

Fecundity and Infertility in the United States*

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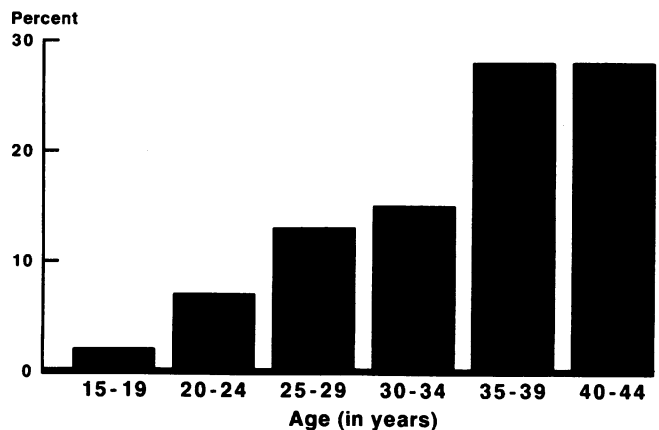
About 2.4 million married couples, with the wives 15–44 years of age, were infertile in 1982 by the conventional medical definition of infertility—a married couple with 12 months or more of unprotected intercourse without a pregnancy.¹ Approximately 1.0 million of the couples were childless (primary infertility) and the other 1.4 million had one or more births before they became infertile (secondary infertility). This definition measures only difficulty in conceiving, however, and includes married couples only.

The concept of impaired fecundity is broader. It includes both difficulty in conceiving and difficulty carrying to term among both married and unmarried women. About 4.5 million women (or couples) had difficulty conceiving or carrying a baby to term (impaired fecundity) in 1982 (Table 1).

Both infertility and impaired fecundity measure *difficulty* in having a baby, not sterility. Since many of these difficulties can be treated, infertility and impaired fecundity can be used to estimate the number who may need medical services to help them have children.

The findings discussed above are only a few of the principal results in a recent report¹ on fecundity (the physical ability to have children), infertility (inability to conceive after 12 months or more of unprotected intercourse), and related aspects of reproductive health—including surgical sterilization, spontaneous pregnancy loss, and pelvic inflammatory disease.

The data are from the 1982 National Survey of Family Growth, which was based on face-to-face interviews conducted in the homes of a nationally representative sample of 7,969 women 15–44 years of age. The data for each woman are multiplied, or “weighted,” by the number of women she represents in the population. Therefore, the 7,969 women interviewed represent the 54 million women ages 15–44 in the US in 1982, and the data reported here are national estimates. The questionnaire included a pregnancy history, a contraceptive history, a marital history, questions on sterilization and infertility problems, and a number of demographic characteristics. No medical examinations or tests were performed, so the etiology of the infertility problems was not



SOURCE: National Center for Health Statistics

FIGURE 1—Per Cent of Women Who Had Impaired Fecundity, by Age: United States, 1982

SOURCE: reference 1, table A

investigated. A detailed description of the methodology of the survey is contained in the report.¹

Age and Fecundity—One of the themes of the new report is the relationship between fecundity impairments, and age. For example, the proportion of nonsterilized women with impaired fecundity rises moderately with age until age 35, when it doubles (Figure 1). This doubling after age 35 applies

TABLE 1—Fecundity and Infertility, US, 1982

	Infertile (Married only)	Impaired Fecundity
(Number in millions)		
Total	2.4	4.5
Childless	1.0	1.9
One or more births	1.4	2.6

TABLE 2—Per Cent with Impaired Fecundity, by Age

Age	Total	No Births	One or more Births
15–34	4.4	4.1	5.8
25–34	13.4	15.5	12.3
35–44	28.0	33.4	26.5

*Copies of the full report, *Fecundity, Infertility, and Reproductive Health in the United States, 1982*, Vital and Health Statistics Series 23, No. 14 are available from the US Government Printing Office, Washington DC, 20402. (Order stock no. 017-022-009999-4, price \$2.75.)

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to both childless women and those who had children before they developed fecundity impairments (Table 2).

Thus the proportion of childless women with impaired fecundity was 16 per cent at ages 25–34, but 33 per cent at ages 35–44. For women with one or more births, the increase was from 12 per cent at ages 25–34 to 27 per cent at ages 35–44. Even data from studies of historical populations, using very different assumptions and measures, reach a qualitatively similar conclusion: fecundity problems increase moderately with age until about age 35, when they increase sharply.²

The report also shows that the rate of spontaneous pregnancy loss (miscarriage or stillbirth) nearly doubles after age 35, from 17 per cent at ages 25–34 to 31 per cent at ages 35–44. Further, the proportion of births delivered by cesarean section was twice as high for mothers in the 35–44 age group as it was for mothers in their twenties. These findings show that it is difficult for a significant minority of women to have children after age 35.

Women who delay childbearing into their 30s—particularly women who intend to have more than one child in their 30s—should be made aware of how rapidly these difficulties increase from the early 30s to the late 30s. Two other topics related to difficulties in childbearing have been discussed in other published accounts. They are: trends in infertility between 1965 and 1982^{1,3–5}; and the rising interest and concern relating to infertility.^{2,3,6}

Factors Associated with Fecundity and Infertility.—In addition to the 4.5 million women with impaired fecundity, in 1982 about 13.7 million American women ages 15–44 or their current husbands had had a sterilization operation: 14 per cent of the 54 million women in this age group had had tubal ligations, 5 per cent hysterectomies, and 6 per cent had husbands with vasectomies. The percentage of women with tubal ligations and hysterectomies was approximately equal among White and Black women. Vasectomy, however, was far more common among White than Black couples (7 per cent vs 1 per cent).

The average (or typical) White woman age 15–44 with a hysterectomy was 31.4 years of age when she had the operation, and had two or three children (mean 2.5). The typical Black woman with a hysterectomy was 32.2 years of age, and had two or more children (mean 2.9). About 10 per cent of hysterectomies occurred to childless women, compared with about 2 per cent of tubal ligations.

Approximately one woman in seven—or 14 per cent of women 15–44 years of age—reported having been treated at some time for pelvic inflammatory disease (PID): 10 per cent in ambulatory settings, and 4 per cent in hospitals.^{1,7} Black women were nearly twice as likely as White women to have been treated for PID (23 vs 13 per cent). This is one possible explanation for the higher rates of infertility among Black couples, and suggests that medical care providers should be especially alert to possible infertility problems among Black women.

In the interview, women were asked the outcome of each of their pregnancies, and to choose one of the following descriptors: stillbirth, miscarriage, abortion, birth by cesar-

ean section, or birth by normal (vaginal) delivery. Miscarriage and stillbirth (termed pregnancy loss in the report) are surprisingly common: one in four women who have ever been pregnant has had at least one pregnancy loss. The pregnancy loss rate is the number of pregnancy losses per 100 pregnancies (miscarriages plus stillbirths divided by miscarriages plus stillbirths plus live births). The pregnancy loss rate was 16 per cent overall. Although many pregnancy losses are inevitable, data in the report suggest that some are not. For example, among women who had ever been treated for PID, the loss rate was 20 per cent; for women never treated for PID, the rate was 15 per cent. This difference was also found in every category of age, pregnancy order, and marital status.¹

Smoking during pregnancy slows fetal growth and increases the chances of low birthweight and spontaneous pregnancy loss. Smoking during pregnancy was most common among teenagers and women with the least education and lowest income. These findings reinforce the importance of patient education, because they are consistent with previously reported findings from the 1980 National Natality Survey.⁸

Conclusion—In sum, the data in this report should be useful for:

- counseling patients about the risks of infertility problems, pregnancy loss and cesarean section;
- comparing local clinic populations with national averages;
- market analyses of new products to serve those with infertility problems;
- planning further studies of the demography and epidemiology of reproductive problems in the United States. The data are also available on public use computer tapes to permit interested researchers to explore these and other issues further.

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