significant differences in proportions are tested with logit models that take account of clustering in the data and that include dummy variables for age-group. (Women aged 25–34 are the comparison group.)

Long-term contraceptive use pattern is validated as the current indicator of pregnancy risk using Kaplan-Meier survival analyses. Estimates are made for the proportion of women experiencing an unintended (unwanted or mistimed) pregnancy within 12-month periods at risk. Contraceptive use pattern among women with an unintended pregnancy is evaluated for the period prior to conception.

For comparison, survival analyses are performed for method use at first intercourse, a common measure of contraceptive behavior. Never-married women aged 15–19 who initiated intercourse at age 15 or older are grouped according to contraceptive use at first intercourse, and the proportion with an unintended pregnancy within 12 months after first intercourse is estimated. This analysis is restricted to never-married teens, who are least likely to intend pregnancy, because it is impossible to isolate those at risk of unintended pregnancy in the 12 months after first intercourse. Those who first had intercourse prior to menarche or who are noncontraceptively sterile, are subfertile or have impaired fecundity are excluded.

Multivariate logistic regression is used to explore potential covariates of current contraceptive use pattern. Contingency ratios are used to model the probability of any contraceptive use during periods at risk, the conditional probability of uninterrupted use given contraceptive use and the conditional probability of effective method use given uninterrupted use. Relationship stability is indicated by relationship status, relationship length and number of partners in the past year. Relationship length is represented by a dummy variable indicating whether the respondent has been with the current sexual partner for more than three months. Number of sexual partners in the past year is included in the logged form, since this distribution is positively skewed, and outliers may unduly influence the estimation of parameters; taking the natural logarithm reduces this possibility. Sexual experience is represented by a dummy variable for lifetime nonvoluntary sexual experience, an additional dummy for having recently experienced nonvoluntary intercourse for the first time and a dummy for having a current sexual partner who is more than three years older.

Social and demographic controls include race and ethnicity, family economic status, mother’s educational attainment and whether the respondent wants another child within the next two years. Family economic status is measured by income as a percentage of the poverty level, which takes into account household size. Because income also tends to be positively skewed, the natural logarithm is applied to this measure as well.

Variables of interest that are significant in the initial multivariate models are explored in subsequent models that allow interactions with age-group. Final models include those interactions that improve the fit of the model. In these models, predicted probabilities are estimated rather than coefficients or odds ratios, because they show explicitly how an effect varies across groups, and because they indicate whether statistically significant results are substantively large. For each outcome variable, the average predicted probabilities for the sample are estimated by age-group. Then, the expected probabilities with different levels of the covariates are estimated individually, leaving the other covariates at their observed values. Covariates that are statistically significant or are found to interact with age are presented.

All analyses use the constructed probability weights provided by the National Center for Health Statistics, which sponsored the survey. With data from sources using a complex sampling design, ordinary statistical techniques tend to underestimate standard errors. Therefore, robust standard errors are calculated using survey estimation techniques in STATA that account for dependence in the data due to clustering and sampling by strata.

Data Limitations

There are a number of important limitations to these data. First, long-term contraceptive use pattern does not necessarily imply consistency of use on a day-to-day basis. If a woman reports using a method during a given month, she is classified as a user of that method in that month; data on the consistency of use during that month are not available for all 12 months prior to the interview. Second, while it is important to consider pregnancy risk to validate the measure of contraceptive use pattern, analyses of pregnancy should be regarded with caution, because of the high levels of abortion underreporting in survey data. Third, while this analysis was meant to include only women who did not want to get pregnant, some women may be ambivalent about preventing pregnancy, while others very clearly want to avoid it; these differences in degree almost certainly affect contraceptive diligence. Finally, the omission of males from this study is a drawback. However, the NSFG does not survey men, and pregnancy underreporting is even more problematic among males, making it difficult to assess the impact of contraceptive use pattern.

Results

Long-Term Contraceptive Use Pattern

Teenagers aged 15–17, but not those aged 18–19, reported higher levels of nonuse than did adult women aged 25–34 (Table 1). Nonetheless, only about 8% of younger teenagers reported long-term nonuse of contraceptives, compared with 2–5% of women in all other age-groups. More than two-thirds of 15–19-year-olds were long-term uninterrupted users. However, teenagers were significantly more likely to be sporadic users and less likely to be uninterrupted effective users than...