

CONTRACEPTIVE SERVICE IN THREE AREAS

PART I. THE CLINICS AND THEIR PATIENTS

REGINE K. STIX, M.D.¹

INTRODUCTION

WITH the recognition of the importance of contraception as a maternal health service, new contraceptive clinics are being established in many sections of the United States, a large proportion of them under the auspices of state or local health services. Up to the present time, most of the newer clinics have patterned their policies after those of the older clinics established by the birth control movement. The wisdom of this procedure is open to question, since it is not known whether the rather rigid policies of the older clinics are the best for all types of communities, or whether it might be better to modify them to suit individual and community needs.

In an attempt to learn just how various types of populations were served by existing contraceptive services, the Milbank Memorial Fund has completed studies of three contraceptive clinics in widely differing sections of the United States. One of them, the Birth Control Clinical Research Bureau (now the Margaret Sanger Research Bureau of the Birth Control Federation of America) is in New York City. It was the first contraceptive clinic established in this country and has, to a great extent, set the pattern for the policies of the organized birth control movement. The other clinics are both independent of the Birth Control Federation. One, the Cincinnati Maternal Health Clinic, operates under the auspices of the local Academy of Medicine; the other is a referral service in the Spartanburg General Hospital in Spartanburg, South Carolina, and is a regular clinic of the Spartanburg County Department of Health.

Detailed studies of the first two clinics have already been pub-

¹ From the Milbank Memorial Fund.

lished.² In the present report, data from the Spartanburg clinic are presented and a comparative evaluation is made of the services of the three clinics in relation to the needs of the patients served by each.

THE RECORDS USED FOR STUDY

The records and methods of study differed slightly for the three clinics, but essentially the same information was available for the families in all three regions. In New York, the large number of patients and the extent of the area served by the clinic (the whole of New York City) necessitated selecting a homogeneous and easily accessible group for study. The group chosen consisted of all the women from the Borough of the Bronx who attended the clinic between January 1, 1931 and June 30, 1932, and who were still living in the Bronx between one and two years after their initial clinic contact. Nine hundred and ninety-one women were located and interviewed in their homes by the author.³

In Cincinnati the procedure differed slightly in that all the women who had attended the clinic in the five years between its inception in November, 1929 and December 31, 1934 were sought for interview. A trained nurse interviewed 1,621 patients in their homes in 1935 and 1936.⁴

In Spartanburg, records were secured for the first 990 patients who attended the clinic which opened in July, 1935. Unlike the procedure in the other two studies, the detailed records were made at the time of each patient's initial contact with the clinic. Complete follow-up records were kept as patients returned, while records for those who failed to return in the year 1939 and had not moved away were completed by a social worker who visited them in their homes.

² Stix, Regine K. and Notestein, Frank W.: *CONTROLLED FERTILITY*. Baltimore, The Williams and Wilkins Co., 1940, 202 pp.; Stix, Regine K.: *Birth Control in a Midwestern City*. *The Milbank Memorial Fund Quarterly*, January, April, and October, 1939, xvii, Nos. 1, 2, and 4, pp. 69-91, 152-169, and 392-423.

³ For details of case-finding and selections involved, see Stix and Notestein, Chapter III and Appendix I.

⁴ For further details, see Stix, 1939, pp. 71-72.

The records of the New York clinic patients contained social and economic information and a complete fertility record for the period between marriage and the date of interview. The record included the date and type of termination of each pregnancy, information concerning morbidity associated with it, if any, and data on the use of contraception which preceded it.⁵ Medical information was limited to that elicited for the fertility history.

The Cincinnati records were similar to those obtained in New York, but contained, in addition, a brief medical history and a check record for some of the findings of the pelvic examination given the patient on her initial clinic visit. For those cases referred to the gynecological clinic run by the Committee on Maternal Health, detailed records of pelvic examinations were available.

The records of the Spartanburg patients included all the information available for patients in Cincinnati and New York and, in addition, a complete record of the pelvic examination given each patient, of the diagnosis made at the referring clinic, and of laboratory procedures, which included a blood test for syphilis (Wassermann and/or Kahn), cervical and urethral smears, and an urinalysis.

THE SOCIAL AND ECONOMIC BACKGROUND OF THE PATIENTS

The three clinics serve three entirely different population groups. The patients of the New York clinic were selected for study because they were fairly representative racially and religiously of the great majority of the patients who attended the clinic during the period of study. More than half of the women interviewed were foreign-born and those who were native-born were preponderantly of foreign parentage. Two-thirds of the couples were Jewish, a sixth of them were Catholic, and the remaining sixth consisted of Protestant couples and those in which the religious affiliations of husband and wife differed. The usual occupations of the husbands were almost equally divided between white-collar and manual work. In 1929, the median annual income of the group was \$2,300 and only four

⁵ See Stix and Notestein, Appendix II.

families were on relief. In 1932 about one hundred families were on relief and the median income of the nonrelief families had dropped to \$1,250. Most of the wives sought contraceptive information on their own initiative. Eighty-six per cent of them paid at least \$2.00 for the service given them; 59 per cent \$5.00 or more.

In Cincinnati, almost all the patients were native-born and 85 per cent were of native parentage. Nearly 75 per cent of those interviewed came from Protestant families and less than 4 per cent from Jewish families. The usual occupation of 81 per cent of the husbands was manual labor, and the remaining 19 per cent were white-collar workers. About one-fourth of the group were recipients of relief, and the median income of nonrelief families was approximately \$1,100 per year. The clinics are maintained as referral services for women who can not afford the services of private physicians and who need contraceptive advice because of illness or poor social and economic conditions.

The patients selected for study in New York and Cincinnati were all white women; in Spartanburg, however, 46 per cent were Negroes. Both whites and Negroes were preponderantly native-born Protestants. Among the white husbands only about 5 per cent were urban white-collar workers, about 60 per cent were urban manual workers, and the remaining 35 per cent were farmers, of whom the majority were sharecroppers or tenants. Less than 1 per cent of the Negroes were white-collar workers; 62 per cent were urban manual workers, mainly unskilled; and 37 per cent were sharecroppers, farm tenants, or farm laborers.

The median annual income of the white urban families was about \$600. Nearly three-fourths of the white rural families had no earnings at all, and the mean income for the rural group was only about \$100 per year. The median annual income of the urban Negroes was about \$400. About 60 per cent of the Negro farm families earned nothing and the mean income for the rural Negro group was about \$125 per year.

The majority of the farms were described by their owners as "one-horse" farms. Most of the tenants and croppers paid one-third of the annual crop as rent, but about 20 per cent of the white and 40 per cent of the Negro tenants paid the owner one-half of the annual crop. Twenty-nine per cent of the white and 18 per cent of the Negro farmers owned or had an equity in one or more farm animals. Only twenty-five white families and eleven Negro families living on farms had automobiles of any sort.

It is evident from these figures that the Spartanburg clinic patients represent the lowest economic group, living at a bare subsistence level. Thirty-one per cent of the white women and 38 per cent of the Negro women had not even entered the sixth grade, and only 29 per cent of the white women and 17 per cent of the Negro women had had any high school education.

Most of the women were referred for contraceptive advice by county health nurses or from other clinics in the Spartanburg General Hospital. A few were sent by midwives or by physicians. Almost half of them were women with serious systemic disease, such as tuberculosis, syphilis, heart disease, or nephritis, and about one-third more were in generally poor physical condition from too frequent childbearing and malnutrition.

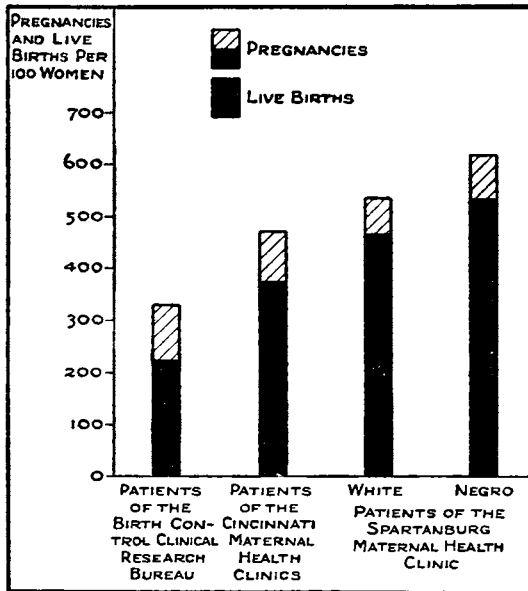
The outstanding differences between the three groups of patients are evident in the reasons for their seeking contraceptive advice. The New York women, a relatively comfortable group economically, were concerned about controlling their own fertility, and were willing to pay for expert contraceptive advice. The women in Cincinnati and Spartanburg were referred for advice because social workers, nurses, or physicians felt that their physical and economic condition contraindicated further pregnancy, at least temporarily.

THE PRECLINIC FERTILITY OF THE CLINIC PATIENTS

The birth rates per 100 women of the white patients in New York City, Cincinnati, and Spartanburg, and of the Negro patients in

Spartanburg, are shown in Figure 1.⁶ Although the clinic patients in each area were more fertile than women in the same area who were unselected with respect to a demonstrated interest in control-

Fig. 1. Pregnancy and birth rates per 100 women for four groups of women prior to clinic attendance. (Rates standardized for age.)



ling their fertility,⁷ the birth rates of the three clinic groups showed the usual economic, social, and regional differentials. The Spartanburg Negroes had the highest birth and pregnancy rates; the New York clinic patients, the lowest.

The total pregnancy rates per year of married life for the experience of the clinic patients before they sought contraceptive advice are shown in

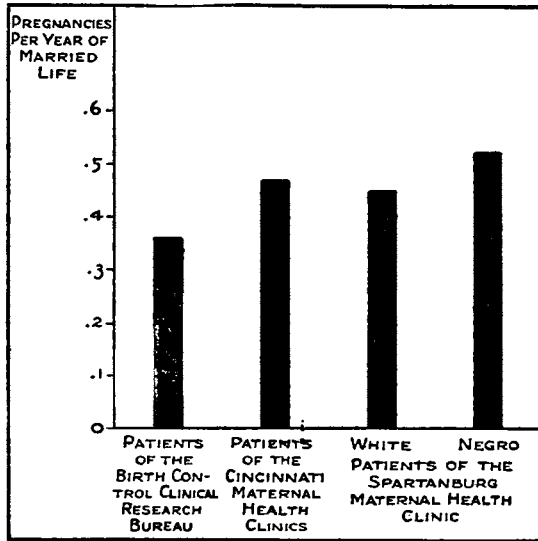
Figure 2. During a ten-year period in which the average New York clinic patient would have had 3.6 pregnancies, the average Cincinnati patient would have had 4.7, the Spartanburg white patient 4.5, and the Negro patient 5.2.

⁶ The rates are standardized to the age distribution of all married women aged 15-44 in the 1930 Census. Women under 15 and over 44 years of age were excluded from the tabulations.

⁷ For comparisons of the fertility of clinic patients with that of other women from the same area see Stix and Notestein, pp. 12-15 (for New York); and Stix, 1939, Foreword to bound monograph, pp. iv-vi (for Cincinnati). In Spartanburg the number of children under 5 per 100 married women 15-44 years of age was 158 for white clinic patients and 70 for all the white women in the County at the time of the 1930 Census. For Negro clinic patients the rate was 172, while for all Negro women in the County in 1930 it was 59. The total number of live births per 100 urban white clinic patients aged 15-44 was 444. For a group with similar occupational status, interviewed in the neighboring city of Greenville during the Health and Depression Survey of the United States Public Health Service in 1933, the number of live births per 100 married women 15-44 was 347. (The birth rates were standardized to the age distribution of all married women aged 15-44 in the 1930 Census.)

The differences in the pregnancy rates per year of married life are less marked than those for the pregnancy rates per 100 women. For example, the pregnancy rates per 100 white women in Spartanburg were higher than those for the Cincinnati women, but the rates per year of married life were almost the same for the two groups. The difference between the two types of rate is associated with a marked disparity in the mean ages at marriage of the four groups of women. In New York the mean age at marriage was 21.8 years; in Cincinnati it was 19.8; for Spartanburg white women it was 18.8 years; and for Spartanburg Negroes, 18.2 years. For the average white patient in Spartanburg as compared with the average Cincinnati patient there was an additional year of marriage in which pregnancy might occur. Once married, however, the Spartanburg white woman and the Cincinnati patient had approximately the same chance of becoming pregnant in each year of married life.

Fig. 2. Total pregnancy rates per year of married life for four groups of women prior to clinic attendance. (Rates standardized for period of married life.)



An analysis of the factors underlying the differences between the birth and pregnancy rates of the four groups of clinic patients will show certain fundamental differences in their attitude toward the control of their fertility before they were referred for contraceptive advice. It has been shown previously that the most important factors associated with group differences in fertility are the prevalence and effectiveness of contraception and the prevalence of illegal abor-

tion.⁸ In order to determine the influence of these factors, it is necessary first to determine what differences, if any, there were in the uncontrolled fertility of the groups under consideration.

The uncontrolled fertility of the four groups, expressed as pregnancies per 100 years of exposure to the risk of pregnancy, is a measure of the rate at which women in the three areas conceived when they made no attempt to use contraception and were not pregnant.⁹ These rates are shown for the four groups under consideration in Table 1. The differentials are small but are in the opposite direction to the differentials for the total fertility in the three areas. When no attempt was made to use contraception, the rates of New York women were significantly higher than those of any of the other groups. The Cincinnati women, in turn, had rates significantly higher than those for both groups of Spartanburg women. It is obvious, therefore, that the high pregnancy and birth rates of the southern women were not associated with "biologically superior" fertility.

The small differences in the uncontrolled fertility of the groups under consideration may be attributed to a number of factors. The first is the differential prevalence of the types of pathology which might be expected to interfere with fertility. In the New York group about 20 per cent of the exposure during which no contraception was used was that of women with a history of serious pelvic infection or evidence of endocrine disorder. In Cincinnati about 28 per cent of the exposure without contraception was that of women with some similar type of pathology. In Spartanburg the percentages for both white and Negro groups were much higher than in either of

⁸ Pearl, Raymond: *THE NATURAL HISTORY OF POPULATION*. New York, Oxford University Press, 1939, p. 244; Stix and Notestein, pp. 147-149; Stix, 1939, pp. 87-89.

⁹ The number of years of exposure to the risk of pregnancy was derived, for each type of exposure, by aggregating the number of months of that type of exposure between marriage and the menopause, during which the women were living with their husbands and not pregnant, and dividing the total by 12. The rates were derived by dividing the number of pregnancies occurring in a given period of exposure to risk by the aggregate number of years of exposure in the period, and multiplying by 100 in order to secure a rate which could be expressed in whole numbers. For further discussion of the concept see Stix and Notestein, Appendix III.

PERIOD OF MARRIED LIFE	WHITE PATIENTS OF			NEGRO PATIENTS OF SPARTANBURG MATERNAL HEALTH CLINIC				
	Clinical Research Bureau (N.Y.C.)	Cincinnati Maternal Health Clinics	Spartanburg Maternal Health Clinic					
PREGNANCIES PER 100 YEARS OF EXPOSURE								
First Pregnancies	271	167	161	158				
All Later Pregnancies	105	93	71	82				
Years Since Marriage								
0-4	114	99	78	90				
5-9	102	94	72	84				
10-14	81	79	61	67				
15-19	69	67	54	63				
EXPOSURE IN YEARS AND NUMBER OF PREGNANCIES								
	Exp. Yrs.	No. Preg.	Exp. Yrs.	No. Preg.	Exp. Yrs.	No. Preg.	Exp. Yrs.	No. Preg.
First Pregnancies	199.4	540	670.9	1,121	268.7	433	223.0	353
All Later Pregnancies	323.6	341	1,696.4	1,583	1,738.5	1,228	1,555.6	1,283
Years Since Marriage								
0-4	197.5	225	987.7	980	663.9	520	680.7	616
5-9	77.3	79	387.7	365	588.7	424	507.9	425
10-14	28.5	23	194.6	153	327.2	199	243.2	164
15-19	20.2	14	126.4	85	158.6	85	123.8	78

Table 1. Pregnancy rates for the noncontraceptive experience of four groups of women prior to clinic attendance.

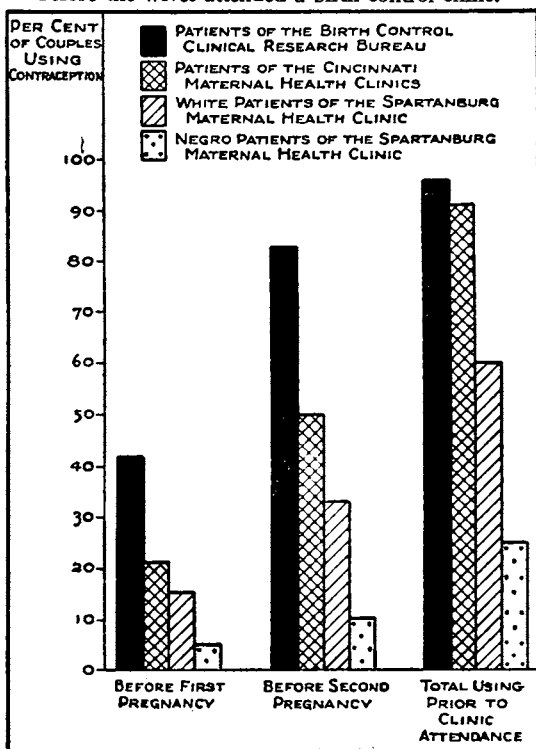
the other cities. About 45 per cent of the exposure of white women and 48 per cent of that of Negro women was that of women with pelvic or endocrine pathology or pellagra or syphilis. The rates of these women were much lower than those of women free from pathology, when no contraception was used.¹⁰

It was found also that the relatively low rates of the Spartanburg white women who were free from pathology were associated with

¹⁰ For detailed discussion of these factors, see Stix and Notestein, pp. 38-39; Stix, Regine K.: The Medical Aspects of Variations in Fertility. *American Journal of Obstetrics and Gynecology*, April, 1938, xxxv, No. 4, pp. 571-580; Stix, Regine K.: Factors Underlying Individual and Group Differences in Uncontrolled Fertility. The Milbank Memorial Fund *Quarterly*, July, 1940, xviii, No. 3, pp. 239-256; Stix, Regine K.: Syphilis and Uncontrolled Fertility. *American Journal of Obstetrics and Gynecology*. (In press.)

periods of postpartum amenorrhea that were longer than those observed for Spartanburg Negroes or for the Cincinnati patients. When the exposure coinciding with postpartum amenorrhea was

Fig. 3. Proportions of couples in three areas who were using contraception at various periods before the wives attended a birth control clinic.



Since the differences in the total preclinic fertility of the four groups under discussion could in no way be considered due to differences in "biological capacity," it is clearly evident that the differential prevalence and effectiveness of contraception is the next factor to be considered.

The period at which couples turned to the use of contraception varied in the three areas. Figure 3 shows the proportions of couples in the four groups who were using contraception at different periods

excluded from the experience of the women free from pathology in all three groups, the differences in noncontraceptive rates were greatly reduced.¹¹

In brief, the uncontrolled fertility of the New York patients was very high, while the high prevalence of pathology and the tendency to prolonged lactation among the Spartanburg patients were associated with comparatively low rates for periods during which no contraception was used

¹¹ Stix, 1940, pp. 248-253. The amount of nonpathological exposure without contraceptives for the New York group was too small to permit of this type of analysis.

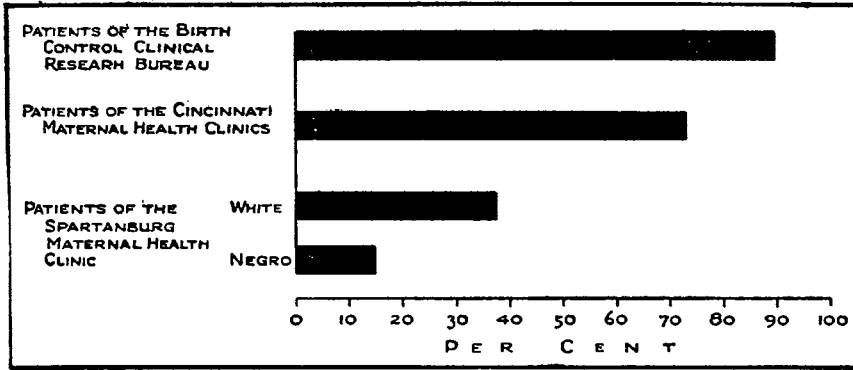


Fig. 4. Proportions of exposure with contraceptives in the total preclinic exposure to the risk of pregnancy of four groups of women.

before the wives sought expert contraceptive advice. The New York couples used contraception earlier and more extensively than any of the others. The smallest proportion of users in each period was observed among the Negroes.

The proportion of the total preclinic exposure of each group during which contraception was used is shown in Figure 4. Before the wives attended a birth control clinic the New York couples had used contraception for about 90 per cent of their exposure to the risk of pregnancy; Cincinnati couples, 73 per cent; white couples in Spartanburg, 38 per cent; and Negro couples for only 15 per cent.

During their use of contraception the pregnancy rates of each group of women were significantly lower than their rates when no contraception was used. The rates are shown in Table 2 and they are compared with the noncontraceptive rates in Figure 5. The reduction in pregnancy rates achieved by the use of contraception was greatest among the New York women and least among the Spartanburg Negroes. In New York the use of contraception prevented 79 per cent of the pregnancies that would have occurred had no contraception been used for an equivalent period of exposure. In Cincinnati the effectiveness of the contraception used was 52 per cent; among the Spartanburg white women, 47 per cent; and among the Negro women, 28 per cent (Table 4).

PERIOD OF MARRIED LIFE	WHITE PATIENTS OF			NEGRO PATIENTS OF SPARTANBURG MATERNAL HEALTH CLINIC				
	Clinical Research Bureau (N.Y.C.)	Cincinnati Maternal Health Clinics	Spartanburg Maternal Health Clinic					
	PREGNANCIES PER 100 YEARS OF EXPOSURE							
First Pregnancies	41	70	64	106				
All Later Pregnancies	27	55	43	58				
Years Since Marriage								
0-4	32	62	48	62				
5-9	27	53	39	56				
10-14	24	50	42	63				
15-29	15	49	38	45				
	EXPOSURE IN YEARS AND NUMBER OF PREGNANCIES							
	Exp. Yrs.	No. Preg.	Exp. Yrs.	No. Preg.	Exp. Yrs.	No. Preg.	Exp. Yrs.	No. Preg.
First Pregnancies	423.7	174	360.8	254	77.8	50	20.7	22
All Later Pregnancies	5,319.8	1,459	6,137.9	3,379	1,138.0	484	291.1	170
Years Since Marriage								
0-4	1,961.1	634	2,032.0	1,264	376.1	180	100.3	62
5-9	2,022.1	536	2,333.0	1,227	412.7	162	103.0	58
10-14	978.7	236	1,233.8	623	234.7	98	56.7	36
15-29	357.9	53	539.1	265	114.5	44	31.0	14

Table 2. Pregnancy rates for the experience with contraceptives of four groups of women prior to clinic attendance.

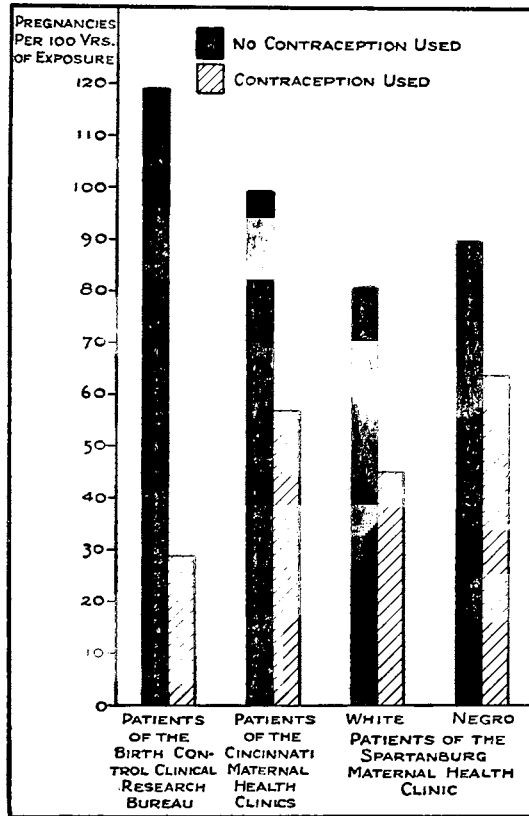
These differences in effectiveness were due partly to the types of contraception used in each area and partly to the diligence and effectiveness with which each type was used. Table 3 shows the distribution in the total exposure with contraceptives of the types of contraception used by each group, and Table 4 the effectiveness with which each of the three most commonly employed methods reduced the risk of pregnancy for each group of women.

The extent of the use of condom and of coitus interruptus did not vary widely for the white couples in the three areas. The Negro couples used condoms for about 25 per cent of their exposure with

contraceptives, but coitus interruptus for only 11 per cent. For about half of the time during which they made any attempt to use contraception the Negro women relied on the douche, a contraceptive which was used very little by the New York women.

The New York couples used all contraception with much greater effectiveness than any of the other groups. The effectiveness of condom was high in Cincinnati and New York. In Spartanburg, however, its use prevented only 50 per cent of the pregnancies of the white women that would have occurred had no contraception been used for an equivalent period of exposure to the risk of pregnancy. Most of the Spartanburg couples who used condoms found them too

Fig. 5. Pregnancy rates with and without contraception for four groups of women prior to clinic attendance. (Rates standardized for period of married life.)



expensive to use regularly, so that the periods of reported condom use include, in many cases, only sporadic use of the contraceptive. The effectiveness of both coitus interruptus and douche was fairly high among the New York couples, but quite low in both Cincinnati and Spartanburg. The effectiveness of both these methods depends, much more than in the use of condom, on the skill and diligence with which they are employed. Apparently the New York

TYPE OF CONTRACEPTION	WHITE PATIENTS OF			NEGRO PATIENTS OF SPARTANBURG MATERNAL HEALTH CLINIC
	Clinical Research Bureau(N.Y.C.)	Cincinnati Maternal Health Clinics	Spartanburg Maternal Health Clinic	
	TOTAL NUMBER OF YEARS OF EXPOSURE WITH CONTRACEPTION			
	5,743.5	6,498.4	1,215.8	311.8
PER CENT OF EXPOSURE WITH EACH TYPE				
TOTAL	100.0	100.0	100.0	100.0
Condom	31.4	23.9	32.3	25.1
Coitus Interruptus	36.4	35.8	29.0	11.3
Douche	5.4	23.0	17.1	49.7
All Other Contraception ¹	26.8	17.3	21.6	13.9

¹ Includes safe period, suppository, pessary, sponge, etc. as well as all alternations of two or more contraceptives.

Table 3. Proportion of each type of contraceptive practice in the preclinic exposure with contraception of four groups of women.

couples were more careful than the couples in the other cities in the use of these two methods.

In addition to the differences in the prevalence and effectiveness of contraception in the preclinic experience of the four groups of women under consideration, differences in the proportion of pregnancies terminating in live births effected a marked disparity in their birth rates (see solid bars in Figure 1). Figure 6 shows,

Table 4. Ratio of effectiveness¹ of each type of contraception used before clinic attendance, for four groups of women.

TYPE OF CONTRACEPTION	WHITE PATIENTS OF			NEGRO PATIENTS OF SPARTANBURG MATERNAL HEALTH CLINIC
	Clinical Research Bureau(N.Y.C.)	Cincinnati Maternal Health Clinics	Spartanburg Maternal Health Clinic	
TOTAL	79	52	47	28
Condom	86	81	50	43
Coitus Interruptus	78	45	53	— ²
Douche	61	25	23	15

¹ Ratio of pregnancies prevented to those expected had no contraception been used for exposures of equal length and distribution.

² Insufficient exposure.

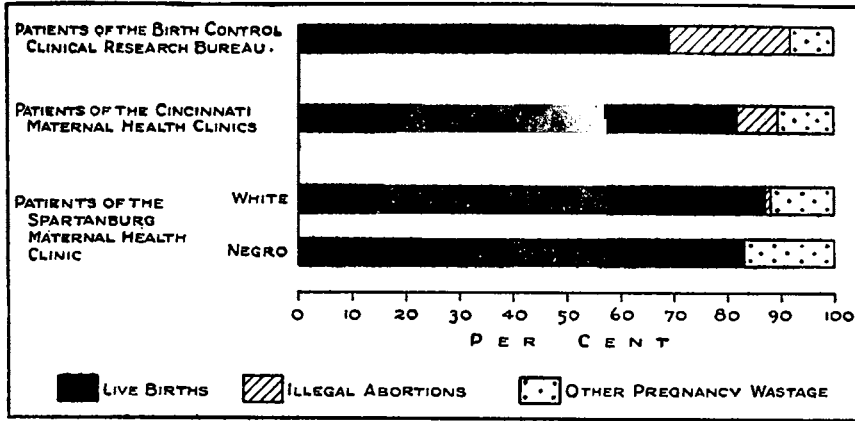


Fig. 6. Proportions of pregnancies terminating in live births, illegal abortions, and other pregnancy wastage for four groups of women prior to clinic attendance.

for each group of women, the proportion of pregnancies terminating in live births, illegal abortions, and other pregnancy wastage, a category which includes stillbirths, spontaneous abortions, and therapeutic abortions. Only 69 per cent of all the pregnancies of the New York women terminated in live births, while 23 per cent were terminated by illegal abortion. In Cincinnati 82 per cent of all pregnancies terminated in live births and only 8 per cent in illegal abortions. Eighty-seven per cent of the pregnancies of the Spartanburg white women terminated in live births and less than 1 per cent in illegal abortions. Only 83 per cent of the Negro pregnancies terminated in live births, but there were only four illegal abortions for all the Negro women. The high rate of stillbirth and spontaneous abortion (other pregnancy wastage) among the Negro women was associated with a high prevalence of syphilis in the group.¹² In all the white groups the proportion of pregnancies terminating in stillbirths and spontaneous abortions was between 8 and 12 per cent. Among the Negro women it was 16 per cent.

CONCLUSION

The effectiveness of the preclinic contraceptive efforts of the New

¹² Thirty-one per cent of the Negro women had positive Wassermann and/or Kahn reactions.

York women, as well as the large number of induced abortions in the group, leads inevitably to the conclusion that these women showed an exceptional interest in controlling their fertility. Their uncontrolled fertility was higher than that of any other groups studied.¹³ It is probable that their awareness of the ease with which they conceived stimulated their efforts at fertility control, and led eventually to their seeking expert advice on contraception at some cost to themselves in both time and money.¹⁴

The Cincinnati patients had higher pregnancy and birth rates than the New York women, although their uncontrolled fertility was much lower. They used contraception both less extensively and less effectively and the proportion of their pregnancies terminated by illegal abortion was only one-third that of the New York women. They were mainly women from low-income families and families on relief who were referred for contraceptive advice because social workers or physicians felt that they needed to limit the size of their families and to space their pregnancies.

The birth rates per 100 women for the Spartanburg white women were somewhat higher than those for the Cincinnati patients, but their pregnancy rates per year of married life were slightly lower. The proportion of their exposure to pregnancy during which contraception was used was only about half that of the Cincinnati women, and they used contraception less effectively than the Cincinnati group. Their rates both with and without contraceptives were lower than those of the Cincinnati women, however, because their uncontrolled fertility was low.

The Negro women in Spartanburg used very little contraception before they attended the Maternal Health Clinic, and the contraception used was not very effective. They had both high birth rates per 100 women and high rates of conception per year of married life.

¹³ See Table 1; also Pearl, Appendix I, Table XVI; and Beebe, Gilbert W. and Gamble, Clarence J.: Clinical Contraceptive Results in a Small Series of Patients. *Journal of the American Medical Association*, October 26, 1940, cxv, pp. 1451-1454, Table 1.

¹⁴ See Stix and Notestein, pp. 10-11.

Their uncontrolled fertility was higher than that of the white women in the area, but it was not so high as that of either of the other clinic groups because nearly half of their exposure without contraceptives was that of women with pelvic infection or syphilis.

This analysis of the factors associated with the differences in the preclinic fertility of four groups of birth control clinic patients is of more than academic interest. It shows the results of differences in the attitudes of the women concerned toward the problem of controlling their own fertility. Such attitudes should determine to a great extent the policies of the clinics from which they seek advice.

The New York women who came to the Clinical Research Bureau were thoroughly familiar with a number of contraceptive techniques. Commercial contraceptives were readily available to them and, as a group, they had used them with a considerable degree of effectiveness. It was quite unnecessary to educate them to the use of contraception. They sought and obtained advice on techniques which would presumably be more acceptable to them than the contraceptives they had used previously.

Commercial contraceptives were less accessible to the women who attended the Cincinnati Maternal Health Clinics than to the New York clinic patients because most of them were too poor to buy reliable contraceptives. In addition, many of them lived in crowded homes under conditions which made the regular use of any contraceptive extremely difficult.¹⁵ In addition to furnishing them with effective contraceptive techniques, the Cincinnati clinics had the responsibility for educating many of them to the regular use of contraception in spite of the handicaps of crowded homes and the lack of private sanitary facilities.

These problems were intensified in Spartanburg and the Spartanburg clinic had an even greater educational responsibility. Few of the patients had ever used effective contraception. In half the Negro cases and 42 per cent of the white cases there was serious illness,

¹⁵ Stix, 1939, pp. 399-400.

which made further pregnancy dangerous to the health of the mother. The housing conditions of the Spartanburg patients were far worse than those in Cincinnati. For example, of 174 white families of six or seven people, 35 per cent lived in three rooms or less and 68 per cent in four rooms or less. Of 137 Negro families of the same size, 53 per cent lived in three rooms or less and 88 per cent in four rooms or less. Fifty-six per cent of all the white families and 66 per cent of all the Negro families had no running water and only 20 per cent of the white and 6 per cent of the Negro families had bathrooms. Thirteen white and twenty-two Negro families had not even a privy. The Spartanburg clinic had the problem of providing these women with contraceptives they would find easy to use and of teaching them the importance of consistent and regular use of the contraceptives given them.

The manner in which these varying problems were met by the three clinics will be the subject of discussion of a subsequent report.