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Purpose: After dramatic declines in teen birth and pregnancy in the 1990s and first half of 2000s, teen birth rates in the United States increased by 3% in 2006. Using a previously-developed Pregnancy Risk Index (PRI) which summarizes pregnancy risk in a population based on contraceptive use and sexual activity, we examined behavioral correlates of these trends and the potential for future change in teen pregnancy.

Methods: Using national data on from the Youth Risk Behavior Survey (N≈125,000) for 1991 to 2007, we calculated changes in PRI over time. We also calculated a contraceptive risk index (CRI) which summarizes pregnancy risk among teens who were sexually active (i.e., past 3 months) based on the prevalence of contraceptive use and effectiveness of specific methods. The PRI=CRI multiplied by the % sexually active. Weighted logistic regression in Stata was used to calculate significant change over time and to account for the clustered, weighted survey design. We compared the PRI to pregnancy rates and birth rates for both the same year and the subsequent year, as behaviors in any year will produce pregnancy outcomes in both years.

Results: Pregnancy risk over time correlated well with pregnancy rates and birth rates for the current year (R²=.78 and .80 respectively) and subsequent year (R²=.78 and .79). Pregnancy risk declined steadily between 1991 and 2003 (29%, p <.000) approximating the declines in teen pregnancy rates from 1991 to 2003 (37%) and teen birth rates from 1991 to 2003 (32%). From 1991 to 2003, sexual activity went from 38% to 35% (p=.10) and the CRI declined from 28.0 to 22.2 (p<.001). Improvements in contraceptive use between 1991 and 2003 were responsible for 70% of declining pregnancy risk and included increases in condom use and decreases in nonuse and use of withdrawal (all, p<.001). Between 2003 and 2007, sexual activity was unchanged (35% to 36%). During this period, small but non-significant declines were found for specific contraceptive methods and overall contraceptive use showed a borderline decline (CRI from 22.2 to 24.4, p=.06). The PRI did not change (7.5 to 8.4, p=.18). Although the PRI was higher among blacks and Hispanics compared to whites, differences in sexual activity between blacks and whites declined and trends in the use of specific contraceptive methods were similar.

Discussion: After improvement in the 1990s and early 2000s, sexual behavioral change related to teen pregnancy appears to have stalled or even reversed. Recent behavioral trends portend stagnant or even rising teen birth and pregnancy rates through 2008. Reinvigorated efforts to promote teen contraceptive use are needed.

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