Duration of Use of Oral Contraception in the United States, 1960-65

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THE EXTENT to which women discontinue oral contraception and their reasons for discontinuing are of interest for two major reasons. First, since the "pill" is the most effective contraceptive yet developed, there is a high demand for information about its acceptability from persons concerned with fertility planning programs in the United States and elsewhere. Second, the pill is more than just another contraceptive—it is a distinctive type of method. Ever since it was licensed for sale in the United States in 1960 there has been much concern about possible undesirable consequences for the user's health. Although confidence in its safety has increased with time and accumulation of satisfactory experience, the Food and Drug Administration (*1*) as well as the drug companies which market the various brands of birth control pills have continued to be watchful, especially for long-term effects. The importance of this question is enhanced by the fact that the pill is now the leading method employed by American women (*2*).

The 1965 National Fertility Study provided an opportunity to examine information pertinent to these problems. The research instrument in this study was a lengthy questionnaire administered in interviews with some 5,600 women under age 55, married, and living with their husbands. They were obtained through a probability sample of the population of coterminous United States and interviewed during a brief period in autumn 1965. This report is confined to 4,810 of these women who were under age 45 in mid-1965.

Since our interview included questions concerning the experience of respondents with the pill, we were able to estimate the proportion who had used it and their reasons for use, the proportion who had discontinued use and their reasons for discontinuing, and women's attitudes in general toward the pill. From a calendar of month-by-month use for the period 1960–65, we estimated the probability of dropout over time.

In our first report on oral contraception (*3a*) we presented estimates that 26 percent of our sample had ever used the pill and that 40 percent of these had stopped using it. More than half (52 percent) of those who discontinued indicated they may use it again. Obviously, this is a most unrefined estimate of discontinuation.

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It concerns not only women who were using the pill solely for contraceptive purposes but also those who said they were using it partly or entirely for other reasons, such as relief of menstrual discomfort or attempts to increase fecundity, and who may have stopped use because the pill was or was not effective for their particular problems. This unrefined proportion who had stopped using the pill also included those who discontinued for reasons unrelated to satisfaction with the method as such; they may have stopped in order to conceive or because of the onset of sterility. Finally, sophisticated measurement requires not only the fact of discontinuing but the length of time used before discontinuing.

In this report we attempt to remedy the deficiencies described above by focusing on the women who said they were using the pill for contraceptive reasons only. Thus, we distinguish dropout for reasons associated with the pill from dropout for extraneous reasons and explore the time dimension of use by life table procedures.

Of all women who had ever used the pill, 69 percent reported use for contraceptive reasons only, 13 percent reported use for noncontraceptive reasons only, and 15 percent reported both types of use. The remainder (a little more than 3 percent) said that they were using it for noncontraceptive reasons only, but later in the interview identified their method of contraception as the pill.

Of women reporting having used the pill for contraceptive reasons only, 66 percent were using it at the time of interview; of the one-third who had discontinued, 53 percent said that they may use it again. Of those reporting use, but not exclusively for contraceptive reasons, 45 percent were using the pill at the time of interview; of those in this category who had discontinued use, 50 percent said they may use it again. These proportions suggest that the pill is used longer for contraception than for other reasons.

The division of respondents into those using for contraceptive reasons only and those using at least in part for noncontraceptive reasons is based on self-report, and, since the question carries ethical implications for some respondents, the answers may lack validity. Thus, among white non-Catholics, one of seven reported use at least in part for noncontraceptive reasons, but among white Catholics, the proportion was twice as high. "Some of this difference may reflect temporary use of the oral contraceptive by Catholic women to regularize the ovulatory cycle and improve the efficacy with which they can employ the rhythm method of fertility regulation. We suspect, however, that part of the explanation may stem from a greater tendency toward dissimulation among Catholics on a question that is of great moral concern to many of them" (*3b*).

Furthermore, among the reasons for choosing the oral contraceptive in preference to other methods there may be a marginal perception of beneficial side effects, such as the avoidance of dysmenorrhea, which would be classified as mixed motivation. There is no way we can resolve these issues of validity with the data at hand. The remainder of this report is concerned exclusively with the women who reported that they used the pill only for contraception.

Reasons for Discontinuation

Approximately one-third of the women who had used the pill were not using it when they were interviewed. These 285 women were asked: "Why did you stop using the pill?" In coding their responses, we separated them into three categories: (*a*) discontinuing because of side effects, (*b*) discontinuing because of other problems of use, (*c*) discontinuing for reasons unassociated with characteristics of the pill (*4*). This categorization permits distinction between those who did or did not experience a problem associated with the pill (categories (*a*) and (*b*) contrasted with category (*c*)) and, for those with some problem, whether it was physiological or not (the division between category (*a*) and category (*b*)). Our results were as follows: 80 percent stopped because of some problem associated with the pill—65 percent because of side effects and 15 percent because of other difficulties—and 20 percent stopped for reasons unconnected with the pill. Some women gave reasons which fell into more than one of these three categories, the most common (2 percent) being side effects and other problems of use. These women were arbitrarily assigned to the side effects category. In the few instances involv-

ing either of these two with extraneous reasons, the side effects category was used.

The responses about side effects are of uneven quality—far short of the diagnostic data which might have been obtained by a medically trained investigator. Although our interviewers were experienced in general survey research and were trained by us on the subjects of fertility and contraception, they had no special competence in the health field. The responses reflect also the expansiveness and articulateness of the respondent. In the same objective situation, one woman might report many complaints, another may confine herself to the outstanding undesirable symptom, and a third may not mention any complaint. Some respondents provided precise descriptions of symptoms, others offered only vague indications of discomfort. Accordingly, our report on the distribution of responses to the question on the reason for discontinuing the pill must be evaluated with consideration for such qualifications.

The principal category of reason for discontinuing was side effects; 65 percent of the women who stopped gave this reason for stopping. Within this category, two complaints predominated. The majority complained of pregnancy-like reactions (weight change, fluid retention, breast tenderness, nausea); the next most common complaint concerned difficulties with the menstrual cycle (spotting, hemorrhaging, irregularity, cramps). Some women cited both types of symptoms.

The literature on oral contraception features particular concern over the possibility of side effects such as thromboembolic disease, blurred vision, and skin discoloration. Among the pill users in our sample, one women reported a blood clot in a leg 2 weeks after discontinuing the pill, another reported being hospitalized because of a clot in one lung, and one woman reported discontinuing because she was suffering from thrombophlebitis. Two women reported skin discoloration, one woman reported blurry vision. We obviously are not in a position to interpret these data as evidence for or against the pill.

Complaints of headaches and nervousness were fairly common. Although the information is imprecise, it appears that the reports of nervousness reflect irritability and tension rather than anxiety. One woman said: "The first brand of pill I took didn't work—made me nervous." In reply to a probe about how she knew it was due to the pill, she said: "Yes, I'm sure the pills were the cause of my nervousness because I would always calm down when I went off them, during my period."

An example of the fairly common complaint of headaches was: "I had such headaches I could not stand it and it made me so very nervous. I only took them for 5 days. I had these terrific headaches like my head was going to beat apart. I just couldn't stand it; it works for some people but not for me. Doctor said to stop taking them and maybe I could try them again later but I wouldn't. We are using something else now."

These two reports illustrate the crudity of our data on side effects. The list of reported symptoms included many of the well-known placebo reactions—symptoms both real and imaginary as a consequence of taking dummy pills—not only headaches, nausea, and nervousness but more specific objective reactions as well.

There are also the obvious difficulties of inferring cause and effect. Some women may have experienced problems unrelated to the pill but coincident with their use of it. The mass media have given considerable publicity to symptoms which may (or may not) be caused by the pill. Some women are presumably suggestible enough to believe they have these symptoms when this possibility is brought to their attention. A few women reported discontinuing on physician's orders, without mentioning a specific symptom. Although we have included these women in the category of side effects, it may be that the physician's decision was merely precautionary rather than because of a specific indication.

It is also evident that persons vary greatly in their ability to tolerate unpleasant side effects and in their readiness to report them. Some women in our study reported complaints such as occasional menstrual breakthroughs, but they were not sufficiently alarmed to discontinue the pill. We asked those currently using the pill the question: "What are some things that are not so good about the pill?" Thirty-eight percent of the current users reported undesirable side effects, but one-half of these (48 percent) indicated that their side effects had subsequently disappeared. Two-thirds of the side effects were

pregnancy-like symptoms, one-eighth were problems associated with the menstrual cycle, and one-sixth were nervousness and headaches.

The second category of reasons for discontinuing is problems of use other than side effects; 15 percent of the women who discontinued use of the pill were so classified. Most of these problems relate to the employment of the pill, such as fear of forgetting to take it, anxiety that it might not work, or dislike of pills in general. One percent cited reasons of morality or religious beliefs as the basis for discontinuing.

The remaining 20 percent of the women who discontinued did so for reasons unassociated with the pill itself; 15 percent stopped in order to have a child, 4 percent stopped because they no longer needed contraception, and for less than 1 percent no information was available on reasons for stopping.

Although the focus of this report is on the decision to discontinue use of the pill, the following favorable data place in perspective the negative reactions reported above. First, as noted before, two-thirds of all users were still using the pill at time of interview. Of those who had discontinued, one-fifth had done so for reasons unconnected with the characteristics of the pill. Furthermore, we asked all women who had discontinued whether they might resume use in the future. Of those who had discontinued use because of unfavorable side effects, 45 percent said they may use it again; of those who reported other problems of use, 55 percent said they may use it again; and of those who reported reasons extraneous to the pill, 70 percent said they may resume use. Thus, from our data, those for whom the pill was an unsatisfactory contraceptive were clearly a small minority of those who had tried it.

We also asked women who had used the pill the question: "In your opinion, what are some of the good things about the pills?" Since they frequently reported more than one "good thing," the following proportions add up to more than 100 percent. Predictably, two-thirds (66 percent) of the women noted its effectiveness as a contraceptive—and presumably most of the others thought this too obvious to mention. One-third (32 percent) spoke of the feeling of security, peace of mind, or sense of well-being associated with sure avoidance of an unwanted pregnancy. One-fourth (27 percent) noted its convenience, ease, or simplicity of use. One-eighth (12 percent) specifically commented that there were no unfavorable side effects, and one-third (35 percent) reported the favorable side effect that the pill reduced menstrual discomfort and irregularity. Finally, 11 percent reported that use of the pill had improved their sex relations, a report that appears to have some basis in fact. The median monthly coital frequency reported by women taking the pill was 41 percent higher than that of women using all other methods of contraception (the difference was 27 percent for women under 25 years of age).

Trend in Dropout Rate

For each woman who reported use of the pill, we compiled a month-by-month retrospective record of that use. To summarize the trend in the dropout rate we assembled these data in life table form, following the same general procedures used in mortality analysis. The probability of continuing oral contraception for at least 3, 6, 12, or 24 months is presented in table 1; the probabilities reflect dropping out because of side effects only, side effects and other problems of use, and all reasons for five cohorts of women who started to use the pill in the different years indicated (the definitions of the time periods employed reflect considerations of sample size). Some women, of course, had more than one interval of experience with the pill because they resumed use after interruption.

Our calculations are based upon the woman's most recent experience only, a decision prompted by considerations of analytical convenience and the fact that reasons for discontinuing were determined only for women not using the pill at the time of interview. The most recent experience constitutes 87 percent of all experience. Examination of the earlier experience for women with more than one interval of use, which is of course heavily concentrated among the earlier cohorts, reveals higher dropout rates than for the more recent experience. Although it is not simple to interpret this difference, it probably does reflect a more difficult experience with the pill in the earlier years. The higher dropout rate in the earlier years is also clearly evident

in the calculations based on the most recent experience.

The outstanding feature of the rates in table 1 is that the probability of continuing oral contraception was markedly lower for the earliest cohort than for later cohorts. There is little evidence to indicate any upward trend in the likelihood of continuation, although there is some suggestion of an increase through 1964 in the probability of continuing 1 year.

Although the probability of continuing the pill for x months is a convenient and easily interpretable summary, it is unsatisfactory for comparison of interval-specific experience because it is cumulative and also because it is expressed as the complement of the topic of interest, namely the act of dropping out. We therefore prepared central dropout rates (table 2) showing the dropout per 100 per month for the same experience described in table 1. It is apparent from these calculations that the low probability of continuation for the 1960–62 cohort was confined largely to the experience of the first 3 months. This relatively high dropout

Table 1. Percentage of women who used oral contraception for at least 3, 6, 12, or 24 months, by reason for discontinuation and year use began

Reason for discontinuation and months of use	1960–62 (N=81)	1963 (N=117)	1964		1965
			January–June (N=134)	July–December (N=161)	January–June (N=199)
Side effects only:					
3	78	91	88	90	91
6	75	84	85	83	----
12	69	75	81	----	----
24	60	----	----	----	----
All problems of use:					
3	76	91	88	87	90
6	70	82	83	77	----
12	63	70	78	----	----
24	53	----	----	----	----
All reasons:					
3	76	90	86	84	87
6	68	81	82	73	----
12	59	68	75	----	----
24	50	----	----	----	----

Table 2. Dropout rates (percent per month) by interval, by reason for discontinuation of oral contraception and year use began

Reason for discontinuation and interval (in months)	1960–62 (N=81)	1963 (N=117)	1964		1965
			January–June (N=134)	July–December (N=161)	January–June (N=199)
Side effects only:					
0–3	8	3	4	4	3
3–6	1	3	1	3	----
6–12	1	2	1	----	----
12–24	1	0	----	----	----
All problems of use:					
0–3	9	3	4	5	4
3–6	3	4	2	4	----
6–12	2	3	1	----	----
12–24	1	1	----	----	----
All reasons:					
0–3	9	3	5	6	4
3–6	4	4	2	5	----
6–12	2	3	2	----	----
12–24	1	2	----	----	----

rate for the 1960–62 cohort is due to side effects (the dropout rates for problems of use other than side effects can be inferred by subtracting the rates in the first panel from those in the second, and so on); other than this, there is no systematic change over time.

The reasons for the decline in the probability of discontinuation after 1962 can only be conjectured. The initial high-dosage pills have been modified substantially. Of equal if not greater significance is that physicians as well as women have become less anxious about the effects of the pill. Perhaps the same unpleasant side effects experienced by some women which are accepted today as temporary or not serious were cause for greater concern in the earlier years.

Because of the small numbers of women in the different cohorts and the absence of any clear-cut trend in the dropout rate after the earliest experience of the 1960–62 cohort, we combined the data for all cohorts into a single synthetic cohort, as is customary in conventional life tables (table 3). Thus, the experience reported for the interval of 12–24 months is for women who began use of the pill before mid-1963, for 6–12 months, before mid-1964, and so forth.

As shown in table 3, 68 percent of the women were still using the pill at 1 year and 53 percent were continuing at 2 years. Considering dropouts due to side effects only, the proportions were 78 percent and 69 percent continuing at 1 and 2 years.

Beyond the third month, the dropout rates for all reasons in table 3 show a sawtooth-like pattern that probably results from the respondents' reporting of use in rounded intervals such as 6 months or 1 year or 2 years. Because of this bias, the rates are assembled in table 4 for intervals of 0–3, 3–6, 6–12, and 12–24 months.

Table 4. Dropout rates (percent per month) by separate reasons for discontinuation of oral contraception

Interval (in months)	Side effects	Other problems of use	Extraneous reasons
0–3	4	0	1
3–6	2	1	0
6–12	1	0	1
12–24	1	0	1

From the dropout rates in table 3, we derived separate rates for problems of use other than side effects and for extraneous reasons (table 4). Two patterns are evident: (*a*) side effects are far more important than other reasons for discontinuing, at least at this stage in the history of adoption of the pill, and (*b*) there is a distinct decline in the probability of dropping out because of side effects, as expected, but no such pattern for other reasons.

In the following analyses of characteristics associated with discontinuing the pill we do not consider the data for all reasons combined, because of a fundamental difference in the explanation for dropouts attributed to side effects or other problems with the contraceptive and dropouts which result from stopping in order to conceive or because there is no longer any need for contraception. The latter two reasons may be explained in terms of the relation of

Table 3. Dropout rates (percent per month) by reasons for discontinuation and percent continuing oral contraception

Interval (in months)	Dropout rates			To month	Percent continuing		
	Side effects	All problems of use	All reasons		Side effects	All problems of use	All reasons
0–3	4	5	5	3	88	87	86
3–6	2	3	3	6	84	80	78
6–9	1	1	2	9	82	78	75
9–12	2	2	3	12	78	73	68
12–15	1	1	1	15	76	72	66
15–18	1	1	2	18	74	69	62
18–21	1	1	1	21	73	68	60
21–24	2	3	4	24	69	62	53

the time the pill is adopted to the interval desired, age of the user, and other such variables; they are unrelated to the evaluation of the pill as a contraceptive.

Dropout Rates by Age and Parity

As indicated in table 5, women under 30 years of age (as of mid-1965) showed less tendency to discontinue oral contraception than older women. Although the percentage continuing at least 2 years was higher for the younger women, this differential is produced by the large difference in the first 3 months. If the pill was used for at least 3 months, the probability of its being used for at least a year was the same for women in both age groups. For side effects, this probability is 0.88 for younger women and 0.87 for older women; for all problems of use, the corresponding probabilities are 0.83 and 0.85.

The greater tendency for older women to discontinue use of the pill during the months immediately following adoption probably results from their lower tolerance of minor side effects; the younger woman, especially if she has never used other methods, is likely to be more tolerant of minor physiological changes.

The relationship between the number of births by mid-1965 and the probability of discontinuing use of the pill is summarized in table 6. Here the association with parity is similar to that of age—the higher the parity the greater the probability of discontinuation. And, as with age, the main difference is concentrated in the first interval; the probability of the woman with three or more children continuing to use the pill for at least a year if she used it for at least 3 months is no different from that of the woman with fewer children. Thus, both age and parity affect the probability of dropout mainly in the first 3 months.

Since age and parity covary, and since there appears to be a difference between the dropout

Table 5. Dropout rates (percent per month) and percent continuing to use oral contraception, by age group

Interval (in months)	Side effects only			All problems of use		
	Under 30	30–44	Total	Under 30	30–44	Total
Dropout rates:						
0–3	3	7	4	3	7	5
3–6	2	3	2	3	3	3
6–12	1	1	1	2	2	2
12–24	1	1	1	1	2	1
Percent continuing to month:						
3	92	82	88	90	81	87
6	88	76	84	83	75	80
12	81	71	78	75	69	73
24	73	63	69	67	56	62

Table 6. Dropout rates (percent per month) and percent continuing to use oral contraception, by parity

Interval (in months)	Side effects only			All problems of use		
	Less than 3 births	3 or more births	Total	Less than 3 births	3 or more births	Total
Dropout rates:						
0–3	3	5	4	4	5	5
3–6	2	2	2	2	4	3
6–12	2	1	1	2	2	2
12–24	1	1	1	1	2	1
Percent continuing to month:						
3	90	87	88	90	85	87
6	86	81	84	84	77	80
12	79	76	78	76	70	73
24	73	64	69	68	56	62

pattern in the first 3 months and in later intervals, we prepared table 7 to show the joint influence of the two variables on the dropout rate. The data reveal two patterns. In the first 3-month interval, age is the clearly dominant factor and the difference by parity is mostly a reflection of the difference by age. The dropout rate beyond the third month, however, appears to be higher for women with three or more children regardless of age, although the difference may not be statistically reliable.

The likelihood that a woman who has been using the pill will discontinue because of problems with the contraceptive (excluding dropping out to have a child or because there is no longer need for contraception) is not simply a matter of the real or perceived physiological or psychological impact of the pill on the woman. Four influential variables are involved: (*a*) the gravity of the reaction, (*b*) the salience of prevention of birth, (*c*) the availability of alternative means of contraception, and (*d*) the necessity for contraception in terms of fecundity. Although it would seem, on the average, that the higher the parity the more important the prevention of a birth, it may be that women with more children are those who have not been strongly motivated to persist with other means of contraception. Also, older women, particularly if they have few children, may feel that the risk of another child is smaller and less serious or they may have had relatively satisfactory experience with other contraceptives and thus be inclined to shift to them rather than persist with the pill and its perceived side effects. In interpreting these data it must also be considered that our data undoubtedly have some degree of unreliability and that our samples are not large—we may be picking up some statistical static. It seems to us, however, that these data cannot be used as strong indications of the differing physiological responses by age and parity to a particular treatment without careful consideration of the alternative explanations.

Dropout Rates by Education and Color

The plausibility of nonmedical reasons for discontinuing oral contraception is strengthened by consideration of the relationship with the amount of education the woman has received. Table 8 presents interval-specific dropout rates for side effects and for all problems of use for three educational categories: some college, completed high school, and some or no high school.

There is a clear division for the first interval, 0–3 months, between those who had completed high school and those who had not; the latter have twice as high a dropout rate as the former. This is principally dropout attributed to side effects. Although the differences are less sharp beyond the third month, they tend mostly in the same direction. The proportion of women "surviving" the third month who continued at least to the 12th month was 90 percent for the higher education group, 87 percent for the middle group, and 86 percent for the low group, considering dropouts for reasons of side effects only; for all problems of use, the proportions were 89 percent, 82 percent, and 82 percent.

An interesting feature of this analysis is that college women who discontinue use of the pill are as likely to do so in the second 3 months as in the first 3 months; perhaps this indicates a disposition to try somewhat longer. In general, the higher dropout rate among women with less education probably reflects the same underlying class differences in motivation and habits of

Table 7. Dropout rates (percent per month) for all problems of use of oral contraception for intervals 0–3 and 3–24 months, by age and parity

Age group (years)	Interval 0–3 months			Interval 3–24 months		
	Less than 3 births	3 or more births	Total	Less than 3 births	3 or more births	Total
Under 30	3	4	3	1	2	2
30–44	8	6	7	1	2	2
Total	4	5	5	1	2	2

Table 8. Dropout rates (percent per month) and percent continuing to use oral contraception, by education

Interval (in months)	Side effects only			All problems of use		
	Some college	Completed high school	Some or no high school	Some college	Completed high school	Some or no high school
Dropout rates:						
0–3	3	3	6	3	3	7
3–6	3	2	2	3	2	3
6–12	0	2	2	0	2	2
12–24	1	1	2	1	1	2
Percent continuing:						
0–3	92	91	84	91	90	82
3–6	85	87	80	82	85	74
6–12	83	79	72	81	74	67
12–24	77	73	59	71	67	50

planning that presumably lead less-educated women to use all contraceptive methods more irregularly.

The differences in dropout rates between whites and nonwhites appear less than might be expected, based on differences in education. The data in table 9 suggest a higher dropout rate among nonwhites for problems of use other than side effects, but the differences are slight.

Methods Used After the Pill

What methods of contraception do women adopt who discontinue the pill? Do they gravitate toward other effective methods? Are they attracted to other new methods? Do couples tend to return to methods used before the pill?

For 216 women who discontinued the pill because of side effects or problems of use, the first method they used after the pill and the last method they used before the pill are shown in table 10. A comparison of these distributions reveals the following features:

- A sharp reduction, from 22 to 8 percent, in reliance on multiple methods, part of which could easily be an artifact of measurement. (Our questionnaire was designed to ascertain which method had been used last if two or more methods had been used alternately only for the interval since the last pregnancy. Because the period before the pill was first used is more likely to have been preceded by a pregnancy than the period after the pill was discontinued, an artificially larger amount of multiple-method usage might have been reported for the earlier period.)
- An increase from 24 to 30 percent in the number of women who reported using no method. Some who used no method after the pill were pregnant; if these women are excluded, the difference is erased.
- The intrauterine device, which was not used by any of the women before the pill, was adopted by 5 percent after they stopped the pill. The fact that less than 2 percent of all women who had ever used any method of contraception reported use of the intrauterine device indicates that women who discontinue the pill tend to adopt other new methods. Additional evidence for this is that the proportion using foam increased from 3 percent before to 7 percent after the pill.

The final observation is directed toward the question of whether couples after discontinuing the pill tend to return to the methods used

Table 9. Dropout rates (percent per month) and percent continuing, by color

Interval (in months)	Side effects only		All problems of use	
	White	Nonwhite	White	Nonwhite
Dropout rates:				
0–3	4	4	4	5
3–6	2	1	3	3
6–12	1	1	1	1
12–24	1	1	1	3
Percent continuing to month:				
3	89	89	88	86
6	84	85	81	79
12	78	82	75	75
24	70	66	66	52

earlier, as suggested by the similarity of the proportions using the other methods listed in table 10. This tendency is clearly supported by a cross-tabulation (not shown here) of the methods used before and after the pill, although the extent of the association depends on how the comparison is conceived. If all of the categories in table 10 are used, the proportion classified as the same after as before is 41 percent. Excluding couples not using any method at either time, the estimate is 53 percent. Finally, if couples classified in the "multiple methods" category also are excluded, the proportion using the same method at both times is 77 percent. No matter how the comparison is defined, the proportion using the same method after as before the pill is substantial.

Table 10. Methods used before and after the pill for 216 women who had used the pill for contraceptive reasons only and who discontinued because of side effects or other problems of use

Method [1]	Percent	
	Before	After
No method	24	30
Rhythm	6	4
Douche	6	5
Withdrawal	2	3
Suppository	1	1
Condom	20	23
Diaphragm or jelly, or both	16	13
Foam	3	7
Intrauterine device	0	5
Multiple methods	22	8
Number of couples	216	216

[1] Excludes women who first used the pill in combination with other methods who comprise 7 percent of all women who discontinued use of the pill.

Summary

An analysis was made of data on discontinuation of oral contraception collected in the 1965 National Fertility Study, an interview survey of a probability sample of married women throughout the United States. Based on these data, admittedly inadequate for diagnostic purposes, there does not appear to be any evidence of serious health problems associated with the use of the birth control pill.

About one-third of all women who had used the pill at any time since 1960 had discontinued use, either permanently or temporarily, by the time of interview in autumn 1965. The majority of these women stopped because of what they perceived as unpleasant side effects of the drug, most of which related either to undesirable reactions commonly associated with pregnancy or to problems connected with the menstrual cycle. Typically, the women who discontinued oral contraception had experienced nausea or menstrual breakthroughs and stopped using the pill after one or two cycles.

The rates of discontinuation of oral contraception for reasons of side effects, problems of use, and for all reasons were analyzed, following life table procedures, for women beginning use of the pill in successive periods since 1960. The probability of discontinuation appears to have declined between 1960–62 and later years. Excluding reasons extraneous to the pill itself, such as stopping to have a child, the most recent dropout rate was approximately 3 to 4 percent per month over the first 3 months and 1 to 2 percent in subsequent months. The proportion continuing for at least 1 year was approximately 80 percent.

Although women under 30 years of age had a lower dropout rate than older women, the age difference was limited to the first 3 months' experience suggesting, perhaps, that older women may be less patient than younger women with minor side effects.

Women with three or more children had a higher dropout rate than women with fewer children but most of this relationship seemed to be due to the associated age factor.

Analysis of the relation of amount of education with the probability of discontinuation revealed a consistent tendency for women with the least education to experience the highest dropout rates. There was little indication that nonwhite women had a higher dropout rate than white women, but the differences were perhaps less than might be expected.

Women who discontinued use of oral contraception tended to return to the method they used before the pill. A slight indication was noted of a tendency to use other new methods such as foam and the intrauterine device.

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