

Contraception among two thousand
private obstetric patients

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CONTRACEPTION AMONG TWO THOUSAND PRIVATE OBSTETRIC PATIENTS

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There are many unknowns in any formula describing the sexual conduct of the American people. Some of these have been partially solved through the efforts of the amazing Dr. Kinsey. Not only has Dr. Kinsey produced facts but, far more important, he has stressed principles. The foremost, that one cannot make generalizations which apply to the sexual practices of the American. In matters of sex there is no typical Mr. or Mrs. America, for our sexual mores are stratified, each layer largely determined by educational background and economic status.

It therefore becomes important in establishing the status of modern contraception to inquire into the conceptional and anticonceptional histories and practices of all types of people, under all conditions, from all walks of life and from all parts of the country. Most of the studies previously reported have been based on specialized groups under specialized conditions—namely, contraceptive clinic patients who are not pregnant and are urgently desirous of remaining not pregnant. In most instances they seek help because they are harassed by too much fertility and too little money. There have been but few surveys of the private patient

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group.¹ Then too, there are surprisingly few contraceptive studies on the pregnant woman; especially the woman who has just achieved pregnancy voluntarily or involuntarily.

CLINICAL MATERIAL AND METHOD

The present survey is therefore unusual, for it deals with the contraceptive history and practices of 2,000 private obstetric patients. During the past several years one of us (A. F. G.) obtained from all patients who came to register for prenatal care and delivery, in addition to the ordinary obstetric history, answers to four questions, the questions applying only to the gestation then current. Did you use contraceptives? What method did you employ? Was this pregnancy planned? When was contraception discontinued? The fact that all the histories were taken by a single, interested person adds much to the accuracy and uniformity of the data. This was reimpresed on me when I recently attempted to analyze the contraceptive data from 1,000 histories at the obstetric clinic of the Johns Hopkins Hospital and the Sinai Hospital of Baltimore. They contained exactly the same questions, phrased in the same way, but many of the answers were left blank or at most only partially filled out. No doubt a time-deficient assistant resident simply asked, "Did you use contraceptives?" The patients almost uniformly answered in the negative, for in the blank after "contraceptive used" appears the word "none" in over 90 per cent. Yet the fact that in a sizeable proportion of these clinic patients several years had elapsed since the last pregnancy makes me exceedingly dubious of the accuracy of the information. Probably the patient did not know what the word contraception meant or, if she did, confused the word with a single technic, most likely the condom.

In this survey of the records of 2,000 private patients, we hoped to determine four things. First, what percentage of our deliveries are the result of planned pregnancies? Second, what methods of contraception have our patients used? Third, what is the relative effective-

1. Dewees, L., and Beebe, G. W.: Contraception in Private Practice, *J. A. M. A.* 110:1169-1172 (April 9) 1938; Contraception and Planned Parenthood in Private Practice, *Human Fertil.* 5:76-80 (June) 1940. Warner, M. P.: Contraception: A Study of Five Hundred Cases from Private Practice, *J. A. M. A.* 115:279-285 (July 27) 1940.

ness of the various methods as employed by them? Fourth, how long did it take our patients to achieve pregnancy after abandoning contraception?

. As a preliminary to further development of these points it is necessary to make clear how the material was assembled and analyzed. With the help of Mr. Omer Huesman, the statistical technician of the Depart-

TABLE I.—*Distribution of Pregnancies by Age and Religion of Wife, Occupation of Husband, Pregnancy Order, and Number of Children Living*

	Pregnancies	%
Age (Yrs.)		
15 to 19.....	38	1.9
20 to 24.....	512	25.7
25 to 29.....	732	36.7
30 to 34.....	479	24.0
35 to 39.....	197	9.9
40 and over.....	38	1.9
Not recorded.....	4
Religion		
Jewish.....	1,196	60.7
Christian.....	774	39.3
Not recorded.....	30
Occupation		
Professional workers.....	518	26.4
Business executives and owners.....	401	20.0
Business employees.....	660	33.0
Manual workers and farmers.....	178	8.9
Unclassified, including armed forces.....	253
Pregnancy order		
First.....	919	46.0
Second.....	680	34.1
Third.....	204	10.2
Later.....	133	6.7
Not recorded.....	4
Children living		
Nons.....	1,111	55.6
One.....	631	31.6
Two.....	168	8.4
More.....	37	1.9
Not recorded.....	8
Total.....	2,000	100.0

ment of Obstetrics at Johns Hopkins Hospital, a thirty-three column code sheet was drawn up. Two of us (A. F. G. and S. R.) coded the pertinent data from 2,000 consecutive obstetric histories; the code sheets in turn were transferred to punch cards by trained clerks. Appropriate tables were then constructed with the aid of a sorting machine. Statistical analysis of the data was made in collaboration with Dr. Christopher Tietze.

Before determining the answers to the four questions it is necessary that we present some basic facts about the patients who form the material of this study. All were married at the time of conception and all lived in Baltimore or its environs, the most distant point being Washington, D. C. The initial office visit was usually at the eighth or ninth week of pregnancy, when the historical data forming the basis of this study were taken. At this time the memory of contraceptive practice and the time necessary for conception was still fresh, and much more vivid than it would have been seven months later, just after delivery. Over 99 per cent of the patients were white, there being 17 Negro

TABLE 2.—*Distribution of Pregnancies by Pregnancy Order and Planning Status*

Pregnancy Order	Total	Contra-ception Not Used		Contra-ception Discon-tinued		Failure of Contra-ception	
		No.	%	No.	%	No.	%
First.....	919	219	23.8	581	63.2	119	12.9
Later.....	1,081	128	11.8	698	64.6	255	23.6
Total.....	2,000	347	17.4	1,279	64.9	374	18.7

women and 2 Chinese in the group. The husbands of the Negro patients were largely of the professional class: teachers, doctors, ministers or engineers.

ANALYSIS OF DATA

Table 1 gives the general composition of the group. The majority of subjects, 62 per cent, were in the third decade of life, and more than 85 per cent were between the ages of 20 and 35. Sixty per cent of the women were Jewish. The Christians were not divided into Protestants and Catholics, though it is believed the Catholics were much outnumbered. Almost 30 per cent of the husbands were professional men: doctors, medical students, scientists, dentists, clergymen, teachers, engineers and lawyers. Twenty-three per cent were either business owners or executives. About 38 per cent were white collar workers, and the remaining 10 per cent manual workers. Most of the latter were *immigrés* to the local shipyards during the war. We found it impossible to classify the group in the armed forces by

social-economic status, since all but a few were temporary soldiers rather than professional. The group was equally divided between officers and enlisted men.

The highly selected social-economic character of the clientele is reflected by the data on pregnancy order and the number of living children, the group being heavily weighted by women in their first pregnancy. Many classified as second pregnancies had only produced an abortus or a child which did not survive, as the 9.6 per cent difference between those in the first pregnancy and those with no living children indicates.

With this groundwork established—this delineation of the manner of man and woman making up the sam-

TABLE 3.—*Distribution of Pregnancies by Number of Children Living and Planning Status*

Number of Children Living	Total	Contra-ception Not Used		Contra-ception Discon- tinued		Failure of Contra- ception	
		No.	%	No.	%	No.	%
None.....	1,111	275	24.8	696	62.5	140	12.6
One or more.....	889	72	8.1	563	63.6	234	26.3
Total.....	2,000	347	17.4	1,279	64.0	374	18.7

ple—we are now ready to consider the first question. What percentage of our deliveries are the result of planned pregnancies? The answer is set forth in tables 2 and 3. Of the 2,000 pregnant women who came to the obstetrician, 374, or 18.7 per cent, came regretfully, since they had not abandoned contraception and became pregnant despite its continued use. A much larger group, 1,279, or 64 per cent, came gleefully, having abandoned successful birth control with the goal to achieve pregnancy. Only 347, or 17.4 per cent, became pregnant without having used any contraceptive at all, some since the day of marriage, others since the termination of the previous pregnancy. Further analysis shows that 219 did not use contraception from the day they married. This group was mainly made up of the relatively elderly who could not afford to waste precious reproductive time, the very young who did not know the facts of life and the devout Catholics. The smaller group, 128, did not use contraception between the previous pregnancy and the current one under

analysis. In almost every instance the previous pregnancy had terminated in an early spontaneous abortion. Patients in this study almost uniformly employed contraception for a variable period after a viable pregnancy.

If the group of patients who did not use contraceptives is added to those who abandoned contraceptives to achieve pregnancy, it appears that 81.4 per cent of the patients had wanted pregnancies. This figure is probably too high for the segment of population which our sample represents. First, it is unfair to assume that all who did not use contraception at any time after marriage or after a previous pregnancy actually wanted a baby immediately. Some probably mentally planned not to have a baby and either ignorantly, or devoutly,

TABLE 4.—*Pregnancies Following Contraception by Method Used*

Method	Pregnancies	%
Condom.....	689	48.3
Diaphragm and jelly.....	644	41.7
Douche.....	75	4.9
Withdrawal.....	72	4.7
Rhythm.....	46	3.0
Suppositories.....	21	1.4
Cream or jelly alone.....	17	1.1
Several methods.....	99
Not recorded.....	10
Total.....	2,000	100.0

trusted to the fickle cooperation of nature. Second, unquestionably some members of the population went to the illegal abortionist and not to the obstetrician when contraception failed them. It is impossible to calculate or even estimate the size of either group.

We should like to point out from table 3 that contraceptive failure terminating in obstetric care was much commoner among the 889 women who had living children than among the 1,111 who had no living children. In fact, the incidence of failure was about twice as great. This must be due chiefly to the fact that the couples with living children have had a greater average duration of contraceptive exposure; does it also mean that they are less careful or that previous childbirth renders them anatomically less efficient for contraceptive success? More profound analysis, at a later date, of our complicated master work tables might furnish a solution to these questions.

The 18.7 per cent ratio of contraceptive failures is much lower than that reported by Whelpton and Kiser² in their Indianapolis study. They found that a little over half of all pregnancies not terminated by illegal abortion were the result of ineffective contraceptive methods. This difference between 19 per cent and 53 per cent is chiefly due to the fact that our material is drawn from the upper and middle classes to a much greater extent than the group reported from Indianapolis, where the sample consisted of urban, native-white Protestant couples with the minimum of an eighth grade education.

The second question we proposed, what methods of contraception have our patients used? is answered in table 4. The analysis includes the 64 per cent who

TABLE 5.—*Pregnancies Following Contraception by Method and Planning Status*

Contraceptive Method Used	Total Cases	Contra-ception Discon- tinued	Failure of Contra- ception	% Failures
Condom.....	609	570	99	14.8 ± 1.4
Diaphragm and jelly....	644	533	111	17.2 ± 1.5
All others.....	840	176	164	48.2 ± 2.7
Total.....	1,653	1,279	374	22.6 ± 1.0

abandoned contraception in order to conceive and the 18.7 per cent in whom conception was accidental and unwanted. Together the condom and diaphragm represented 85 per cent of the total contraceptives used. The 99 subjects whose histories are not included in our computations because they used "several methods" were largely couples who used the condom on one occasion and the diaphragm on another. A smaller number used the safe period in conjunction with the condom or diaphragm.

Certainly no one would claim that our observations are representative of a large segment of the population. Koos³ in 1947 showed that there are striking class differences in the employment of contraceptive measures.

2. Whelpton, P. K., and Kiser, C. V.: Social and Psychological Factors Affecting Fertility: VI. The Planning of Fertility, *Milbank Mem. Fund Quart.* 25: 209-257 (Jan.) 1947.

3. Koos, E. L.: Class Differences in the Employment of Contraceptive Measures, *Human Fertil.* 12: 97-101 (Dec.) 1947.

This report confirmed the earlier observations of Riley and White,⁴ who showed that not only class but geographic area, size of community, age and religion affect the choice of contraceptive technic. From the previous literature plus our own study, one might postulate that in this country at least, the sophistication of any social group is in direct proportion to their use of the condom and diaphragm and in inverse proportion to their use of withdrawal and the postcoital douche.

The answer to question three, what is the relative effectiveness of the various methods as employed by them? is set forth in table 5. First, it is apparent that of the 1,653 pregnancies which were preceded by contraception, 374, or 22.6 per cent, occurred despite

TABLE 6.—*Planned Pregnancies by Duration of Exposure*

Mo. of Exposure	No. of Pregnancies	% of Pregnancies
1.....	895	31.9
2 and 3.....	382	30.8
4 to 6.....	220	17.7
7 to 12.....	140	11.3
13 to 24.....	53	4.3
25 to 36.....	23	1.9
Longer.....	27	2.2
Not recorded.....	39
Total.....	1,270	100.0

the continued use of contraceptives. We cannot say from this that our clientele's contraceptive methods are 77.4 per cent effective. We are still faced with the unknown number of contraceptive failures which are terminated illegally. Furthermore, in such a population sample there are couples who remain steadfastly undesirous of children. These never find their way to the statistical tables of the obstetrician or the clandestine corridors of the abortionist, because they practice contraception consistently and successfully throughout marriage.

We can say from table 5 that the condom and diaphragm as used by this population sample offered about equal protection and that they were equally superior to the other contraceptive methods. This is in line with earlier reports by many authors.

4. Riley, J. W., and White, M.: The Use of Various Methods of Contraception, *Am. Sociol. Rev.* 5 : 890-903 (Dec.) 1940.

Table 6 answers the fourth and final question, how long did it take our patients to achieve pregnancy after abandoning contraception? Approximately one-third became pregnant immediately at the first ovulation after contraception was discontinued; another 30 per cent, at the second or third ovulation. In total, 62.7 per cent of the pregnancies occurred within the first three months and 90.8 per cent within the first year after the elimination of birth control. To be sure, there must have been an unknown number in this population who were chagrined because, in spite of the discontinuance of contraceptive practices, pregnancy did not result. They, too, have no path leading to these tables.

SUMMARY

1. Almost two thirds of the 2,000 pregnancies occurred after contraception had been discontinued for the avowed purpose of initiating pregnancy. An additional sixth of the sample had not used contraception at all. Only 19 per cent of the pregnancies were the result of actual contraceptive failure.

2. The condom and the diaphragm were equally popular. These two methods were used by more than 85 per cent of those who practiced contraception in the group surveyed.

3. The relative effectiveness of the condom and the diaphragm, as used by this group, was approximately the same. These devices were far more effective than the other methods employed.

4. Three fifths of the planned pregnancies occurred within three months, and more than nine tenths within one year from the time contraception was discontinued. To us this seems decidedly significant. It might furnish the obstetrician and gynecologist grounds to pause and consider. It has been customary for the physician to show little interest or concern in the reproductive disappointments of a couple until sterility has continued for at least two, and usually three years. On the basis of these data we propose that one year is long enough.

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