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## Contraceptive Utilization Among Widowed, Divorced, and Separated Women in the United States: 1973 and 1976<sup>1</sup>

### INTRODUCTION

The data presented in this report are the latest nationwide statistics on contraceptive utilization from the 1976 and 1973 National Surveys of Family Growth conducted by the National Center for Health Statistics. The data were collected by means of personal interviews with a multistage probability sample of women 15-44 years of age in the noninstitutionalized population of the conterminous United States. Women were eligible for inclusion in the sample if they were currently or previously married or were never married but had offspring presently living in the household.

The interview focused on the respondents' marital and pregnancy histories, their use of contraception and the planning status of each pregnancy, their intentions regarding number and spacing of future births, their use of maternal care and family planning services, and on a broad range of social and economic characteristics. Between June 1973 and February 1974, 3,856 black women and 5,941 women of other races were interviewed for Cycle I. Between January and September of 1976, 2,946 black women and 5,665 women of other races were interviewed for Cycle II. Further discussion of the survey design, definition of terms, and sampling variability are in the Technical Notes.

Among the estimated 3.6 million widowed, divorced, and separated, or postmarried, women of childbearing age (15-44 years) in the United States in 1976, about 1.2 million, or one-third,

were sterile and another 1.6 million, or nearly one-half, were using some method of contraception other than surgical sterilization. These figures reflect substantial changes in a period of 3 years; in 1973 just over one-fifth of currently postmarried women in the child-bearing ages were sterile and only 30 percent reported using some method of contraception. The increase in the proportion reporting use of contraception other than surgical sterilization quite likely reflects greater candor in responding to these surveys as much as any actual increase in contraceptive practice. These data are comparable with those recently published for currently married women in the United States.<sup>2</sup>

### CONTRACEPTIVE STATUS OF WIDOWED, DIVORCED, AND SEPARATED WOMEN

The frequency of sterility has increased substantially more among widowed, divorced, and separated women between 1973 and 1976 (11.4 percentage points) than among currently married women (6.4 percentage points), resulting in a greater proportion sterile among the postmarried (32.8 percent) than among the currently married (30.2 percent) in 1976.<sup>2</sup> These observations are true for both surgical and nonsurgical sterility, though the latter comparison is not statistically significant. While there were more surgical sterilizations for contraceptive than for noncontraceptive reasons among both currently

<sup>1</sup>This report was prepared by Kathleen Ford, Ph.D., Division of Vital Statistics.

<sup>2</sup>National Center for Health Statistics: "Contraceptive Utilization in the United States: 1973 and 1976," ADVANCE DATA, No. 36, August 18, 1976.

married and postmarried women, the post-married women reported a higher proportion of noncontraceptive sterilizations and a lower proportion of contraceptive ones.

The very large decline in the porpotion of noncontraceptors among postmarried women between 1973 and 1976 is anomalous (table 1). There was no statistically significant change in the proportions who were pregnant, post partum, or trying to become pregnant, and, as expected, these porpotions were markedly

lower among postmarried women than among currently married women. The proportions of "other nonusers"—noncontraceptors for reasons unrelated to pregnancy—are much larger among postmarried women than among currently married women but account for virtually all of the decline in noncontraceptors among the post-married between 1973 and 1976 (25.6 percentage points). While a major part of this decline can be attributed to the increase in sterilizations noted above, more than half of it is

Table 1. Number of widowed, divorced, and separated women aged 15-44 and percent distribution by contraceptive status, according to race: United States, 1973 and 1976

Contraceptive status	Total <sup>1</sup>		White		Black	
	1976	1973	1976	1973	1976	1973
	Number in thousands <sup>2</sup>					
All women.....	3,601	3,601	2,516	2,546	1,031	1,028
	Percent distribution					
Total.....	100.0	100.0	100.0	100.0	100.0	100.0
	<u>Sterile women</u>					
All sterile women.....	32.8	21.4	32.3	20.3	33.7	24.4
Nonsurgical.....	2.7	*0.5	2.3	*0.3	3.2	*0.9
Surgical.....	30.1	20.9	29.9	19.9	30.4	23.5
Noncontraceptive.....	13.7	8.4	14.0	8.6	13.6	8.2
Contraceptive.....	16.4	12.3	15.9	11.1	16.8	15.3
	<u>Fecund women</u>					
Noncontraceptors:						
Pregnant, post partum, seeking pregnancy.....	2.0	2.9	1.6	2.3	3.1	4.5
Other nonusers.....	19.7	45.3	17.7	47.4	23.7	39.2
Contraceptors:						
All methods.....	45.4	30.4	48.4	30.1	39.5	31.9
Oral contraceptive pill.....	28.0	18.1	30.8	18.6	21.3	17.2
Intrauterine device (IUD).....	9.1	7.2	9.4	7.0	8.8	7.9
Diaphragm.....	1.2	1.3	1.2	1.5	*1.3	*0.6
Condom.....	1.8	*0.9	1.9	1.1	*1.6	*0.5
Foam.....	1.4	*0.7	1.2	*0.4	*1.9	*1.6
Rhythm.....	1.2	*0.4	1.5	*0.4	*0.7	*0.4
Withdrawal.....	*0.3	*0.3	-	*0.4	*1.0	*0.0
Douche.....	1.0	*0.3	1.0		*1.2	*1.1
Other.....	1.4	1.2	1.3	*0.7	*1.5	2.5

<sup>1</sup>Includes white, black, and other races.

<sup>2</sup>In the 1973 figures, estimates of the number of women in thousands include cases for which contraceptive status was not ascertained but was imputed. Only those cases in which contraceptive status was ascertained are included in the 1976 figures. See Technical Notes.

reflected in the increase in number of women using methods other than sterilization.

The proportion of contraceptors among the post married rose 15.0 percentage points from 1973 to 1976, reaching 45.4 percent—only 3.2 percent below the proportion of contraceptors among currently married women in that year. These figures may reflect an increase in sexual activity among the postmarried or, more plausibly, a greater candor in discussing these topics anonymously. However, there was also a change in interviewer instructions in 1976 which could have influenced these figures. A more detailed analysis of contraceptive practices which examines these possibilities will be published in series 23 of *Vital and Health Statistics*.

Among currently married women, the resort to surgical sterilization has resulted in a higher frequency of sterility among white compared with black women. However, for the post-married, sterility from both surgical and non-surgical causes is higher among black women,

though the difference diminished greatly between 1973 and 1976 because of the larger increase among white women.

Looking at contraceptors exclusive of those with contraceptive sterilizations (table 2), it is seen that use of the modern methods (pill and IUD) in both 1973 and 1976 was strikingly higher among postmarried women (83.4 and 81.6 percent in the respective years) than among currently married women (59.7 and 58.5 percent, respectively). The slight decline observed in the use of the oral contraceptive pill between 1973 and 1976 among currently married women—particularly among black women—did not appear among the post married women of either race. The distinct shift back to traditional methods observed among currently married black contraceptors between 1973 and 1976 (12.9 percentage points) also was not observed among postmarried black contraceptors (a statistically nonsignificant shift of only 2.4 percent).

Table 2. Number of widowed, divorced, and separated women aged 15-44 using contraception and percent distribution by contraceptive method according to race: United States, 1973 and 1976

Contraceptive method	Total <sup>1</sup>		White		Black	
	1976	1973	1976	1973	1976	1973
	Number in thousands <sup>2</sup>					
All contraceptors.....	1,636	1,092	1,217	763	407	328
	Percent distribution					
Total.....	100.0	100.0	100.0	100.0	100.0	100.0
Oral contraceptive pill.....	61.6	59.7	63.7	62.2	54.1	54.1
Intrauterine device (IUD).....	20.0	23.7	19.4	23.3	22.3	24.7
Diaphragm.....	2.7	4.1	2.5	5.1	3.4	*1.8
Condom.....	4.0	3.1	4.0	3.8	4.1	*1.4
Foam.....	3.0	2.4	2.4	*1.3	4.8	5.0
Rhythm.....	2.7	*1.3	3.1	*1.3	*1.8	*1.4
Withdrawal.....	*0.6	*0.9	-	*1.2	2.5	*0.2
Douche.....	2.2	*1.0	2.0	-	3.1	3.4
Other.....	3.0	3.6	2.8	*1.7	3.8	7.9

<sup>1</sup>Includes white, black, and other races.

<sup>2</sup>In the 1973 figures, estimates of the number of women in thousands include cases for which contraceptive status was not ascertained but was imputed. Only those cases in which contraceptive status was ascertained are included in the 1976 figures. See Technical Notes.

## TECHNICAL NOTES

### The Survey Design

The National Survey of Family Growth (NSFG) is designed to provide data on fertility, family planning, and related aspects of maternal and child health. Fieldwork for Cycle I was carried out by the National Opinion Research Center between June 1973 and February 1974. Fieldwork for Cycle II was carried out by Westat, Inc., between January and September of 1976.

A multistage probability sample of women in the noninstitutionalized population of the conterminous United States was used in both cycles. Each time, approximately 33,000 households were screened to identify the sample of women who would be eligible for NSFG, i.e., women between the ages of 15 to 44 years, inclusive, who were currently married or previously married or who were never married but had offspring presently living in the household. In households with more than one eligible woman, a random procedure was used to select only one to be interviewed. Since the interviews were always conducted with the sample person, the term "respondent" is used as synonymous with sample person. For Cycle I, interviews were completed with 3,856 black women and 5,941 women of other races. For Cycle II, interviews were completed with 2,946 black women and 5,665 women of other races. A detailed description of the sample design for Cycle I is presented in "National Survey of Family Growth, Cycle I: Sample Design, Estimation Procedures, and Variance Estimation," Series 2, Number 76, in the *Vital and Health Statistics* series. A similar report is in preparation for Cycle II.

The interview was focused on the respondent's marital and pregnancy histories, on the use of contraception and the planning status of each pregnancy, on the respondent's intentions regarding the number and spacing of future births, on maternal and family planning services, and on a broad range of social and economic characteristics. While the interviews varied greatly in the time required for their completion, they averaged about 70 minutes for Cycle I and about 58 minutes for Cycle II.

Quality control procedures were applied at

all stages of the survey. These included a verification of listing completeness with unlisted dwelling units being brought into the sample, a preliminary field review of completed questionnaires for possible missing data or inaccurate administration, a 10-percent sample recheck of all households to be screened in the survey, observation of interviews in the field, and an independent recoding of a 5-percent subsample of completed interviews.

### Reliability of Estimates

Since the statistics presented in this report are based on a sample, they may differ somewhat from the figures that would have been obtained if a complete census had been taken using the same questionnaires, instructions, interviewing personnel, and field procedures. This chance difference between sample results and a complete count is referred to as sampling error. In addition, the results are also subject to non-sampling error due to respondent misreporting, data processing mistakes, and nonresponse. It is very difficult, if not impossible, to obtain accurate measures of nonsampling errors. These types of error were kept to a minimum by the quality control procedures and other methods incorporated into the survey design and administration.

Sampling error, or the extent to which samples may differ by chance from a complete count, is measured by a statistic called the standard error of estimate. Approximate standard errors for estimated numbers and percentages from Cycle I are shown in tables I and II for the total and white populations and in tables III and IV for the black population. Provisional estimates for standard errors for Cycle II for total and white women can be obtained by multiplying the standard errors for these women from Cycle I by a factor of 1.1. Similarly, provisional estimates of standard errors for Cycle II for black women can be obtained by multiplying the standard errors for these women from Cycle I by a factor of 1.2.

The chances are about 68 out of 100 that an estimate from the sample would differ from a complete census by less than the standard error.

Table I. Approximate standard errors for estimated numbers for white and total women: 1973 National Survey of Family Growth

Size of estimate	Relative standard error	Standard error
50,000.....	30.0	15,000
100,000.....	21.2	21,000
200,000.....	15.0	30,000
500,000.....	9.5	47,000
1,000,000.....	6.7	67,000
2,000,000.....	4.8	95,000
5,000,000.....	3.0	151,000
10,000,000.....	2.2	216,000
20,000,000.....	1.5	311,000

Table II. Approximate standard errors for estimated percentages expressed in percentage points for white and total women: 1973 National Survey of Family Growth.

Base of percentage	Estimated percentage						
	2 or 98	5 or 95	10 or 90	20 or 80	30 or 70	40 or 60	50
100,000.....	3.0	4.6	6.4	8.5	9.7	10.4	10.6
500,000.....	1.3	2.1	2.8	3.8	4.3	4.6	4.7
1,000,000.....	0.9	1.5	2.0	2.7	3.1	3.3	3.3
3,000,000.....	0.5	0.8	1.2	1.5	1.8	1.9	1.9
5,000,000.....	0.4	0.6	0.9	1.2	1.4	1.5	1.5
7,000,000.....	0.3	0.5	0.8	1.0	1.2	1.2	1.3
10,000,000.....	0.3	0.5	0.6	0.8	1.0	1.0	1.1

Table III. Approximate standard errors for estimated numbers for black women: 1973 National Survey for Family Growth

Size of estimate	Relative standard error	Standard error
25,000.....	25.3	6,000
50,000.....	17.9	9,000
100,000.....	12.7	13,000
150,000.....	10.3	16,000
250,000.....	8.0	20,000
350,000.....	6.8	24,000
500,000.....	5.7	28,000
750,000.....	4.7	35,000
1,000,000.....	4.0	40,000

Table IV. Approximate standard errors for estimated percentages expressed in percentage points for black women: 1973 National Survey of Family Growth

Base of percentage	Estimated percentage						
	2 or 98	5 or 95	10 or 90	20 or 80	30 or 70	40 or 60	50
5,000.....	7.9	12.3	17.0	22.6	25.9	27.7	28.3
10,000.....	5.6	8.7	12.0	16.0	18.3	19.6	20.0
50,000.....	2.5	3.9	5.4	7.1	8.2	8.8	8.9
100,000.....	1.8	2.7	3.8	5.1	5.8	6.2	6.3
300,000.....	1.0	1.6	2.2	2.9	3.3	3.6	3.6
500,000.....	0.8	1.2	1.7	2.3	2.6	2.8	2.8
700,000.....	0.7	1.0	1.4	1.9	2.2	2.3	2.4
1,000,000.....	0.6	0.9	1.2	1.6	1.8	2.0	2.0

estimated. In this report, numbers and percentages which have a standard error that is more than 25 percent of the estimate itself are considered "unreliable." They are marked with an asterisk to caution the user but may be combined to make other types of comparisons of greater precision.

In this report, terms such as "similar" and "the same" mean that any observed difference between two estimates being compared is not statistically significant. Similarly, terms such as "greater," "less," "larger," and "smaller" indicate that the observed differences are statistically significant. The normal deviate test with a .05 level of significance was used to test all comparisons which are discussed in the text. A statistically significant difference is one large enough that in repeated samples of the same size and type as this one such a large difference would be expected to be found in less than 5 percent of the samples. Lack of comment in the text between any two statistics does *not* mean the difference was tested and found not to be significant.

Adjustment for nonsampling error due to nonresponse was made in two ways. Nonrespondent cases, as distinct from missing data items, were imputed by weighting for nonresponse within each primary sampling unit, stratum, and age-race category. In the 1973 survey, codes for missing items were imputed using a "hot deck" procedure. In the 1976 survey, imputation for missing data items has not been performed and the figures in the tables are based

The chances are about 95 out of 100 that the differences between the sample estimate and a complete count would be less than twice the standard error. The relative standard error is the ratio of the standard error to the statistic being

only on those interviews where enough information was obtained from the respondent to determine contraceptive status. As a result, in the 1976 figures, about 1,061,000 women out of an estimated 31,847,000 total ever-married women are not represented.

## DEFINITIONS OF TERMS

The following definitions are applicable to all women in the survey, regardless of marital status.

### Sterile

*Sterile.*—A woman (or couple) was classified as sterile if she reported that it was impossible for her to have a baby.

*Nonsurgical.*—A woman (or couple) was classified as nonsurgically sterile if she reported that it was impossible for her to have a baby for any reason other than a sterilizing operation. Reported nonsurgical reasons for sterility included menopause and sterility due to accident, illness, or congenital causes.

*Surgical.*—A woman (or couple) was classified as surgically sterile if she or her husband were completely sterile due to an operation.

Since sterilizing operations are very frequently obtained exclusively or partly as methods of contraception, i.e., because of their complete effectiveness against conception rather than for purely therapeutic reasons, they have been further classified as contraceptive and noncontraceptive. In Cycle I, a sterilizing operation was contraceptive if the respondent answered "yes" to the question "Was the operation done at least partly so that you would not have any more children?" Since the avoidance of more children (conceptions) could itself be for therapeutic reasons, the question was reworded in Cycle II to "Was one reason for the operation because you had all the children you wanted?" This change in wording was expected to yield a lower percent of operations reported for contraceptive reasons than would have been reported previously. As a result, the percents of couples with contraceptive and noncontraceptive sterilization shown in this report are not completely comparable between the two sur-

veys. Also, there is evidence that sterilizing operations classified as noncontraceptive may include some that actually were at least partly contraceptive in intent. The percent classified as contraceptive should therefore be regarded as a minimum estimate. Because of these limitations on the data, sterilizations for contraceptive reasons are reported with other causes of sterility and not, as formerly, with other methods of contraception.

### Fecund—Noncontraceptors

*Pregnant.*—A woman (or couple) was classified as pregnant if she replied affirmatively to the question "Are you pregnant now?" or for those in doubt, "Do you think you probably are pregnant or not?" A woman who reported that the onset of her last menstrual period was within the 30 days prior to the interview was automatically considered not pregnant.

*Seeking pregnancy.*—A woman (or couple) was classified as seeking pregnancy if she reported she was not using a method at the time of interview because she wanted to become pregnant.

*Post partum.*—A woman (or couple) was classified as post partum if she reported she was not currently using a method, was not seeking a pregnancy, and her last pregnancy had terminated within 2 months before the date she was interviewed.

*Other nonusers.*—Women (or couples) who reported they were currently using no contraceptive method and could not be classified in any of the preceding categories of noncontraceptors were classified here. Among these are women who were indifferent to the chances of pregnancy, had a very low risk of pregnancy due to some fecundity impairment, or objected to contraceptive methods for personal or religious reasons. Among the widowed, divorced, and separated, infrequent intercourse or complete abstinence probably accounts for a significant proportion of nonusers. Women who used the douche following intercourse, but who did not report this as a method of contraception, were also classified here although such douching practice is known to have a very modest contraceptive effect when done very soon after intercourse.

**Fecund—Contraceptors**

*Method users.*—A woman (or couple) who reported use of a contraceptive method other than a surgical sterilization at the date of interview was classified according to the specific method used. Methods used by extremely small proportions of the population such as jelly, cream suppositories, or abstinence, not in combination with any other methods, were grouped in the category “Other.” Where more than one method was reported in current use, the method generally considered the most effective was used for classification purposes.

**Demographic Terms**

*Age.*—In this report, age is classified by the age of the respondent at her last birthday before the date of interview.

*Race.*—Classification by race, based on interviewer observation, was reported as black, white, or other. Race refers to the race of the woman interviewed.

*Marital status.*—Persons are classified by marital status as married, widowed, divorced, separated, or never married or as informally married, such as living with a partner or common-law spouse. Persons who are temporarily separated for reasons other than marital discord, such as vacation, illness, or Armed Forces, are classified as married. Divorced persons are those whose most recent marriage has been legally dissolved and who are free to remarry. Women with an annulled marriage, while having the legal status of never having been married, are classified together with divorced women. The category “separated” includes those who are legally or informally separated from their most recent spouse due to marital discord. The “never married” include those who have never had a formal marriage and do not consider themselves in any of the preceding categories. However, in the NSFG, only single women with offspring living in the household are included and separately classified.

SYMBOLS	
Data not available-----	---
Category not applicable-----	...
Quantity zero-----	-
Quantity more than 0 but less than 0.05-----	0.0
Figure does not meet standards of reliability or precision-----	*

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