# Unwanted Fertility and the Use of Contraception

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POOR WOMEN in the United States have higher proportions of unwanted births than nonpoor women (*1–3*). Jaffe (*4*) summarized the usual explanation for this difference as follows: Typically, couples in higher socioeconomic groups, who can afford private medical care, tend to use the more reliable medical methods of family planning, while parents in low-income groups, with less access to medical care, depend more on the less reliable nonmedical drugstore methods. The 1965 National Fertility Survey provides general support for Jaffe's explanation (*5*).

The entire Federal effort of providing subsidized family planning services is based on that reasoning (*6,7*). It is assumed that if the poor gained access to physician-administered contraception (PAC) equal to that now experienced by the nonpoor, then the difference in unwanted fertility rates experienced between the poor and nonpoor would disappear. That assumption has not been tested.

This paper, one of a series of reporting results of a 5-year research program to examine the consequences of the delivery of subsidized family planning services in the United States, is addressed to the following questions:

1. Are the poor less likely to use PAC than the nonpoor?
2. Are the poor more likely to use drugstore methods than the nonpoor?
3. Do the poor have higher rates of unwanted births than the nonpoor?
4. Can the higher rates of unwanted births to the poor be attributed to their lower use of PAC?

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We also examine differences between blacks and whites on each of these four points.

## Data Sources

We used two different data sources to answer the four questions. The first source was a set of interviews conducted in 16 cities during 1969 and 1970 with 1,497 black and 1,652 white ever-married women between the ages of 15 and 44. These women were living in randomly selected households located in low-income census tracts. The cities were purposively selected and do not represent a random sample of cities of their size. They were selected from standard metropolitan statistical areas with populations of not less than 100,000 and not more than 2 million in 1965. Approximately 100 white and 100 black respondents were interviewed in each city, except in Johnstown and Altoona, Pa., where only whites were interviewed. The cities in which we interviewed were: Atlantic City, N.J.; Houston, Tex.; Jackson, Miss.; Mobile, Ala.; Muskegon, Mich.; Utica, N.Y.; West Palm Beach, Fla.; Wilmington, Del.; Altoona, Pa.; Columbus, Ohio; Johnstown, Pa.; Memphis, Tenn.; Milwaukee, Wis.; Portland, Oreg.; Savannah, Ga.; and Akron, Ohio. For this analysis, respondents who were pregnant or undergoing menopause were excluded from the data set.

The second data source from our larger research program allowed assessment of unwanted fertility after community-level patterns of contraceptive had been documented. In each city, we interviewed each month a sample of approximately 35 black and 35 white newly delivered mothers in the hospitals to determine whether the last birth was ever wanted at the time of its conception. Only whites were interviewed in Johnstown and Altoona. In the interest of efficiency, we excluded hospitals with less than 200 births per year.

## Findings

*Are the poor less likely to use PAC than the nonpoor?* Table 1 shows the rates of contraceptive use by race and income. It is clear that there

**Table 1. Use of physician-administered contraceptives and drugstore methods, by race and income**

| Method | Less than $4,000 | | $4,000—$6,999 | | More than $7,000 | | Total | |
|---|---|---|---|---|---|---|---|---|
| | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| *Whites* | | | | | | | | |
| Physician-administered | 131 | 43.7 | 199 | 48.4 | 255 | 42.6 | 585 | 44.7 |
| Pill | 89 | 29.7 | 138 | 33.6 | 185 | 30.9 | 412 | 31.5 |
| IUD | 13 | 4.3 | 25 | 6.1 | 15 | 2.5 | 53 | 4.0 |
| Sterilization | 29 | 9.7 | 36 | 8.8 | 55 | 9.2 | 120 | 9.2 |
| Drugstore | 38 | 12.7 | 88 | 21.4 | 130 | 21.7 | 256 | 19.6 |
| Condom | 21 | 7.0 | 52 | 12.7 | 89 | 14.9 | 162 | 12.4 |
| Foam | 17 | 5.7 | 36 | 8.8 | 41 | 6.9 | 94 | 7.2 |
| None of these methods | 145 | 48.3 | 155 | 37.7 | 237 | 39.6 | 537 | 41.0 |
| Total | 300 | 22.9 | 411 | 31.4 | 598 | 45.7 | 1,309 | ..... |
| *Blacks* | | | | | | | | |
| Physician-administered | 256 | 44.9 | 197 | 49.1 | 128 | 51.4 | 581 | 47.6 |
| Pill | 156 | 27.4 | 131 | 32.7 | 89 | 35.7 | 376 | 30.8 |
| IUD | 41 | 7.2 | 25 | 6.2 | 13 | 5.2 | 79 | 6.5 |
| Sterilization | 59 | 10.4 | 41 | 10.2 | 26 | 10.4 | 126 | 10.3 |
| Drugstore | 86 | 15.1 | 63 | 15.7 | 48 | 19.3 | 197 | 16.1 |
| Condom | 47 | 8.2 | 29 | 7.2 | 23 | 9.2 | 99 | 8.1 |
| Foam | 39 | 6.8 | 34 | 8.5 | 25 | 10.0 | 98 | 8.0 |
| None of these methods | 265 | 46.5 | 167 | 41.6 | 95 | 38.2 | 527 | 43.2 |
| Total | 570 | 46.7 | 401 | 32.9 | 249 | 20.4 | 1,220 | ..... |

NOTE: For total physician-administered contraceptives for both blacks and whites, only the largest differences between income categories are significant at $P < .01$. Some respondents had used more than one method recently. Therefore, the sum of the numbers of recent users for each method is greater than the total number of users.

were no important differences in the use of PAC among whites by income, whereas among blacks use of PAC is somewhat more common among high income women than low. A comparison of blacks and whites within income levels reveals they do not differ in use of PAC except in the higher income category, where blacks are more likely to use PAC than whites. An examination of the same data by education (not shown) revealed no statistically significant differences in use of PAC within each race by education and no difference between races within educational categories.

*Are the poor more likely to use drugstore methods than the nonpoor?* Table 1 shows that the poor are not more likely to use drugstore methods than the nonpoor.

*Do the poor have higher rates of unwanted births than the nonpoor?* Table 2 shows the proportion of women in our household sample who had at least one unwanted birth. There are statistically significant differences for each race between the lowest and highest socioeconomic categories. The differences in unwanted births by income, for both whites and blacks, are sufficiently small to question the justification for mounting large-scale programs to erase them. However, differences between blacks and whites within income categories are large; more than twice as high a proportion of black women experienced at least one unwanted birth. The differences in unwanted fertility by education within each race are also substantial.

**Table 2. Number and percentage of respondents who exceeded desired parity, by education, income, and race**

| Factor | Whites | | Blacks | |
|---|---|---|---|---|
| | Number | Percent | Number | Percent |
| *Education (grade)* | | | | |
| Less than 12 | 610 | 23.1 | 759 | 46.1 |
| 12 | 564 | 12.4 | 410 | 30.4 |
| More than 12 | 172 | 9.9 | 85 | 21.2 |
| Total | 1,346 | 16.9 | 1,254 | 39.3 |
| *Income* | | | | |
| Less than $4,000 | 293 | 19.8 | 528 | 43.4 |
| $4,000–$7,000 | 401 | 18.0 | 390 | 39.0 |
| More than $7,000 | 579 | 14.8 | 242 | 33.9 |
| Total | 1,273 | 17.0 | 1,160 | 39.9 |

NOTE: All differences between highest and lowest education level within each race are significant at $P < .01$. All differences between races within education levels are significant at $P < .01$.

Table 3 shows the proportion of women in our hospital survey who reported that their last birth

**Table 3. Number and percentage of unwanted births for married respondents, by mother's hospital admission status, education, and race, for year ending October 31, 1971**

| Factor | Blacks | | Whites | |
|---|---|---|---|---|
| | Number | Percent | Number | Percent |
| Hospital admission: | | | | |
| Nonprivate | 1,227 | 30.3 | 999 | 16.5 |
| Private | 1.098 | 17.7 | 3,067 | 9.6 |
| Total | 2,325 | 24.3 | 4,606 | 11.1 |
| Education (grade): | | | | |
| Less than 12 | 878 | 36.9 | 1,072 | 19.8 |
| 12 | 992 | 19.0 | 2,189 | 10.1 |
| More than 12 | 417 | 9.6 | 1,321 | 5.3 |
| Total | 2,287 | 24.1 | 4,582 | 11.0 |

NOTE: All differences between races within categories, and within races between categories are significant at $P < .01$.

was never wanted. These women were interviewed during a 1-year period after the household surveys were completed. We used private versus nonprivate hospital admission status as an income discriminant. The poor of each race have substantially higher rates of unwanted births than the nonpoor. Differences in unwanted births by education are even larger. For each race the proportion of unwanted births is about three times larger in the lowest educational category than in the highest. Within educational levels, the proportions of unwanted births is about twice as high for blacks as for whites.

*Can the higher rates of unwanted births to the poor be attributed to their lower use of PAC?* It is not likely that differences in rates of unwanted fertility as large as those observed could be caused by the trivial differences in method used (table 1).

*Intercity variation in unwanted fertility and use of PAC.* Both the level of unwanted fertility and the use of PAC varied greatly among the 16 cities in the study. Unwanted fertility varied during 1970 from 17 to 38 percent for blacks and from 8 to 24 percent for whites. Use of PAC varied from 20 to 63 percent for blacks and from 14 to 61 percent for whites in our 1969–70 surveys. The rank order correlation by cities between use of PAC and percent of unwanted births is —.36 for blacks and —.43 for whites, a result indicating that the percent of unwanted births has a modest inverse relationship with use of PAC.

## Discussion

Although the data from this study came only from 16 selected cities, several reports from the 1970 National Fertility Study—which used a representative national sample and separately reported data computed in different ways from ours —point to the same conclusions: In 1970 there were still substantial differences in the level of unwanted fertility in the United States by race, education, and income, but about the same high level of protection by the best contraceptive methods is being experienced by both blacks and whites of widely varying income and education (*8–10*).

If the minor differences in use of PAC do not account for the large differences in unwanted fertility between the poor and nonpoor, between blacks and whites, and between educational levels, then it is unlikely that increasing the use of PAC among the poor, the black, and the less educated until it reaches the level of use in the more favored groups will by itself substantially reduce the gap in unwanted fertility between the more favored and the less favored segments of the population.

## REFERENCES


(*1*) Bumpass, L., and Westoff, C. F.: The 'perfect contraceptive' population. Science 169: 1180 (1970).

(*2*) Campbell, A. A.: The role of family planning in the reduction of poverty. J Marriage Fam 30: 236–245 (1968).

(*3*) Jaffe, F. S., and Guttmacher, A. F.: Family planning programs in the United States. Demography 5: 910–923 (1968).

(*4*) Jaffe, F. S.: Toward the reduction of unwanted pregnancy. Science 174: 119 (1971).

(*5*) Ryder, N. B., and Westoff, C. F.: Reproduction in the U.S., 1965. Princeton University Press, Princeton, N.J., 1971.

(*6*) Family Planning and Population Research Act of 1970. Public Law 91–572, 91st Congress.

(*7*) Report of the Secretary of Health, Education, and Welfare Submitting Five-Year Plan for Family Planning Services and Population Research Programs. U.S. Government Printing Office, Washington, D.C., Oct. 12, 1971.

(*8*) Commission on Population Growth and the American Future: Population and the American future. U.S. Government Printing Office, Washington, D.C., 1972, p. 97.

(*9*) Westoff, C.: The modernization of U.S. contraceptive practice. Fam Plann Perspect 4: 9–12 (1972).

(*10*) Ryder, N. B., and Westoff, C. F.: Wanted and unwanted fertility in United States 1965 and 1970. *In* Demographic and social aspects of population growth, edited by C. F. Westoff and R. Parke, Jr. U.S. Government Printing Office, Washington, D.C., 1973.