

Patterns in the Socioeconomic Characteristics of Women Obtaining Abortions in 2000–2001

By Rachel K. Jones,
Jacqueline E.
Darroch and
Stanley K.
Henshaw

Rachel K. Jones is a senior research associate, Jacqueline E. Darroch is senior vice president and vice president for science, and Stanley K. Henshaw is senior fellow at The Alan Guttmacher Institute, New York.

CONTEXT: Information about the socioeconomic characteristics of women obtaining abortions in the United States can help policymakers and family planning providers determine which groups of women need better access to contraceptive services.

METHODS: A representative sample of more than 10,000 women obtaining abortions from a stratified probability sample of 100 U.S. providers were surveyed in 2000–2001; survey data are used to examine the demographic characteristics of women who terminate pregnancies. This information, along with other national-level data, is used to estimate abortion rates and ratios for subgroups of women and examine recent changes in these measures.

RESULTS: In 2000, 21 out of every 1,000 women of reproductive age had an abortion. Women who are aged 18–29, unmarried, black or Hispanic, or economically disadvantaged—including those on Medicaid—have higher abortion rates. The overall abortion rate decreased by 11% between 1994 and 2000. The decline was greatest for 15–17-year-olds, women in the highest income category, those with college degrees and those with no religious affiliation. Abortion rates for women with incomes below 200% of poverty and for women with Medicaid coverage increased between 1994 and 2000. The rate of decline in abortion among black and Hispanic adolescents was lower than that among white adolescents, and the abortion rate among poor teenagers increased substantially.

CONCLUSIONS: Increased efforts are needed to help both adolescent women and adult women of all economic statuses avoid unintended pregnancies.

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Abortion is a common experience among U.S. women.¹ Nevertheless, because abortion is a sensitive topic for many people, it is commonly underreported in national surveys,² and representative information about women who have abortions is limited. Most states and the District of Columbia collect data on the characteristics of women who have abortions as part of their vital statistics systems; the Centers for Disease Control and Prevention (CDC) tabulates and publishes these data in summary form.³ However, this information is limited to a few basic demographic characteristics.

Accurate national information describing women who have abortions may dispel, or confirm, stereotypes that arise when people are reluctant to talk openly about their abortion experiences. In addition, given that abortion rates decreased throughout the 1990s,⁴ identifying the groups of women in which the decrease was below average or in which no decrease occurred can help policymakers and family planning providers determine which groups of women at which point in their lives need greater assistance preventing unintended pregnancies.

To obtain a more comprehensive and nationally representative overview of abortion, The Alan Guttmacher Institute (AGI) conducted a national survey of U.S. women having abortions in 2000–2001. In this article, we present

information from the survey on the social and demographic characteristics of women who had abortions. We also present abortion rates and ratios for subgroups of women for the year 2000, combining data from the AGI survey of women having abortions with data on the number of abortions from the 2001–2002 AGI Abortion Provider Survey.⁵ Our analysis explores whether the decline in the national abortion rate between 1994 and 2000 occurred across all subgroups of women or was concentrated in certain subgroups. We conclude by discussing variations in abortion rates within the context of larger social and economic developments that may have affected women's childbearing decisions and access to contraceptive services.

METHODS

This survey of abortion patients is AGI's third in a series, and uses a design and questionnaire similar to those for the two earlier studies, which were conducted in 1987⁶ and 1994–1995.*⁷

Data Collection

The facilities in the survey were selected from all hospitals, clinics and physicians' offices where abortions were performed in 1996, according to information from AGI's 1997 Abortion Provider Survey. Facilities were stratified by provider type (hospital or nonhospital) and 1996 caseload,

*For ease of presentation, we will refer to the survey dates as 1994 and 2000.

rounded to the nearest 10 (30–390 abortions; 400–1,990; 2,000–4,990; and 5,000 or more), and listed by state; states were listed geographically within census regions in each stratum. Facilities that reported fewer than 30 abortions in 1996 were not included because of the high likelihood that they would perform few or no abortions during the survey period. Their exclusion could cause little bias regarding the representativeness of women obtaining abortions because these facilities accounted for fewer than 1% of all reported procedures in 1996.⁸

Clinics with large caseloads were oversampled to obtain adequate representation of the variety of facilities in the sample. For example, we took every fourth facility that reported 5,000 or more abortions in 1996 and one in every 24 of those reporting 30–390 abortions. We ultimately obtained usable data from eight hospitals and 92 nonhospital facilities.* So that women in large clinics would not have a higher probability of being in the sample than women in small clinics, each facility was assigned a sampling period that was inversely proportional to its probability of being selected. Facilities were asked to administer the questionnaire to all women who had an abortion during the specified period.

The four-page questionnaire, available in both English and Spanish, was distributed to women by facility staff. Participating facilities decided when to present the questionnaire; in most cases, women completed it along with other paperwork while they waited for their procedure. The questionnaire included an introduction explaining the purpose of the survey and informing women that participation was voluntary and anonymous and would not affect the services they would receive. The questionnaire and procedures were approved by the AGI Institutional Review Board.

Participating facilities reported performing 13,071 abortions during the sampling period. Usable questionnaires were obtained from 10,683 women, for a usable-response rate of 82%. Seventy-one percent of these women obtained abortions during the second half of 2000, and the remaining 29% during the first half of 2001. Facility staff supplied information about age, race, ethnicity and Medicaid coverage for 1,052 women who did not complete the questionnaire. (Reasons women did not complete the questionnaire included refusal to participate, failure of the clinic to distribute questionnaires and lack of time to complete the survey.) No information was available for the remaining 1,336 women.

Data Analysis

• **Weights.** To correct for any bias produced by nonresponse or by change from the original sampling plan, we followed a three-stage weighting process. First, individual weights were developed to adjust for the demographic characteristics of the 1,052 women for whom we had basic demographic data only. Second, facility-level weights adjusted for the 1,336 nonrespondents for whom no demographic data were available. Third, stratum weights were constructed to correct for departures from the number of facilities specified by the sampling plan for each grouping by caseload and provider type.[†] With the final weight adjusted to a mean of 1.0, the stan-

dard deviation is 0.21 and the range is 0.42–2.95.

The level of nonresponse on most of the demographic items reported here was 2–4%, but it ranged from 0.6% on previous pregnancy experience to 16% on household income. We imputed the missing information for key variables on the basis of the responses of other women with similar characteristics, using a “hot-deck” procedure.[‡]

• **Representativeness of the sample.** We compared our survey results with the state abortion statistics compiled by the CDC for 1998 (the latest year for which detailed information is available).⁹ We were able to compare distributions for age, race, Hispanic origin, marital status and parity. Some differences between the two data sources are likely because the CDC data on age, race and parity are based on only 47–60% of all abortions[§] and data on Hispanic ethnicity on just 35% of abortions.

Overall, however, the comparison with CDC data offers reassurance that our sample accurately represents the universe of women having abortions. Only in the racial and ethnic profile of women having abortions did our results differ from the CDC's by three or more percentage points. In our survey, 10% of women indicated that they were Asian, Pacific Islander, American Indian or Alaskan native; in the CDC tabulations, 6% were classified as “other race.” In addition, 55% of the AGI sample is classified as white, while the comparable CDC figure is 59%. The survey found that 20% of women obtaining abortions in 2000–2001 were Hispanic; the CDC statistics showed 17%.

There are several possible reasons for the discrepancies in race and ethnicity. First, the CDC statistics include no data on women obtaining abortions in California, which has large Asian and Hispanic populations. Second, Census Bureau statistics indicate that the proportion of Asians among all women aged 15–44 in the U.S. population increased by 5% between 1998 and 2000, and the proportion of Hispanics rose by 6%. Thus, the proportion of abortion patients who were Hispanic or Asian may well have been higher in 2000–2001 than in 1998.

On the other hand, it is also possible that our data over-

*If a facility declined to participate or did not obtain usable questionnaires from at least half of the target women, it was replaced by the next facility listed in the same stratum, which in most cases was in the same or a neighboring state in the same region. Of the initial 114 abortion providers sampled, 60 had to be replaced, and in many cases the replacements had to be replaced. Of 14 facilities that could not be replaced, 13 were in the smallest caseload category (30–390 abortions in 1996).

†For the stratum of hospitals and nonhospital facilities with the smallest abortion caseload, we reduced the target number of facilities because it became apparent during fielding that the decrease in small providers observed between 1992 and 1996 had continued (source: reference 5).

‡We used cross-tabulations to identify the variables most strongly associated with each item requiring imputation. Respondents were sorted according to these variables in the order of the strength of the item's association with the variable to be imputed, so that similar cases were adjacent to one another in the file. A missing value was then replaced by the value of the preceding case in the file.

§CDC data are missing for states that do not collect information on the particular item or on abortion, for unreported abortions in states that do collect the information and for item nonresponse. In 1998, the CDC reported the woman's age for 791,387 abortions, or 60% of the 1,319,000 abortions estimated by AGI. Race was reported for 616,444, or 47% of the estimated abortions (source: reference 3).

TABLE 1. Percentage distribution of women obtaining abortions in 2000 and 1994, and of all U.S. women aged 15–44 in 2000; estimated abortion rates for 2000 and 1994, and percentage change in the rate between the two years; and pregnancy rate and proportion of pregnancies ending in abortion in 2000—all by selected characteristics at outcome

Characteristic	Women having abortions		Women aged 15–44, 2000	Abortion rate*			Pregnancies, 2000	
	2000	1994		2000	1994	% change	Rate†	% ending in abortion
Total	100.0	100.0	100.0	21	24	-11	87	25
Age								
<15	0.7	1.2	u	u	u	-27	u	u
15–19	18.6	20.6	16.0	25	34‡	-27	72	34
15–17	6.5	8.8	9.5	15	24‡	-39	42	35
18–19	12.0	11.5	6.5	39	48‡	-18	119	33
20–24	33.0	32.8	15.1	47	52	-9	159	29
25–29	23.1	21.4	15.6	32	32	0	153	21
30–34	13.5	14.4	16.5	17	18	-5	112	16
35–39	8.1	7.5	18.5	9	10	-3	50	19
≥40§	3.1	2.3	18.4	4	3	10	11	31
Marital status								
Married	17.0	18.4	47.7	8	9	-14	99	8
Previously married**	15.6	17.1	11.5	29	32	-11	67	43
Never-married	67.3	64.4	40.8	35	41	-14	79	45
Cohabiting††								
Yes	30.7	20.5	18.7	55	57	-3	u	u
No	69.3	79.5	81.3	29	36	-20	u	u
No. of live births								
0	39.1	45.4	42.8	19	26	-25	81	24
1	27.4	24.7	18.0	32	33	-2	151	22
≥2	33.5	29.9	39.2	18	18	2	64	28
Residence								
Metropolitan	88.0	88.5	78.8	24	27	-11	u	u
Nonmetropolitan	12.0	11.5	21.2	12	13	-10	u	u
Poverty status‡‡								
<100%	26.6	25.4	12.8	44	36§§	25	133	33
100–199%	30.8	24.4	17.5	38	31§§	23	115	33
200–299%	18.0	18.9	17.9	21	25§§	-13	87	24
≥300%	24.6	31.3	51.8	10	16§§	-39	66	15
Medicaid coverage								
Yes	24.2	26.5	9.0	57	50	14	u	u
No	75.8	73.5	91.0	18	20	-12	u	u
Race/ethnicity								
Non-Hispanic								
White	40.9	48.0	68.2	13	16	-20	73	18
Black	31.7	30.0	13.7	49	54	-8	115	43
Asian/Pacific Islander	6.4	4.4	4.4	31	28	11	88	35
Native American	0.9	1.2	0.9	u	u	u	u	u
Hispanic	20.1	16.5*†	12.8	33	37*†	-10	132	25
Education*‡								
Not H.S. graduate	12.7	12.0	11.2	23	22	7	85	27
H.S. graduate/GED	30.3	30.4	30.9	20	20	1	73	27
Some college	40.6	40.3	32.5	26	29	-12	68	38
College graduate	16.4	17.3	25.5	13	19	-30	63	21
Religion*§								
Protestant	42.8	37.4	51.0	18	17	10	u	u
Catholic	27.4	31.3	27.5	22	25	-13	u	u
Other	7.6	7.6	5.4	31	30	2	u	u
None	22.2	23.7	16.2	30	46	-35	u	u

*Number of abortions per 1,000 women in relevant subgroup. †Sum of births and abortions per 1,000 women aged 15–44. ‡Differs from previously published figures, which were based on state abortion reports. §Denominator is women aged 40–44. **Includes separated women. ††Based on single women only. ‡‡Percent-age of federal poverty level. §§Previously published AGI estimates of abortion rates by poverty status (reference 1) were inaccurate because of a programming error.

*†Previously published figures for Hispanics (references 1 and 7) have been adjusted according to state abortion reports. *‡Limited to women older than 19. *§Limited to women older than 17. Notes: u=unavailable. Sources: see appendix (page 234).

estimate the proportion of abortions accounted for by Hispanics. Hispanics tend to be concentrated in certain clinics and certain states, and our clustered survey design produces a higher standard error (2.6 percentage points) for this characteristic than for variables that are more evenly

distributed among facilities. Thus, the 95% confidence interval for the proportion Hispanic is 15–25%.

- **Measures of abortion.** We calculated abortion rates by applying the percentage distributions found in our surveys to the numbers of medical and surgical abortions estimat-

ed to have occurred nationally, and then dividing by the relevant estimated populations. The estimated national totals were 1,423,200 abortions in 1994 and (as of July 18, 2002) 1,313,300 in 2000.¹⁰ (We also present limited information on abortion rates in 1987, when 1,559,100 abortions occurred.) The population denominators for 2000 were as of April 1, 2000, based on the population census. For characteristics not yet available from the census, tabulations from Current Population Surveys (CPS) or other sources were used to distribute the Census Bureau totals (see appendix, page 234).

Many unintended pregnancies are carried to term,¹¹ but the available data allow us to examine only the proportion of all pregnancies resulting in abortion. We computed pregnancy rates as the sum of birthrates and abortion rates (excluding pregnancies ending in spontaneous abortions). When possible, we used information from birth certificates in 2000 by subgroup reported by the National Center for Health Statistics to compute estimated pregnancy rates.¹² For subgroups for which birth data were not available, we used data from the June 2000 Fertility Supplement of the CPS to estimate the distributions of relevant characteristics from women who gave birth in the prior year.

We calculated confidence intervals for abortion patients with various characteristics, taking into account weights and sample clustering. These confidence intervals were used to calculate minimum confidence intervals for rates. The actual confidence intervals for rates are larger but not easily calculated when there is random error in the population denominators. We used the minimum confidence intervals to determine which findings should be highlighted in the text and as the basis for our conclusions.

- **Measures of poverty.** We examine abortion rates and changes in abortion rates between 1994 and 2000 according to poverty status. Both surveys asked women about their total family income in the last year, before taxes. Women in 2000 were provided with 11 income categories, listed in increments of \$5,000 or \$10,000 and ranging from “under \$9,999” to “\$70,000 or more.” We coded each response category to the median value, and constructed a four-category measure of poverty status based on reported family income and number of family members in the woman’s household at the time of the abortion. The four poverty-status categories are less than 100%, 100–199%, 200–299% and at least 300% of the federal poverty threshold.

To examine pregnancy by poverty status, we estimated poverty levels of women who had given birth in the last year, as reported on the June 2000 Fertility Supplement of the CPS. The June CPS devotes fewer items to income than does the March survey, which is used by the Census Bureau to monitor poverty in the United States. As a result, the June CPS underestimates family income by 10% or more, and therefore overestimates the proportion of women at lower poverty status levels.¹³ In addition, the June CPS does not distinguish between family and nonfamily members in the household. We therefore based the four-category measure of poverty status on number of household members and

TABLE 2. Abortion rate per 1,000 women in 1987 and percentage change in abortion rate, 1987–1994 and 1987–2000, by selected characteristics

Characteristic	Rate, 1987	% change	
		1987–1994	1987–2000
Total	27	-11	-21
Age			
15–19	42	-20	-41
15–17	31	-22	-53
18–19	60	-20	-34
20–24	52	-2	-11
25–29	32	0	0
30–34	17	7	1
35–39	9	2	-1
≥40	3	1	11
Marital status			
Married	10	-9	-22
Previously married*	40	-19	-28
Never-married	48	-14	-26
Cohabiting†			
Yes	86	-34	-35
No	41	-12	-30
Medicaid coverage			
Yes	71	-29	-19
No	23	-11	-21

*Includes separated women. †Based on single women only. Note: Abortion rates by subgroup in 1987 are limited to characteristics that were measured comparably in all three AGI surveys and for which information on population characteristics was measured comparably in 1987, 1994 and 2000.

reported family income in the previous year. Because we were interested in comparing pregnancy outcomes on the basis of economic status at the time of conception, infants born in the previous year were excluded from the number of household members.

Poverty status is susceptible to higher levels of measurement error than characteristics such as race and age because of lower response rates, respondent uncertainty about family income and lack of clarity about the number of family members. The four-category measure is intended to distinguish between poor, low-income, middle-income and higher-income women, respectively, and is not intended to serve as an exact measure of poverty status.

FINDINGS

Women's Characteristics

Between 1994 and 2000, the abortion rate fell by 11%, from 24 to 21 per 1,000 women aged 15–44 (Table 1); in 2000, 25% of all pregnancies (excluding miscarriages) ended in abortion. Subgroups of women varied, often dramatically, in their rates of abortion, reflecting differences in rates of pregnancy and in the proportions of pregnancies ending in abortions.

- **Age.** Almost one in every five women (19%) who had an abortion in 2000–2001 were adolescents, more than half (56%) were in their 20s and a quarter (25%) were 30 or older. The proportion aged 15–19 had decreased slightly, from 21% in 1994. Most teenagers having abortions in both years were aged 18–19 (12% of all women having abortions),

while only 1% were younger than 15.

Women aged 20–24 have a higher abortion rate than any other age-group (47 abortions per 1,000), and women aged 40 or older have an exceptionally low rate (four per 1,000). Adolescents also have a higher-than-average abortion rate—25 per 1,000 women aged 15–19. The relatively high adolescent abortion rate is largely attributable to a high level of abortion among women aged 18–19 (39 per 1,000); the rate among 15–17-year-olds is 15 per 1,000.

Adolescents' abortion rates declined more than older women's rates between 1994 and 2000: The rate dropped by 39% among women aged 15–17 and by 18% among women aged 18–19. In contrast, rates changed by 10% or less among women aged 20 or older.

Adolescent abortion rates have been declining since at least 1987 (Table 2, page 229), though the decrease between 1994 and 2000 (27%—Table 1) was larger than the one between 1987 and 1994 (20%). The recent decrease in abortion rates for adolescents aged 15–17 was substantially larger than the decrease between 1987 and 1994, while the decline in abortion rates for older adolescents did not differ between the two periods. In both periods, decreases in abortion rates were larger for adolescents than for adult women.

Older teenagers' high abortion rate in 2000 reflects an above-average pregnancy rate (119 per 1,000 women aged 18–19) as well as the termination of 33% of these pregnancies in abortion (Table 1). The lower abortion rate among younger adolescents reflects a below-average pregnancy rate (42 per 1,000), in large part because many adolescents aged 15–17 have not had sex.¹⁴ However, the proportion of pregnancies among women aged 15–17 that end in abortion (35%) is similar to the proportion among those aged 18–19.

The high abortion rate among women aged 20–24 reflects both an above-average pregnancy rate (159 per 1,000) and a relatively high proportion of pregnancies ending in abortion (29%). Women aged 25–34 also have high pregnancy rates, but the proportion of pregnancies that end in abortion in this group decreases with age to 16% among women aged 30–34. The low abortion rate among women aged 40 or older can largely be attributed to their low pregnancy rate (11 per 1,000), as pregnancies among women in this age-group are almost as likely as those among adolescents to end in abortion.

- **Marital status.** Two-thirds of women having abortions in 2000 had never been married, one in six were currently married and another one in six were separated, divorced or widowed when they became pregnant. The proportion of women having an abortion who had never been married increased from 64% in 1994 to 67% in 2000.

Married women had a rate of eight abortions per 1,000 in 2000, while rates for previously married and never-married women were much higher—29 and 35 per 1,000, respectively. Between 1994 and 2000, abortion rates declined

by 11–14% for women in all three marital-status groups, continuing a decline that started in the late 1980s (Table 2). The abortion rates of women in the different marital-status groups are influenced by age, which differs sharply by subgroup. Estimates of age-standardized abortion rates by marital status (not shown)* revealed that if women in each marital-status group had the same age distribution as all women aged 15–44, the highest abortion rate would be among previously married rather than never-married women (50 vs. 30 per 1,000); married women would still have the lowest rate (11 per 1,000).

Despite their high pregnancy rate (99 per 1,000), married women have a low abortion rate because they carry the overwhelming majority of their pregnancies (92%) to term. Previously married and never-married women are much less likely than married women to become pregnant, but more than four out of 10 of their pregnancies end in abortion.

- **Cohabitation.** Although 19% of unmarried U.S. women aged 15–44 are living with their partners, these women accounted for 31% of abortions among unmarried women in 2000, up from 21% in 1994. Abortion rates changed little for unmarried, cohabiting women between 1994 and 2000, following a steep rate of decline in their abortion rates between 1987 and 1994 (34%—Table 2). Rates declined substantially (20%) among unmarried women who were not cohabiting between 1994 and 2000. The 1994–2000 pattern represents a dramatic slowdown in the rate of decrease among cohabiting women and an increasing rate of decline for noncohabiting, unmarried women. In all three years, cohabiting women had high abortion rates.

- **Parity.** A large proportion (73%) of all women having abortions had been pregnant before: Some 48% had had a previous abortion, including 36% who had experienced both a previous birth and an abortion and 12% who had experienced only a previous abortion. It is also worth noting that 52% of women having abortions in 2000 intended to have (more) children in the future, and 22% were unsure of their birth intentions (not shown).

The majority of women obtaining abortions had had one or more previous births—61%, up from 55% in 1994. Even among adolescent women having abortions, a fairly high proportion (23%) had had previous births, ranging from 32% among Hispanics to 28% among blacks and 16% among whites (not shown).

The abortion rate was higher among women with one child (32 per 1,000) than among women with none or those with two or more children (18–19 per 1,000). Once age is taken into account, much of the difference in abortion rates among women with a prior birth disappears; age-adjusted abortion rates for women with more than one birth increase to rates similar to those for women with one birth (not shown).

Among women with no children, the abortion rate decreased steeply, by 25%, between 1994 and 2000; there was little change among women who had already had children. The proportion of pregnancies ending in abortion was lowest among women with one child; however, women with one child had an exceptionally high pregnancy rate, so al-

*To obtain age-standardized abortion rates, we computed abortion rates for each five-year age-group, then multiplied these age-specific rates by each age-group's proportion in the total population of women aged 15–44 in 2000.

though a smaller-than-average proportion of their pregnancies ended in abortion, they had the highest abortion rate of all parity subgroups.

• **Residence.** Abortion services are concentrated in cities,¹⁵ so it is often easier for women residing in metropolitan counties to obtain these services. Nine in 10 women obtaining abortions reside in metropolitan areas, compared with eight in 10 women aged 15–44. Women in metropolitan counties and those in nonmetropolitan counties had similar rates of decline in abortion between 1994 and 2000, but the abortion rate among women living in metropolitan counties in 2000 was still twice that among women residing in nonmetropolitan counties (24 vs. 12 per 1,000).

• **Poverty.** Women with incomes below 200% of poverty made up 30% of all women of reproductive age, but accounted for 57% of all women having abortions in 2000: Twenty-seven percent of abortions were obtained by women living below the poverty line, and another 31% by women with incomes of 100–199% of poverty. The concentration of economically disadvantaged women among those having abortions was greater in 2000 than in 1994, when 50% of women obtaining abortions had incomes of less than 200% of poverty.

Abortion rates decreased as income rose, from 44 per 1,000 among poor women to 10 per 1,000 among the highest-income women. In 1994 as well, women with incomes below 200% of poverty had higher abortion rates than higher-income women. However, between 1994 and 2000, rates decreased among middle- and higher-income women, whereas they increased among poor and low-income women.

The high abortion rates among economically disadvantaged women were partly due to high pregnancy rates—133 per 1,000 for poor women and 115 per 1,000 for low-income women. As income increased, pregnancy rates declined, and women with the highest incomes had a pregnancy rate of 66 per 1,000. These women were the least likely to abort their pregnancies (15%), and poor and low-income women were the most likely to do so (33%).

• **Medicaid.** About one-quarter of women obtaining abortions were covered by Medicaid for general health care. The abortion rate among all women with Medicaid coverage (57 per 1,000) was three times the rate among women not covered by Medicaid.* Between 1994 and 2000, the abortion rate among Medicaid recipients increased, whereas the rate among women who were not receiving Medicaid declined.

The increase in abortion rates among women with Medicaid coverage between 1994 and 2000 was an abrupt change from the 1987–1994 period, when abortion rates for this group declined substantially. Women with Medicaid coverage in 1987 had 71 abortions per 1,000, and by 1994 this rate had decreased by 29%, a decline that was larger than that for women with no Medicaid coverage.

In 2000, two-thirds of Medicaid recipients who obtained an abortion lived in states where abortions are publicly funded for women with Medicaid coverage, but one-third lived in states with restrictions on Medicaid funding of abortions (not shown).[†] In states that provide Medicaid funding for

medically necessary abortions, women with Medicaid coverage had an abortion rate more than four times as high as women without such coverage (89 vs. 21 per 1,000). In contrast, in states that do not cover abortion services for women on Medicaid, the abortion rate among Medicaid recipients was twice that of women without Medicaid coverage (35 vs. 16 per 1,000).[‡]

• **Race/ethnicity.** Of women obtaining abortions, 41% were non-Hispanic white, 32% were non-Hispanic black and 20% were Hispanic. The remaining women were Asian or Pacific Islander (6%) or Native American (1%).[§] Between 1994 and 2000, the proportion of women obtaining abortions who were Asian or Pacific Islander increased.

The lowest abortion rate of all the racial and ethnic groups examined was among white women (13 per 1,000), while the highest rate was among black women (49 per 1,000). Hispanic and Asian women had abortion rates slightly higher than average (33 and 31 per 1,000, respectively).** Between 1994 and 2000, abortion rates fell for all groups but Asians; the drop was largest (20%) among white women.

White women also had a lower pregnancy rate than any of the other racial or ethnic groups and, with only 18% of pregnancies ending in abortion, were the most likely to carry their pregnancies to term.

Black women's high abortion rate reflects both their high pregnancy rate and the high proportion of conceptions (43%) that ended in abortion. Hispanic women had the highest pregnancy rate of all the racial and ethnic groups (132 per 1,000); one-quarter of pregnancies ended in abortion.

*Women without Medicaid coverage consist of women who were both similar and dissimilar to Medicaid recipients in a variety of characteristics, i.e., women who were eligible for Medicaid because of their low income and family status (in most states, unmarried mothers), but who were not enrolled in Medicaid, and women who were not eligible because they had incomes above their state's eligibility cutoff, or were economically disadvantaged but had no children. Whereas some women without Medicaid coverage have other types of health insurance that cover contraceptive services or abortion services, many have no health insurance or have insurance that does not cover these services.

†As of October 2000, roughly the midpoint of data collection, the following used state Medicaid funds to cover medically necessary abortion services: California, Connecticut, Hawaii, Maryland, Massachusetts, Minnesota, Montana, New Jersey, New Mexico, New York, Oregon, Vermont, Washington and West Virginia (source: AGI, The status of major abortion-related policies in the states, New York: AGI, 2000). While Alaska, Arizona, Idaho, Illinois and Indiana were under court order to cover medically necessary abortions, in practice almost no Medicaid abortions were funded in these states, and they are not included with states that cover medically necessary abortions in the calculations.

‡Because of higher income limits on Medicaid eligibility for pregnant women in many states, some women may have received Medicaid coverage only for the abortion. If these women indicated that they were covered by Medicaid, this would artificially inflate the abortion rate for women on Medicaid in states where Medicaid covers abortion services. Regardless of individual women's Medicaid status, we found that the abortion rate of poor and low-income women in states where Medicaid covered abortion services in 2000 was higher than the rate for poor and low-income women in states where it did not (79 vs. 40 per 1,000), suggesting that Medicaid coverage of pregnancy termination increases access to abortion services for economically disadvantaged women.

§All racial designations refer to non-Hispanic women of those races.

**Because Native Americans accounted for fewer than 1% of women obtaining abortions in 2000, we do not estimate abortion rates for this group. However, our data suggest that they are neither overrepresented nor underrepresented among women obtaining abortions.

TABLE 3. Estimated abortion rate per 1,000 women aged 15–44, by poverty status, according to race and ethnicity, 2000

Poverty status*	White	Black	Hispanic
Total	13	49	33
<100%	23	62	68
100–199%	27	68	34
200–299%	15	48	19
≥300%	7	28	15

*Percentage of federal poverty level.

Because black and Hispanic women are much more likely than non-Hispanic whites to have low incomes,¹⁶ their abortion rates may be influenced by their greater economic disadvantage. Indeed, within each racial and ethnic group, middle- and higher-income women had lower abortion rates than poor and low-income women (Table 3). However, at all income levels, abortion rates for black and Hispanic women were higher than those for white women. Moreover, except in the group with the lowest income, black women had the highest abortion rates. The gaps between racial and ethnic groups were largest among middle- and higher-income women: Black women at and above 200% of poverty had abortion rates about 2–3 times those of Hispanic women and 3–4 times those of non-Hispanic white women. (These differences may overstate the influence of poverty status, however, because even among women at and above 300% of poverty, blacks and Hispanics tend to be less well-off, on average, than whites.¹⁷)

- **Education.** Among women aged 20 or older, those who had not graduated from high school accounted for 13% of abortions (Table 1). High school graduates made up 30% of women having an abortion, and those with at least some college, 57%.

The abortion rate among college graduates (13 per 1,000) was lower than average; moreover, women with college degrees were the only educational group to show a higher-than-average decline in abortion rates (30%) between 1994 and 2000. The relatively small proportion of pregnancies among college graduates that ended in abortion (21%) and the below-average pregnancy rate account for their low abortion rate. Women with some college had a pregnancy rate that was lower than average, but 38% of their pregnancies ended in abortion in 2000, resulting in the highest abortion rate of any educational group (26 per 1,000).

We also examined abortion rates by school enrollment status among women younger than 20 (not shown). Nearly two-thirds of adolescents who had an abortion were enrolled in school during the month they became pregnant. Enrollees had a lower abortion rate than adolescents who were not in school (19 vs. 65 per 1,000). The abortion rate for adolescents enrolled in school decreased by 29% between 1994 and 2000, and the rate for their out-of-school peers declined by 13%.

- **Religious affiliation.** The majority of women older than 17 who obtained an abortion reported a religious affiliation. The highest proportion (43%) identified themselves

as Protestant. Twenty-seven percent of women having an abortion identified themselves as Catholic, and 8% as a member of another religion; 22% reported no religious affiliation. Thirteen percent identified themselves as “born-again” or evangelical, three-fourths of whom were Protestant (not shown).

Women affiliated with “other” religions and those who did not identify with any religion had the highest abortion rates (31 and 30 per 1,000, respectively). Women with no religious affiliation experienced the largest decline in abortion of all the groups examined (35%).

Comparing Adolescent and Adult Abortion Rates

The concentration of declining abortion rates between 1994 and 2000 among adolescents, whites and economically better-off groups of women raises questions about whether the decline in abortion was consistent within all adolescent subgroups. We also seek to determine whether the decrease in the abortion rate among adolescents alone accounted for the declines among whites and medium-to-high-income women. To explore these questions, we examined abortion rates by race and ethnicity, Medicaid coverage and poverty status separately for adolescents and adults (Table 4).

Patterns in abortion rates by age for white, black and Hispanic women were fairly similar: In both 1994 and 2000, adolescents in all three racial and ethnic groups had higher abortion rates than their adult counterparts, but the differences were narrower in 2000 than in 1994 because the decline in abortion in all three groups was greater for adolescents than for adults. The decline was smaller among black and Hispanic adolescents (25% and 13%, respectively) than among whites (41%).

Abortion rates according to Medicaid coverage and poverty status show a similar pattern: The decline is greater (or the increase smaller) among teenagers than among older women within each coverage and economic subgroup. As a result, the difference between adolescent and adult abortion rates narrowed between 1994 and 2000. Among Medicaid recipients, for example, the abortion rate among teenagers fell by 14%, while that among older women increased by 19%. Between 1994 and 2000, abortion rates increased among both adolescents and adult women with incomes below 200% of poverty, whereas they decreased for both age-groups of higher-income women.

DISCUSSION AND CONCLUSION

Information gathered from this nationally representative sample reveals that the typical woman having an abortion is between the ages of 20 and 30, has never married, has had a previous birth, lives in a metropolitan area, and is economically disadvantaged and Christian. However, women who have abortions are diverse, and unintended pregnancy leading to abortion is common in all population subgroups.

Although the national abortion rate decreased by 11% between 1994 and 2000, not all population groups participated equally in the decline, and some groups experienced increases. As a result, women having abortions are

increasingly those who are never-married, low-income, non-white and Hispanic, and have already had at least one child.

Birthrates changed little between 1994 and 2000, and limited data suggest that no change occurred in the proportion of births that were unintended.¹⁸ Information from women who gave birth in 17 states in 1999 reveals that between one-third and one-half of these births were unintended. Comparable information gathered in nine of the states in 1993 suggests that the proportion of births that were unintended changed little between 1993 and 1999.¹⁹ If these dynamics apply to all women, then the decrease in abortion between 1994 and 2000 reflects decreases in both the overall rate of unintended pregnancy and the proportion of women with unintended pregnancies who have abortions.

More comprehensive information on intention status of pregnancies ending in births will not be available until completion of the 2002 National Survey of Family Growth. Data from that survey also will allow us to examine sexual and contraceptive use patterns that may be responsible for changes in pregnancy and abortion rates. In the meantime, it is unclear to what extent changes in abortion rates for the nation or for specific subgroups reflect changes in levels of unintended pregnancy or differences in the proportion of unintended pregnancies terminated by abortion.

Abortion rates among adolescents have been declining since the late 1980s. Parental involvement laws for minors took effect in eight states* between 1994 and 2000. It is unlikely that these restrictions account for much of the decline in adolescent abortion rates during this time period because these states account for only 17% of female adolescents, and abortion rates also declined during this time period for other groups not affected by such restrictions. The pregnancy rate for adolescents aged 15–19 fell from 91 per 1,000 in 1994²⁰ to about 72 per 1,000 in 2000.²¹ indicating that adolescent abortion rates did not decline between 1994 and 2000 because more teenagers were carrying their pregnancies to term. The decline in adolescent pregnancy may be a continuation of a trend toward more consistent use of contraceptives and use of more effective methods as well as decreases in sexual activity among at least some subgroups.²²

The fact that abortion (and pregnancy) rates among teenagers continued to decline is encouraging and calls for continued attention to pregnancy prevention efforts. However, the large decline in abortion among adolescents between 1994 and 2000 did not occur across all subgroups. Decreases among Hispanic adolescents and those covered by Medicaid were smaller than those for all adolescents, and abortion rates for poor teenagers increased.

Economically disadvantaged women, who had high abortion rates in both 1994 and 2000, were the only group we examined whose abortion rate increased substantially during this period. Given that poverty is susceptible to measurement error, actual changes in abortion rates by poverty status may have been less drastic than our analysis suggests. Nonetheless, our findings demonstrate that abor-

TABLE 4. Estimated abortion rates for 2000 and 1994, and percentage change between the two years, by selected characteristics, according to age-group

Characteristic	Rate		% change
	2000	1994	
Total	21	24	-11
RACE/ETHNICITY			
White			
<20	15	26	-41
≥20	12	14	-15
Black			
<20	55	74	-25
≥20	48	50	-3
Hispanic			
<20	38	44	-13
≥20	32	36	-10
MEDICAID COVERAGE			
Yes			
<20	61	71	-14
≥20	53	44	19
No			
<20	20	29	-32
≥20	17	19	-7
POVERTY STATUS*			
<100%			
<20	51	42	21
≥20	43	34	26
100–199%			
<20	42	41	1
≥20	37	29	27
200–299%			
<20	23	38	-38
≥20	21	22	-5
≥300%			
<20	11	28	-60
≥20	10	15	-33

*Percentage of federal poverty level.

tion rates increased for economically disadvantaged women and women on Medicaid, while they decreased for middle- and higher-income women.

In both 1994 and 2000, the high level of abortion among poor and low-income women was due, in part, to a very high pregnancy rate.²³ Preliminary analyses (not shown) indicate that between 1994 and 2000, poor women became more likely to end their pregnancies in abortion, and middle- and higher-income women became less likely to do so.

Economically disadvantaged women in 2000 may have found it harder to obtain and use effective contraceptive methods, as well as to care for and support a child when they did become pregnant. Changes in welfare policy such as rules requiring welfare recipients to seek employment, along with economic growth, expanding job markets and the availability of new college tax credits may have made it less feasible or less attractive for low-income women to

*Delaware, Idaho, Iowa, North Carolina, South Dakota, Tennessee, Texas and Virginia implemented parental involvement laws between 1994 and 2000.

have children. One unintended consequence of welfare reform was a decline in Medicaid coverage; the proportion of women of reproductive age covered by the program decreased between 1994 and 1999, while the proportion of women with no insurance coverage increased.²⁴

The decline in the number of women covered by Medicaid, and the parallel increase in the number with no insurance, was not accompanied by increased funding for free or low-cost family planning services. In fact, funding for Title X, the largest source of public funding for contraceptive services for women not covered by Medicaid, remained stable between 1994 and 1999 once inflation is taken into account.²⁵ As a result, economically disadvantaged women may have had more difficulties accessing family planning services during this time period.

In contrast, abortion rates for women covered by Medicaid decreased substantially between 1987 and 1994. One factor that may have contributed to this earlier decrease was the advent of highly effective, long-acting methods such as the hormonal implant and injectable. Both methods were covered by Medicaid; in fact, Medicaid covered 60% of all women receiving hormonal implants from family planning agencies in 1991–1992.²⁶ These long-acting methods may have been more accessible to women with Medicaid coverage than to those without it. The steep decreases in abortion rates among women on Medicaid during the period of increased availability of highly effective contraceptives, contrasted with the increased abortion rates during the time period when contraceptive services may have become less accessible to poor and low-income women, suggest that improved access to family planning services could have a very real impact on reducing levels of unintended pregnancy and of abortion for poor and low-income women.

Increased efforts to enroll eligible individuals into Medicaid along with increases in Title X funding would improve low-income women's access to contraceptive services. In addition, further efforts need to be made to extend Medicaid eligibility to women with incomes above regular eligibility levels, which are very low in some states. Finally, more eligible adolescents should be enrolled in the State Children's Health Insurance Program, which covers family planning services in most states.²⁷ The program got off to a slow start, enrolling relatively few eligible individuals, and early efforts were focused on enrolling young children even though teenagers are also eligible.

Black and Hispanic women are more likely than white women to be economically disadvantaged, and this partially explains their higher abortion rates. Within all three racial and ethnic groups, there is a clear association between poverty status and abortion, the abortion rate being higher among poor and low-income women than among those with incomes greater than 200% of poverty. However, economic status, as measured by poverty status, does not explain all the differences between racial and ethnic groups. Except in the lowest poverty-status group, black women have the highest abortion rates, followed by Hispanic women, and the lowest rates occur among white women.

In 1994, the higher abortion rate among black women reflected primarily a rate of unintended pregnancy much higher than those among white and Hispanic women, as well as a somewhat higher proportion of unintended pregnancies ending in abortion.²⁸ Black, Hispanic and white women at risk of unintended pregnancy have roughly similar levels of contraceptive use,²⁹ but nonpoor black women using reversible methods have higher levels of contraceptive failure than do similar white and Hispanic women.³⁰ Thus, the high levels of abortion among black women across economic statuses also point to a need for greater assistance in preventing unintended pregnancies.

Although further decreases in unintended pregnancies can help the downward trend in U.S. abortion rates continue, some women will still turn to abortion, either to resolve an unintended pregnancy or to deal with a change in circumstances following an intended conception.³¹ Indeed, the fact that most women having abortions have already been pregnant and given birth reflects the importance and relevance of abortion in women's reproductive lives. It is therefore important that high-quality, safe health care services be available and accessible, not only to women who choose to carry pregnancies to term, but also to those who turn, instead, to abortion.

APPENDIX: DATA SOURCES FOR TABLE 1

Sources of Population Data

Age and race/ethnicity: U.S. Bureau of the Census, U.S. Census 2000, race and Hispanic or Latino origin by age and sex for the United States: 2000 (PHC-T-8), 2002, <<http://www.census.gov/population/www/cen2000/phc-t08.html>>, accessed June 15, 2002.

Marital status: U.S. Bureau of the Census, Marital status and living arrangements: March 2000, *Current Population Reports*, 2001, Series P-20, No. 537.

Cohabitation: Special tabulations from the Current Population Survey, March 2000, adjusted using data from the 1995 National Survey of Family Growth.

Number of live births: U.S. Bureau of the Census, Fertility of American women: June 2000, *Current Population Reports*, 2001, Series P-20, No. 543.

Residence: U.S. Bureau of the Census, Census 2000 summary file 1 (SF 1), 100-percent data, 2002, <<http://factfinder.census.gov/servlet/BasicFactsServlet>>, accessed June 15, 2002. (The 1990 definition of metropolitan residence was used for both 1994 and 2000.)

Poverty status: Special tabulations from the Current Population Survey, March 2001.

Medicaid: Special tabulations from the Current Population Survey, March 2001.

Education: U.S. Bureau of the Census, Educational attainment in the United States: March 2000, *Current Population Reports*, 2001, Series P-20, No. 536.

Religion: Mayer E, Graduate Center of the City University of New York, special tabulations from the American Religious Identification Survey, 2001.

Sources of Birth Data

Age, number of live births: Martin JA et al., Births: final data for 2000, *National Vital Statistics Report*, 2002, Vol. 50, No. 5, Table 2.

Marital status, poverty status, race/ethnicity and education:

Special tabulations from the Current Population Survey, Fertility Supplement, June 2000.

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Author contact: rjones@guttmacher.org