

# Evaluation of the Five-Year Family Planning Plan

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A KEY OBJECTIVE of the 5-year plan for federally subsidized family planning services in the United States is to enable Americans to have only those children they want by providing physician-administered contraception to all who need them, with priority given to the poor (1). Cost estimates for the 5-year program range from \$1.3 to \$1.5 billion for services.

Substantial reductions in unwanted births must be attributed to the program before it is judged a success. Our analyses suggest that if all the 5.1 million women in the primary target group of the program were using physician-administered contraception, there would be 24 percent fewer unwanted births in the United States. (We considered only births that were never wanted as unwanted, whereas the 5-year plan also considers timing or spacing error.) In this paper we present the procedures for obtaining that estimate.

## Data Sources

Two of the data sources are from our family planning evaluation program's community surveys and hospital surveys. In the community surveys, interviews were conducted with 1,652 white and 1,497 black ever-married women in 16 Standard Metropolitan Statistical Areas (SMSAs) during 1969 and 1970. The women were between the ages of 15 and 44 and lived in randomly selected households in low-income census tracts. The SMSAs were Akron and Columbus, Ohio; Altoona and Johnstown, Pa.; Atlantic City N.J.; Houston, Tex.; Jackson, Miss.; Milwaukee, Wis.; Mobile, Ala.; Muskegon, Mich.; Portland, Oreg.;

Savannah, Ga.; Utica, N.Y.; West Palm Beach, Fla.; Wilmington, Del.; and Memphis, Tenn.

In the hospital surveys, interviews were conducted with approximately 35 white and 35 black newly delivered mothers in each of the 16 cities each month during 1971 to determine whether the last birth was wanted at the time of conception. A total of 8,139 white women and 4,988 black women were interviewed in hospitals. The percentages of births unwanted in this data set are almost identical with those reported for births that occurred during 1966-70 to respondents in the 1970 national fertility study (2).

Some data used in the analysis did not provide distributions by race and the appropriate levels simultaneously. Whites and nonwhites were dealt with separately, because they differ on nearly all variables used in the analysis. We used estimates for blacks to represent estimates for nonwhites when the data were available for blacks only. Since the U.S. Census and vital statistics data are for whites and nonwhites, we use the term "non-

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white." However, all other data used in our analysis pertain to whites and blacks. The 1970 Current Population Survey (3) reported the number of husband-wife families by race, number of family members, and family income, which allowed allocation of women and births according to those variables. The data are not completely compatible with the data we apply them to, but more compatible data are unavailable. We substituted distributions reported by Jaffe (4) in the analysis and found less reduction in unwanted births than the 24 percent reported here.

## Procedures

Our approach was to estimate the numbers of unwanted births (never wanted) which occurred above and below the 150 percent above-poverty line before the 5-year program began and to estimate those which would have occurred if all women below the 150 percent level had adopted physician-administered contraception. In this paper, we consider the target group below the 150 percent poverty line, whereas the 5-year plan considered several other groups as well. We do not include the other groups because (a) their inclusion would have yielded reductions in unwanted fertility less than the 24 percent reported here, (b) they consisted of the unmarried who are considered ineligible for unwanted births, and (c) presumably they can afford contraceptive services and are, therefore, considered low priority by the program.

From the estimates we determined the percentage reduction in unwanted births which would have occurred if all women below the 150 percent level had used federally subsidized family planning services. When there were two different estimates for a variable in the analysis, we used the one that resulted in the greatest reduction of unwanted births.

*Unwanted births before the program.* We first determined the number of unwanted births which occurred before the program began. Within birth-order categories, and for whites and nonwhites separately, we multiplied the percentage of births which were unwanted, according to our hospital surveys, by the number of legitimate births which occurred in the United States during 1968 (5).

This estimate yielded 370,504 white unwanted births and 114,103 nonwhite unwanted births. The total number of unwanted births is 11 per-

cent less than Blake estimated (6), which might be explained by our more recent data on the percentage of births unwanted.

We then estimated the numbers of those births which occurred to families above and below the 150 percent poverty line. According to the 1965 National Fertility Study, 71 percent of the white and 25 percent of the black unwanted births occur to women above the 125 percent above-poverty line (7). Multiplying those percentages by the numbers of unwanted births yields 263,058 unwanted births to whites and 28,526 to nonwhites above the 125 percent level. To allocate those births according to the 150 percent level, we (a) calculated the percentage of husband-wife families above the 125 percent level who were 125-150 percent above poverty according to the 1970 Current Population Survey (6 percent of the whites and 15 percent of the nonwhites), (b) multiplied those percentages by the number of unwanted births above the 125 percent level, and (c) subtracted those births from the number above the 125 percent level and added them to those below that level (see table, row 1).

*Unwanted births after the program.* According to the 5-year plan, 5,110,000 women below the 150 percent poverty level need family planning services. In the 1970 Current Population Survey, 84 percent of the husband-wife families below the 150 percent level were white and 16 percent were nonwhite. Multiplying those percentages by the number of women in need produces the estimate that 4,292,400 of the 5.1 million were white and 817,600 were nonwhite.

Only those wanting no more children are eligible for unwanted births. In our community surveys, 47 percent of the whites and 68 percent of the blacks who were not pregnant, menopausal, or surgically sterilized wanted no more children. These estimates were used instead of those in the 5-year plan because (a) they were calculated for whites and blacks separately, (b) they were from more recent data, (c) they were from data collected in low-income neighborhoods, (d) they yielded larger reductions in unwanted births, or (e) they excluded women who were menopausal, pregnant, or surgically sterilized. We multiplied those percentages by the numbers in need of family planning services to estimate that 2,017,428 white and 555,968 nonwhite women were in need of services and at risk of unwanted births.

According to the 5-year plan, 15 percent of the

women in need of services will be protected from conception by surgical sterilization by the end of the program. We deducted them from the number in need who wanted no more children, charged them with no unwanted births, and considered the remaining 1,714,814 whites and 472,573 nonwhites to be using the pill or IUD.

Our community survey indicated that white women had 3.8 unwanted births per 100 women per year subsequent to the adoption of the pill or IUD, and black women had 6.3 (8). The rates multiplied by the number of women thought to be using the pill or IUD yields the number of unwanted births which would occur to those women in a year (row 2 of table). To those who are accustomed to looking at the contraceptive failure rates developed from clinical studies, "field failure rates" may appear excessive. Rates near 1 pregnancy per 100 woman-years are generated by eliminating women who forgot to take their pills or stopped taking them. But from a programmatic point of view, a service program can only provide the contraceptives and instruct the user. Under these circumstances, the pregnancy rate is much higher. Our rates appear somewhat lower than those obtained in the 1965 National Fertility Study (9).

*Reduction in unwanted births.* Our estimates of the number of unwanted births which occurred at the outset of the plan are in the table, row 1. In row 2, our estimates show the number of unwanted births which would have occurred if, among all women below the 150 percent poverty level, 15 percent were sterilized and 85 percent used the pill or IUD. Also entered in row 2 are the unwanted births which occurred to women above the 150 percent level at the beginning of the program, births we assumed would not be

prevented by the 5-year program. Row 3 is our estimate of the number of unwanted births prevented. The number of unwanted births prevented divided by the total number of unwanted births before the program yields the percentage reduction in unwanted births: 24 percent for whites and nonwhites combined, 16 percent for whites, and 53 percent for nonwhites (row 4).

## Discussion

Our analysis may appear unfair to the 5-year plan, since that plan prescribes services for women below the 150 percent level, but in our calculations we included unwanted births to women above that level. Inclusion of women above the 150 percent level is a necessary feature since the plan calls for elimination of unwanted births among all Americans, not only among those below the 150 percent level. As stated in the Report of the Secretary of HEW, "The primary objective . . . is to assist American couples to avoid unwanted pregnancies" (1a). Furthermore, "The primary objective . . . is to enable Americans to freely determine the number and spacing of their children" (1b).

Since the objective does not exclude women above the 150 percent level, the achievement of the plan's objectives must also be assessed in terms of reduction in unwanted births above that level. That is a condition of our model. And, even though the objective is aimed at all Americans, services are targeted only for those below the 150 percent level; therefore, the plan should be credited with reducing unwanted births only among those families. That, too, is a condition of our analysis.

Attributing a possible 24 percent reduction in unwanted births to the 5-year plan overestimates

### Summary of estimates of unwanted births

Unwanted births	White poverty line		Total	Nonwhite poverty line		Total	Total poverty line		Total
	<150 percent	>150 percent		<150 percent	>150 percent		<150 percent	>150 percent	
	1. Number before the program. . . .	123,230		247,274	370,504		89,856	24,247	
2. Number if 15 percent of women <150 percent level were protected by surgical sterilization and 85 percent adopted the pill or IUD; no change to women >150 percent level. . . . .	65,163	247,274	312,437	29,772	24,247	54,019	94,935	271,521	366,456
3. Reduction. . . . .	58,067	0	58,067	60,084	0	60,084	118,151	0	118,151
4. Percent reduction . . . . .	47	0	16	67	0	53	55	0	24

the possible effect because:

1. When two estimates for the same variable needed in the analysis were available, we used the estimate which resulted in the greater reduction in unwanted births.

2. It is unrealistic to believe that all women in the primary target group of the program would adopt physician-administered contraception, although we considered this to be the case in the analysis.

3. Relative to the numbers in need of services, nonwhite women are more likely than white women to use federally subsidized family planning services. If that pattern continues, and not all in need obtain services, then the reduction in unwanted births would be less than we have shown.

4. We gave all the credit to the 5-year program for preventing unwanted births by increasing coverage with physician-administered contraception, whereas other sources of those methods might contribute to the reduction. Many unwanted births prevented by federally subsidized services might have been prevented without those services, but we attribute them to the Federal program in our analysis.

5. Ours was a 1-year model. If the same general model had been applied for 5 years rather than 1 year, the maximum and total reduction in unwanted births which could be attributed to the 5-year program would have been less than 24 percent if we had assumed that (a) the number of unwanted births would decrease progressively during 1970-75 without the program at the rate found by Blake (6) for 1960-65, and (b) the number of unwanted births to the poor would decrease progressively during 1970-75, at a rate proportional to the expenditure of Federal funds for services, to a number in 1975 which equaled the number we estimated would occur if all below the 150 percent poverty level were using the program-preferred methods (8).

6. Many of the users being served by subsidized clinics are in the "above 150 percent of poverty" group. If these instead of those below the line are served, fewer unwanted births will be prevented, since those above the line have lower rates of unwanted births.

Unwanted births might decrease during the period of the 5-year program, and perhaps more than the 24 percent yielded by our analysis. There will be a tendency to attribute most of any

reduction to the 5-year program. However, Blake estimated that the average of 750,000 unwanted births per year during 1960 and 1965 had dropped to 546,000 in 1968, a 27 percent reduction before the 5-year program began (6). Proper evaluation of the program must identify those unwanted births which would have been prevented without the program and those which can be correctly credited to the 5-year program.

For those who believe that the national family planning program should have greater potential for reducing unwanted births in the United States, we recommend (a) identification of all Americans as the key target group of the program rather than only the 5 million women with relative inability to pay for services, and (b) increased provision of sterilization for many families who want no more children but have many fecund years ahead of them.

In sum, if all women below the 150 percent poverty level had adopted contraceptives in accordance with the 5-year plan for delivering family planning services, there would have been no more than 24 percent fewer unwanted births in the United States.

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