for new supplies or for check-up visits.[14] More than one-third of all the women who gave up using the clinic prescription did so for these reasons (Table 29).

More than 25 per cent of women who gave up the prescribed contraceptives did so because the diaphragm was uncomfortable to the husband or wife, or was difficult to place. About 20 per cent of the couples who rejected the diaphragm and jelly found them estheti-

[14] This finding is not a new one. The Committee on Maternal Health has been aware of this difficulty and has been meeting the problem by establishing new clinics in districts more readily accessible to those women who are least able to spend time and money on transportation.

cally unacceptable or too much trouble to use, and an additional 5 per cent were afraid to use them.

The distributions of reasons given by women of the three social classes were much the same. A relatively small proportion of women in the white-collar group found it difficult to return to the clinic but the proportion of women discarding the diaphragm and jelly because they were esthetically unacceptable or too much trouble to use was higher in this group than in either of the other groups.

Only about 9 per cent of the patients who found the diaphragm and jelly an unsatisfactory method of contraception gave accidental pregnancy with the method as their reason for discarding it. Less than a third of the 220 patients who had accidental pregnancies while using the clinic prescription stopped using the diaphragm and jelly because of its failure to protect them against pregnancy. Seventy per cent of those who had accidental pregnancies returned to the use of the diaphragm and jelly after the termination of the accidental pregnancies.

Certain factors appear to be of especial importance in the clinic's loss of patients:

1. The rate of rejection of the diaphragm and jelly was highest in the first four months following the initial clinic visit.

2. The women who found the diaphragm and jelly least acceptable were those who lived in crowded homes, most of them on relief, or with very low incomes. Among women who lived in less crowded homes those with little education used the prescribed contraceptives for considerably shorter periods than women who had had at least some high school education. For women living in the more crowded homes the association between acceptability and education was slight.

3. Thirty-four per cent of the women who rejected the diaphragm and jelly did so because of the difficulty of coming to the clinic for new supplies. An additional 26 per cent found the diaphragm un-

comfortable or difficult to place, and about 20 per cent more found it esthetically unacceptable or too much trouble to use. Comparatively few women discarded the diaphragm and jelly because they became pregnant while using these methods.

THE CLINIC PRESCRIPTION AND ACCIDENTAL PREGNANCY

To serve its purpose in preventing pregnancy, a contraceptive must be effective as well as acceptable. The diaphragm with jelly is a highly effective contraceptive,[15] but not every woman who used it was completely protected against pregnancy. If certain types of women are more likely than others to have accidental pregnancies, special care in training such patients at the clinic may make them more successful in the use of the prescribed contraceptives. Because such a large proportion of patients rejected the diaphragm and jelly and used other types of contraception, it is also important to the clinic to know what types of women had accidental pregnancies with contraceptives other than those prescribed. For the woman whose health contraindicates further pregnancy, even one accidental pregnancy may have disastrous consequences, and should be avoided whenever possible.

As a group, the women who had accidental pregnancies postclinic, either with the prescribed contraceptives or with other types of contraception, were more fertile in the preclinic period than those whose postclinic use of contraception was completely successful. Their pregnancy rates without contraception were higher than those of the women who had no accidental pregnancies after they attended the clinic, but the most important difference in the preclinic rates of the two groups was observed in their rates when contraception was used. The preclinic pregnancy rates with contraception of the women who had accidental pregnancies after attending the clinic were more than half again as high as those of the women whose postclinic practice of contraception was completely successful (Table 30 and Figure 11). Women whose preclinic fertility was

[15] See Table 22.

Period of Married Life	No Contraception Used		Contraception Used	
	All Women Who Had Accidental Pregnancies Post Clinic	All Women Who Had No Accidental Pregnancies Post Clinic	All Women Who Had Accidental Pregnancies Post Clinic	All Women Who Had No Accidental Pregnancies Post Clinic
	PREGNANCIES PER 100 YEARS' EXPOSURE BEFORE CLINIC ATTENDANCE			
First Pregnancies	210	153	135	60
All Later Pregnancies	99	90	78	48
Years Since Marriage				
0–4	102	97	86	55
5–9	101	91	72	46
10–14	85	72	73	43
15–29	79	55	81	41
	NUMBER OF YEARS OF EXPOSURE AND NUMBER OF PREGNANCIES			
	Exp. Yrs. / No. Preg.	Exp. Yrs. / No. Preg.	Exp. Yrs. / No. Preg.	Exp. Yrs. / No. Preg.
First Pregnancies	163.2 / 342	501.7 / 768	53.4 / 72	300.1 / 181
All Later Pregnancies	580.7 / 576	1,051.7 / 942	1,465.3 / 1,136	4,646.0 / 2,217
Years Since Marriage				
0–4	367.9 / 377	597.1 / 581	502.7 / 431	1,522.4 / 830
5–9	120.2 / 122	251.2 / 228	568.5 / 408	1,756.3 / 808
10–14	62.2 / 53	118.7 / 86	288.7 / 212	937.7 / 402
15–29	30.5 / 24	84.7 / 47	105.5 / 85	429.5 / 177

[1] The total number of women who had accidental pregnancies post clinic was 484. Sixteen women had no exposure or had only exposure without contraception, after clinic attendance, and 1,121 used contraception with complete success after they attended the clinic.

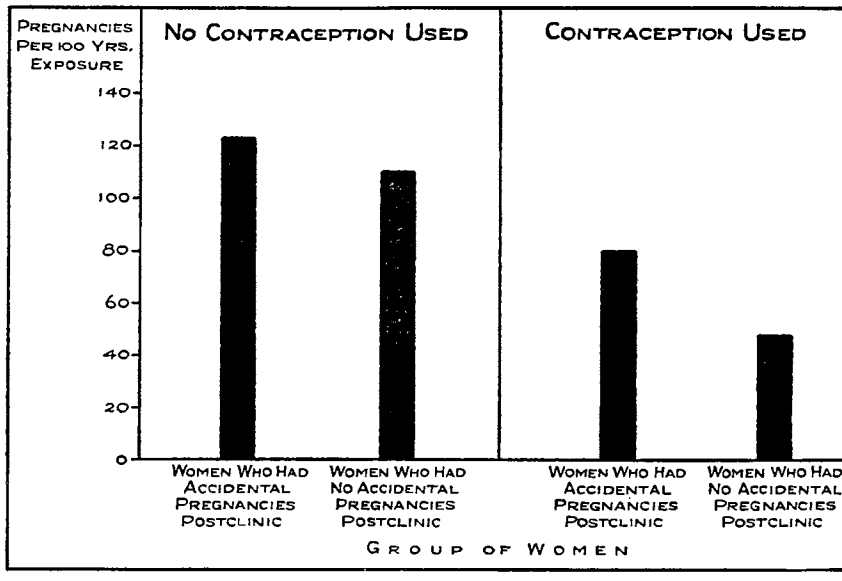
Table 30. Preclinic pregnancy rates of women who had accidental pregnancies after attending the clinic, and of those who had none.[1]

high and especially those whose previous use of contraception was relatively ineffective proved poorer risks from the clinic's point of view than those whose early efforts with contraception had produced better results.

Women who lived in crowded dwellings had higher accidental pregnancy rates with diaphragm and jelly than those who had some privacy (Table 31 and Figure 12). Crowding in the home may have resulted from previously high fertility, but when postclinic pregnancy rates of women with small, medium sized, and large families,

living in homes in which there were two or more persons per room were compared with those of women with families of similar size, who lived in less crowded homes, it was found that both crowding and previously high fertility were associated with high pregnancy rates after attendance at the clinic. Women whose fertility, as expressed by their total number of pregnancies, was high had high accidental pregnancy rates postclinic (another way of showing the relationships brought out by Table 30), and among women with each number of pregnancies, those living in crowded homes had higher accidental pregnancy rates than women whose homes afforded some privacy.[16] These differences were observed both with the clinic prescription and with other types of contraception, after

Fig. 11. Total preclinic pregnancy rates,[1] with and without contraception, of women who had accidental pregnancies after attending the clinic and of those who had none.



[1] Standardization of these rates did not change the rate-relationships.

[16] When pregnancy rates with the prescribed contraceptives were computed for women who lived in homes in which there were two or more persons per room, and those in homes in which there were less than two persons per room, by education of the wife, it was found that there were no significant differences in the rates of the women in over-crowded homes by education, but that in the less crowded homes, there was an inverse association between pregnancy rates and amount of education.

Women with Each Number of Pregnancies	Housing and Type of Contraception			
	CIR		All Other Contraception	
	Two or More Persons per Room	Less Than Two Persons per Room	Two or More Persons per Room	Less Than Two Persons per Room
	TOTAL PREGNANCIES PER 100 YEARS' EXPOSURE			
All Women	18	5	42	21
Women with 2 or Less Pregnancies	8	1	17	6
Women with 3-5 Pregnancies	19	5	31	25
Women with 6 or More Pregnancies	21	13	52	31
	NUMBER OF YEARS OF EXPOSURE AND NUMBER OF PREGNANCIES			
	Exp. Yrs. / No. Preg.	Exp. Yrs. / No. Preg.	Exp. Yrs. / No. Preg.	Exp. Yrs. / No. Preg.
All Women	817.2 / 150	2,001.9 / 98	570.9 / 238	932.3 / 200
Women with 2 or Less Pregnancies	101.2 / 8	772.7 / 9	35.8 / 6	262.4 / 15
Women with 3-5 Pregnancies	334.2 / 63	827.2 / 38	220.5 / 69	393.7 / 100
Women with 6 or More Pregnancies	381.8 / 79	402.0 / 51	314.6 / 163	276.2 / 85

Table 31. Post clinic pregnancy rates by housing and total fertility.

clinic attendance, but in almost every instance the pregnancy rates with the other types of contraception were at least twice as high as those with the contraceptives prescribed by the clinic. These high rates represent the use of various types of contraception and it is difficult to determine just what weight each type of contraception bears in the total rates, since the experience was too small to permit of finer classification.

All women who had accidental pregnancies with the contraceptives prescribed at the clinic were questioned in detail in order to

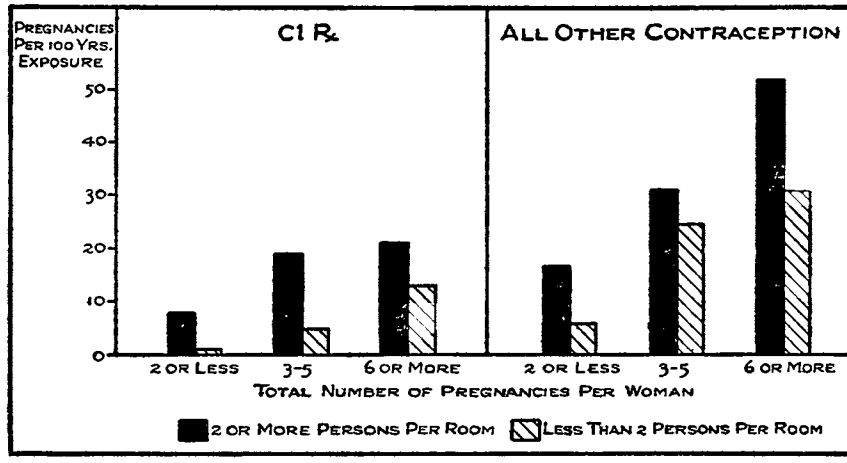


Fig. 12. Postclinic pregnancy rates by housing and total fertility.

ascertain as nearly as possible how these accidental conceptions occurred. Each patient who had had such a pregnancy was asked to explain her technique of use of the diaphragm and jelly, leading questions being scrupulously avoided. In addition, she was urged to state what she thought might have been the cause of the accidental pregnancy. The reasons given were judged in relation to the reported techniques, the clinic record of the difficulty of fitting the patient, and all other pertinent data, and the pregnancies assigned to five broad groups of possible causes. The five categories were:

1. *Error in Technique.* The pregnancy was judged to be due to an error in technique, when the patient's answers to questions concerning her technique of use revealed that she did not know whether the pessary was in place, that she had used insufficient jelly, or that there had been some other deviation from the instructions given her.

2. *Faulty Fit.* Only seventeen pregnancies were grouped in this category. In some cases the patient reported that the diaphragm would not stay in place, or was uncomfortable, while in others the pregnancy occurred shortly after a change in the size of the diaphragm, or the patient's record showed that she was a poor subject for the diaphragm because of seriously relaxed vaginal walls.

3. *Defect in Diaphragm.* The pregnancies grouped under this heading were those of patients who reported that the diaphragm had a hole in it at the time the pregnancy occurred.

4. *Omission.* A large proportion of the patients who had accidental pregnancies reported that the diaphragm had been carelessly omitted once or twice, shortly before conception occurred. In the strictest sense, such conceptions did not take place when the prescribed contraceptives were used. There are three cogent reasons for charging them against the prescribed contraceptives, however: (a) we are concerned with the effectiveness of the method prescribed as used in a population group, and not in its effectiveness under ideal conditions; (b) it is doubtful whether any large group of couples uses contraception with complete consistency, and there is no way of accounting for those occasional lapses which do not result in pregnancy; and (c) there is no certainty that conception took place on the single occasion on which the contraceptive in question was omitted, though, for the present analysis, omission seems the most logical reason to which to ascribe it.

5. *Other or Unknown Reason.* Pregnancies included in this category were mainly those for which the patient could find no reason.

Table 32. Distribution of apparent reasons for accidental pregnancies occurring during the use of clinically prescribed contraceptives, for three social classes.

Apparent Reason for Pregnancy	All Women	Nonrelief Wives of		Wives of Relief Recipients
		White-Collar Workers	Manual Workers	
	Total number of pregnancies			
	248	27	135	86
	Per cent attributed to each cause			
Total	100.1	99.9	100.1	100.0
Error in Technique	34.3	33.3	31.9	38.4
Faulty Fit	6.9	7.4	7.4	5.8
Omission	37.5	29.6	39.3	37.2
Defect in Diaphragm[1]	7.7	7.4	7.4	8.1
Other or Unknown	13.7	22.2	14.1	10.5

[1] Diaphragm torn or badly worn.

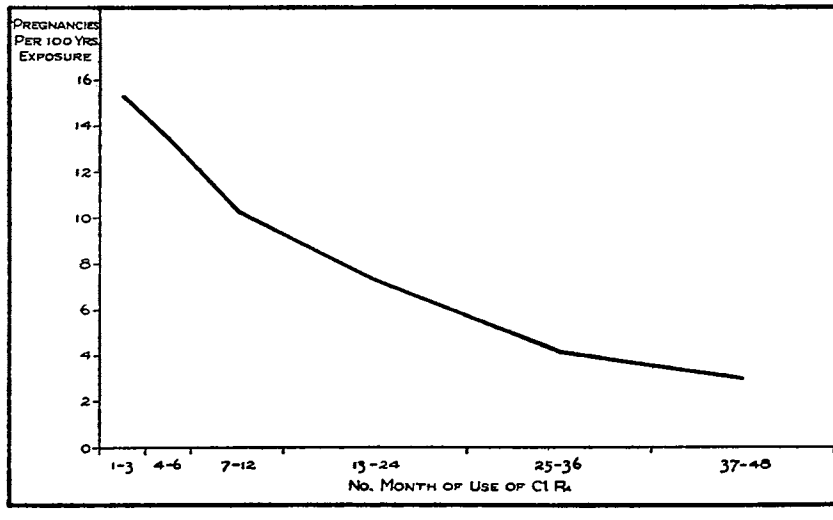
Period Following Initial Clinic Contact	Pregnancies per 100 Years' Exposure	Number of Years of Exposure	Number of Pregnancies
1– 3 Months	15.4	350.8	54
4– 6 Months	13.6	316.6	43
7–12 Months	10.3	365.7	58
13–24 Months	7.3	838.0	61
25–36 Months	4.1	462.0	19
37–48 Months	3.0	200.2	6

Table 33. Total pregnancy rates with clinically prescribed contraceptives in successive periods following the initial contact with the clinic.

In almost every case she reported a perfect technique of use, denied omission on any occasion, and stated that she had found no flaw in the diaphragm.

The distribution of pregnancies attributed to each of these causes is shown in Table 32. About one-third of the pregnancies were ascribed to error in technique and a slightly larger proportion to careless omission of the contraceptive. The distributions did not differ widely for the three social class groups except for the relatively low proportion of omissions reported by the wives of white-collar workers. In this group the number of pregnancies occurring when the diaphragm was omitted may have been higher than re-

Fig. 13. Total pregnancy rates with clinically prescribed contraceptives in successive periods following the initial contact with the clinic.



ported, since the proportion of those for which the apparent cause was unknown was much larger than in either of the other groups.

The increased risk of accidental pregnancy when the prescribed contraceptives were new and unfamiliar is reflected in Table 33 and Figure 13, which show the number of accidental pregnancies per 100 years of exposure to risk among patients using the prescribed contraceptives, in successive periods following the initial contact with the clinic. The highest rates occurred in the first three months after the initial visit to the clinic. After the fourth month of use, the rates dropped, and after a year of use they were less than half as high as those observed in the first three months. After two years the rates were below five pregnancies per 100 years of exposure, and it is reasonable to assume that rates much lower than this could scarcely be expected for any large group. The same trend was observed in the rates of all three social classes (Table 34 and Figure 14), but the rates for relief recipients were consistently and significantly higher than those of self-supporting workers, in each period, and it is probable that they would continuously remain somewhat

Table 34. Pregnancy rates of each social classs with clinically prescribed contraceptives in successive periods following the initial contact with the clinic.

Period Following Initial Clinic Contact	Couples Not on Relief				Couples on Relief	
	White-Collar Workers		Manual Workers			
	Pregnancies per 100 years' exposure					
1–6 Months	9.6		14.4		18.4	
7–12 Months	4.9		10.1		15.2	
13–24 Months	4.4		5.4		15.2	
25–48 Months	2.4		2.7		8.8	
	Number of years of exposure and number of pregnancies					
	Exp. Yrs.	No. Preg.	Exp. Yrs.	No. Preg.	Exp. Yrs.	No. Preg.
1–6 Months	114.8	11	395.2	57	157.3	29
7–12 Months	102.5	5	337.9	34	125.3	19
13–24 Months	158.2	7	501.7	27	178.1	27
25–48 Months	122.5	3	414.9	11	124.8	11

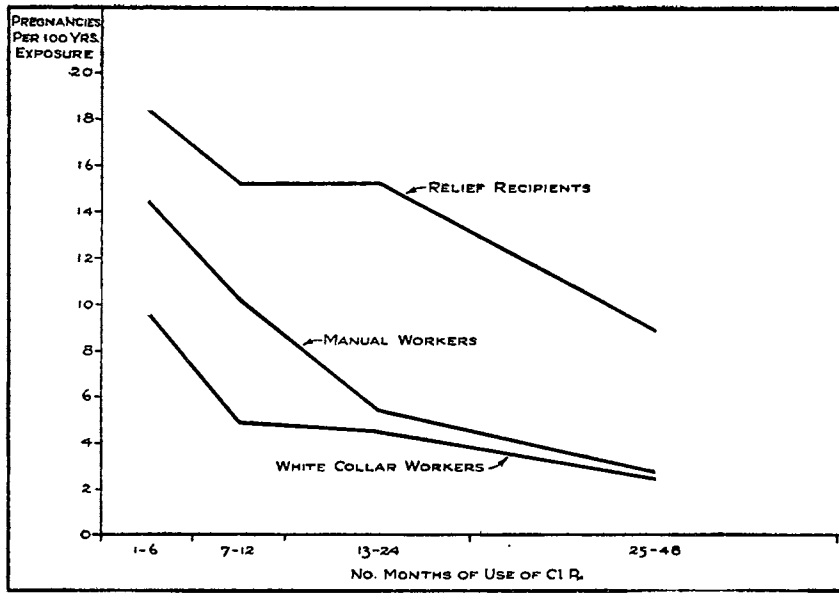


Fig. 14. Pregnancy rates of each social class with the clinically prescribed contraceptives in successive periods following the initial contact with the clinic.

higher than those of either of the self-supporting groups.[17]

The decline in rates with increasing length of use of the prescribed contraceptives was apparent for pregnancies attributed to all causes except defects in the diaphragm (Table 35 and Figure 15). For pregnancies associated with worn diaphragm, the rates showed a slight rise over the period of observation, doubtless because a diaphragm becomes worn only after a lapse of time. As has been shown in Table 32, omission and error in technique were responsible for the largest proportion of the accidental pregnancies. Rates for pregnancies due to error in technique declined with increasing length of use of the diaphragm and jelly. The number of accidental pregnancies per 100 person years of exposure to risk, due to omission, also declined, but the proportion of pregnancies due to omission increased from about one-third of the pregnancies occurring in the first three months following clinic contact to nearly one-half of

[17] The significance of differences between the rates compared in the text was tested in each instance by means of the χ^2 test. See also Part II, footnote 13.

Period Following Initial Clinic Contact	Apparent Reason for Pregnancy					
	Total	Error in Technique	Faulty Fit	Defect in Diaphragm[1]	Omission	Other or Unknown
	Pregnancies per 100 years' exposure					
1–6 Months	14.5	5.2	1.5	0.3	5.1	2.4
7–12 Months	10.3	3.4	0.9	0.5	3.9	1.6
13–24 Months	7.3	2.6	0.1	1.0	3.1	0.5
25–36 Months	4.1	1.1	0.0	0.6	1.9	0.4
37–48 Months	3.0	0.5	0.5	1.0	0.0	1.0
	Exp. Yrs.	Number of pregnancies attributed to each cause				
		Total				
1–6 Months	667.4	97	35	10	2	34	16
7–12 Months	565.7	58	19	5	3	22	9
13–24 Months	838.0	61	22	1	8	26	4
25–36 Months	462.0	19	5	0	3	9	2
37–48 Months	200.2	6	1	1	2	0	2

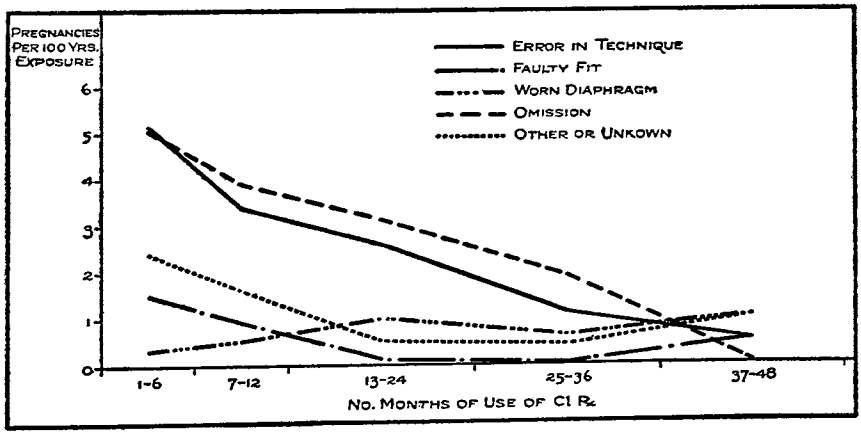
[1] Diaphragm torn or badly worn.

Table 35. Pregnancy rates with clinically prescribed contraceptives in successive periods following the initial contact with the clinic, by apparent reason for pregnancy.

those occurring in the third year of use of the prescribed contraceptives.

Pregnancies rates, with diaphragm and jelly, of women who had anatomical abnormalities which might have been expected to in-

Fig. 15. Pregnancy rates with clinically prescribed contraceptives in successive periods following the initial contact with the clinic, by apparent reason for pregnancy.



terfere with the fit or placing of a diaphragm, remained significantly higher throughout the postclinic period than those of women who had no anatomical abnormalities (Table 36 and Figure 16). The highest rates were observed among women who had fecal impaction when they were examined at the clinic. The variable distortion of vaginal walls in the chronically constipated woman makes the accurate fitting of a diaphragm especially difficult. It is probable that the pregnancy rates of this group of women were more than twice as high as those of women without anatomical

Table 36. Pregnancy rates with clinically prescribed contraceptives of women with and without anatomical abnormalities which might interfere with the fit or placing of a diaphragm, in successive periods following the initial clinic contact.

Period Following Initial Clinic Contact	Women with No Anatomical Abnormalities[1]	Women with Each Type of Anatomical Abnormality				
		Total	More Than One Pelvic Factor	Cystocele and/or Rectocele	Fecal Impaction	Obesity, Short Fingers, etc. ± Pelvic Abnormality
	Pregnancies per 100 years' exposure					
1-6 Months	13	17	12	19	30	21
7-12 Months	9	14	11	12	41	0
13-24 Months	6	10	9	6	19	21
25-36 Months	3	6	3	8	6	—[a]
37-48 Months	2	4	10	0	—[a]	—[a]
Total[2]	8	11	9	10	22	15
	Number of years of exposure and number of pregnancies					
	Exp. Yrs. / No. Preg.	Exp. Yrs. / No. Preg.	Exp. Yrs. / No. Preg.	Exp. Yrs. / No. Preg.	Exp. Yrs. / No. Preg.	Exp. Yrs. / No. Preg.
1-6 Months	464.4 / 62	202.2 / 35	76.0 / 9	91.7 / 17	20.2 / 6	14.4 / 3
7-12 Months	395.5 / 35	169.7 / 23	64.2 / 7	76.7 / 9	17.2 / 7	11.5 / 0
13-24 Months	586.1 / 37	250.9 / 24	98.5 / 9	111.6 / 7	26.7 / 5	14.1 / 3
25-36 Months	316.9 / 10	144.9 / 9	60.5 / 2	62.3 / 5	16.5 / 1	5.6 / 1
37-48 Months	129.2 / 3	71.0 / 3	31.0 / 3	34.8 / 0	4.3 / 0	0.8 / 0
Total[2]	1,941.8 / 151	879.0 / 97	348.3 / 31	399.0 / 40	85.2 / 19	46.4 / 7

[1] This category includes women with malposition of uterus. The pregnancy rates of this group were lower, but not significantly lower than those of women without anatomical abnormalities.
[2] Includes exposure and pregnancies of women who had more than 48 months of exposure.
[a] Less than 10 years of exposure.

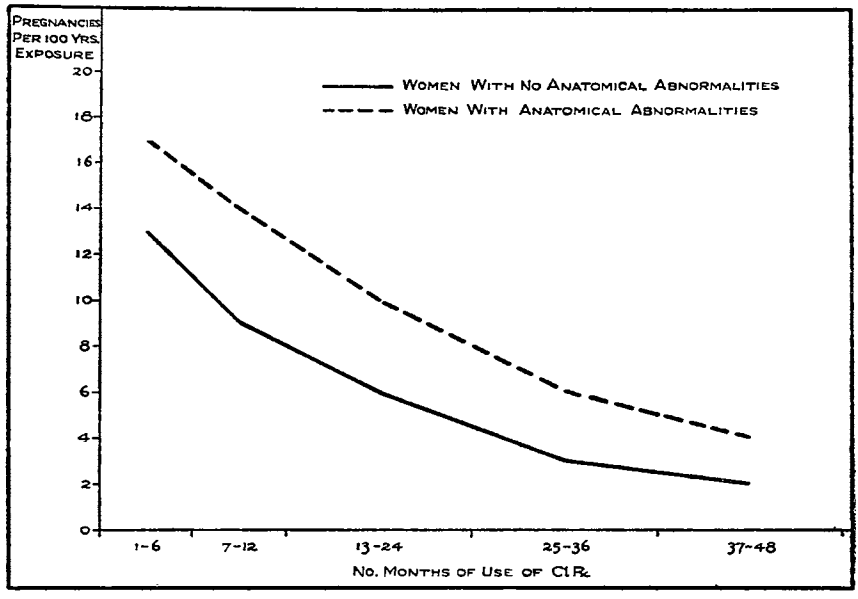


Fig. 16. Pregnancy rates with clinically prescribed contraceptives of women with and without anatomical abnormalities which might interfere with the fit or placing of a diaphragm, in successive periods following the initial clinic contact.

abnormalities, because of the impossibility of the patient's knowing when the diaphragm would fit properly. Another small group with relatively high pregnancy rates included the women who, because of obesity or short fingers or arms, could not know whether the diaphragm was in place. Women with cystocele or rectocele, or both, had pregnancy rates that were slightly higher than those of women whose records showed no anatomical abnormalities. The differences in rates might have been more significant had the experience been greater. The presence or absence of malposition of the uterus or other pelvic difficulties appeared to have no effect on the pregnancy rates.

It is probable that many of the women with cystocele or rectocele were those who had had high pregnancy rates before they attended the clinic, and that the pelvic abnormalities which resulted from frequent childbearing increased the risk of pregnancy with an intravaginal contraceptive device. These women, as well as the

women with fecal impaction were to a great extent those who could not afford the time or money for adequate medical care. The incidence of both types of pathology was much higher among women who lived in crowded homes than among women who lived in homes in which there were less than two persons per room.[18] The various factors which made the use of a complex contraceptive technique most difficult were not isolated, but definitely interrelated. A further finding shows this to be strikingly true. Of the women who lived in homes in which there were two or more persons per room, and who had either vaginal relaxation or fecal impaction, 32 per cent had accidental pregnancies while using the diaphragm and jelly. Only 11 per cent of the women with similar physical disabilities, who lived in homes in which there were less than two persons per room, had accidental pregnancies while using the prescribed contraceptives.

The patients who have large families and low incomes present the greatest difficulties to the clinic. They are the very people who are most in need of effective contraception and at the same time the ones least likely to use a complex contraceptive diligently for any length of time. The social conditions under which they live and the pelvic abnormalities resulting from their previous high fertility make it more difficult for them than for more fortunately situated women to use a diaphragm and jelly. Their problems require a new approach on the part of the clinic.

SUGGESTIONS FOR A REORIENTATION OF CLINIC POLICY

The results of the present study confirm the impression that the diaphragm with spermicidal jelly is a highly effective contraceptive. Contrary to the usual opinion, however, condom is at least as effective as the diaphragm and jelly combination, even when the types of condom used vary widely in quality and when no spermicidal

[18] In the group with two or more persons per room, 22.3 per cent of the women had cystocele, rectocele, or fecal impaction, as compared with 13.9 per cent in the group who lived in homes in which there were less than two persons per room.

substance is used in conjunction with the condom.[19] Other techniques of contraception appear to be less effective than either condom or diaphragm, but their effectiveness as shown for this group, as well as for other groups[20] suggests that with good instruction in anatomy and techniques of use, even the least effective contraceptives may be highly effective for couples who will use them consistently and with care.

The diaphragm and jelly were acceptable to a fairly large group of clinic patients, but since a year after their first visit to the clinic, between one-third and one-half of the patients advised rejected them in favor of some other contraceptive technique, it becomes clear that no single contraceptive is likely to be acceptable to all members of a heterogeneous group of couples. The diaphragm and jelly were given up mainly because the technique was complicated, the diaphragm or jelly was esthetically unacceptable, or because it was difficult to renew supplies. Most of the women who came to the clinic did so because they or their husbands were dissatisfied with the contraceptive methods previously used; yet those couples for whom the diaphragm and jelly proved unacceptable turned to the types of contraception previously used by the group.

A rough estimate of the attitudes of the group toward four types of contraception is given in Table 37. The figures are probably far from accurate, but when judged in relation to the detailed study of the acceptability of the diaphragm and jelly, they point to the wisdom of recognizing individual needs in prescribing a contraceptive.

Among the four contraceptives listed there was none that was disliked by all couples, nor was there any that was liked by all. Those most popular with both men and women were the diaphragm and jelly, and the douche. The latter was slightly more

[19] Table 22.

[20] Stix, Regine K. and Notestein, Frank W.: Effectiveness of Birth Control. The Milbank Memorial Fund *Quarterly*, April, 1935, xiii, No. 2, pp. 162-178; and unpublished material on the postclinic pregnancy rates of the same group of New York women.

Attitude Toward each Contraceptive	Diaphragm and Jelly		Condom		Coitus Interruptus		Douche	
	Wife	Husband	Wife	Husband	Wife	Husband	Wife	Husband
	Number of individuals reporting attitudes							
	1,572	1,565	782	800	786	845	320	26
	Per cent of those reporting							
Liked Contraceptive or was Indifferent to it	80.2	87.5	54.5	11.4	61.5	12.3	84.7	84.6
Disliked Contraceptive	19.8	12.5	45.5	88.6	38.5	87.7	15.3	15.4

Table 37. Attitudes of husbands and wives to four types of contraception.

acceptable to the women than the diaphragm, probably because of its simplicity. The male methods of contraception, condom and coitus interruptus, were more acceptable to the wives than to the husbands in the group, though less acceptable to both than either of the other contraceptives. The assumption that all couples who apply to a birth control clinic for advice dislike the techniques of contraception previously used is apparently unwarranted.

It would seem wise to prescribe diaphragm and jelly for those patients for whom they are suitable, who are willing to take the trouble to use them, and who have the requisite intelligence, privacy, and time to undertake the complicated procedures required. Even these selected patients should be encouraged to return to the clinic for a different type of contraception if the diaphragm should prove unacceptable. The patient who is chronically constipated, or who is difficult to fit for other reasons, should be given contraceptives to be used by the husband whenever possible. For those couples who have previously found other contraceptives satisfactory, the best methods of using those contraceptives should be taught. New and simple techniques are being developed which may prove satisfactory for people with limited intelligence, who live in crowded quarters. It is probable that such groups can never be taught to use

contraception as effectively as less handicapped people who have fewer economic and social difficulties with which to contend.

The increased hazard of accidental pregnancy when techniques are new points to the need of additional warning concerning special care in the use of the diaphragm for the first few months. More intensive training of patients for whom contraception has previously been ineffective may also help to reduce the risk of accidental pregnancy.

The establishment of readily accessible clinics in congested areas appears to have aided in reducing the loss of clinic patients in Cincinnati. It is possible that a more flexible system for renewal of supplies might reduce still further the proportion of patients who fail to return because they cannot spare the time or money for a trip to the clinic. A simple system of mail service for supplies, together with the substitution of an annual for a semi-annual check-up visit might reduce the amount of transportation necessary for the patients. On the other hand, extra time and service might profitably be given each patient on the initial visit to the clinic, and on as many immediately subsequent visits as may be necessary to supply her or her husband with a satisfactory and acceptable contraceptive that will be used consistently. Some couples may prefer to alternate the use of several contraceptives rather than to have one partner assume sole responsibility for the prevention of conception. Such a preference is only natural and human and should be recognized by the clinic. The necessary changes in policy may best be characterized as changes tending toward the recognition of human differences and preferences—with a new orientation toward suiting the individual patient rather than expecting all patients to accept a single method of contraception.

The institution of new policies should be undertaken slowly and with recurrent evaluation of their effect. Comparison of the effect of a new policy on the proportion of patients active before and after its inception is a rough but useful measure which may be made at

any time. Patients who fail to return to the clinic should be followed up in order to ascertain the reasons for their dissatisfaction with the clinic's services. Many of them would welcome the opportunity to obtain other types of contraception at minimum cost and to learn the best methods of use of those contraceptives.

The maternal health clinic must strive to provide each patient with the contraceptive which will prevent the hazard of pregnancy for her. The most effective contraceptive is of no use in the hands of the patient to whom it is not acceptable, while the contraceptive usually thought to be ineffective may offer a real protection against pregnancy to the patient who will use it consistently and in accordance with the best available instructions.

SUMMARY

In the years 1930-1934, occlusive diaphragms with spermicidal jelly were prescribed for 98 per cent of the patients of the Cincinnati Maternal Health clinics. When these patients were followed up, in a study conducted by the Milbank Memorial Fund, it was found that a substantial proportion of them had rejected the prescribed contraceptives. The loss of these patients suggests that changes in clinic policy may be advisable.

The most rapid loss of clinic patients occurred within four months of their first contact with the clinic. A year after the initial clinic contact, between 52 and 71 per cent of those patients who were still in need of contraception were using the prescribed contraceptives.

The dominant factor associated with the acceptability of the contraceptives prescribed by the clinic was the degree of crowding in the home. Women who lived in homes in which there were two or more persons per room found the diaphragm and jelly less acceptable than those who lived in homes in which there were less than two persons per room. There were also differences in length of use by education and social class.

One-third of the women who rejected the diaphragm and jelly

gave as their reason the difficulty of returning to the clinic for new supplies. Nearly half of those who gave up the prescribed contraceptives did so because the diaphragm was uncomfortable, difficult to place, esthetically unacceptable, or too much trouble to use. Only 9 per cent of the women who discarded the clinic prescription did so because of its failure to protect them against pregnancy.

It was found that the effectiveness of the diaphragm and jelly differed under different conditions and for different groups of women. The groups for whom the diaphragm and jelly were least effective were (1) women whose preclinic fertility was high and whose preclinic use of contraception was ineffective, (2) women who lived in homes in which there were two or more persons per room, and (3) women with anatomical abnormalities interfering with the fit or placing of a diaphragm.

Pregnancy rates with the prescribed contraceptives were highest in the three-month period following each patient's first contact with the clinic. They declined steadily until, after two years of use of the diaphragm and jelly, there were less than five pregnancies for each 100 person-years' exposure to pregnancy.

In view of the findings noted, it is suggested that clinic policies be changed to permit the more flexible prescription of a variety of contraceptives, suiting each to the individual patient. The type of contraception should be changed, if the patient is dissatisfied with the method first prescribed.

The clinic is urged to give more intensive training at the initial clinic visit and to make it possible for the satisfied patient to return only once annually, meanwhile securing supplies by mail.

The clinic must aim to provide each patient with a contraceptive that is acceptable to her and will prevent the hazard of pregnancy for her. A contraceptive that is usually thought to be relatively ineffective may prove highly effective for the patient who likes it and will use it diligently.