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TO Interested Parties

FROM The Alan Guttmacher Institute

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SUBJECT Causes of declines in teenage pregnancy rates and birthrates

A recent article in *Adolescent & Family Health* (*AFH)* asserts that increased abstinence accounted for most, and in some cases all, of the declines during the early 1990s in pregnancy rates and birthrates among women aged 15-19.[1] Authors of the *AFH* article, and materials in support of the article's conclusions produced and widely distributed by The Physicians' Consortium, claim that this new analysis compensates for "errors" contained in earlier research on this subject by The Alan Guttmacher Institute (AGI) by relying on a more sophisticated methodology than that used by AGI.

AGI stands by the conclusions of its analysis that roughly one-fourth of the drop in teenage pregnancy rates between 1988 and 1995 resulted from increased abstinence, and approximately three-fourths resulted from more effective contraceptive use among sexually experienced teenagers.[2] AGI's methodology for measuring the factors contributing to pregnancy rate declines follows the consensus reached at a meeting convened by the National Institute of Child Health and Human Development (NICHD) to examine this very issue. This meeting involved researchers from AGI, the National Center for Health Statistics (NCHS), the Urban Institute, Child Trends and the National Campaign to Prevent Teen Pregnancy. And despite The Physicians Consortium's charge that AGI's study was not externally reviewed, it was in fact reviewed and revised based on comments from researchers at NICHD, Child Trends and NCHS.

A variety of researchers, using different time periods, data sets and approaches, have examined teenage pregnancy declines and, like AGI, all conclude that both increased abstinence and improved contraceptive use played significant roles. Indeed, even the *AFH* study, if read closely enough, shows that both reduced levels of sexual activity and reduced pregnancy rates among sexually active young women contributed to the decrease in teenage pregnancy rates and birthrates.

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[1] Mohn JK, Tingle LR and Finger R, "An analysis of the causes of the decline in non-marital birth and pregnancy rates for teens from 1991 to 1995," *Adolescent and Family Health,* 2002, 3(1):39-47.

[2] Darroch JE and Singh S, *Why is Teenage Pregnancy Declining? The Roles of Abstinence, Sexual Activity and Contraceptive Use,* Occasional Report, New York: The Alan Guttmacher Institute, 1999, No. 1.

However, the *AFH* study's bottom-line conclusion—that increased abstinence is responsible for the entire decline in birthrates among unmarried teenagers and most of the decline in pregnancy rates—is inaccurate and misleading because of at least four significant methodological flaws in its analytical approach:

1) **Separating teens by marital status ignores when and why teenagers marry and leads to inaccurate conclusions:** The *AFH* article and its presentation by The Physicians Consortium inappropriately treat unmarried teenagers as a separate population from married teenagers, with distinctly different behaviors and birthrates and pregnancy rates. In fact, these are not independent groups of teenagers: Many teenagers marry while they are pregnant, so that nonmarital conceptions become marital births. As a result, changes in the behavior of unmarried women (fewer pregnancies, or fewer pregnant women deciding to get married before giving birth) can appear as changes in marital birthrates and pregnancy rates—even when there is no change in behavior among already married women. AGI researchers discussed these interrelationships and appropriately did not separate teenagers by marital status in their analysis.

2) **Analyzing birthrates alone ignores the impact of abortion and obscures declines in unintended pregnancy:** The birthrate analyses presented in the *AFH* article are inadequate because they do not take into account changes in the proportion of pregnancies ending in birth vs. abortion, which obscure improved prevention of pregnancy by sexually active teenagers. The Physicians Consortium presents the apparent rise in birthrates among sexually active unmarried teenagers as evidence of a failure of contraceptive use when, in reality, it results from fewer abortions among unmarried pregnant teenagers and fewer marriages among those who are giving birth. AGI researchers tested the impacts of decreasing proportions of teenage pregnancies ending in abortion and appropriately focused further analysis on factors accounting for the changes in the underlying teenage pregnancy rate.

3) **Using data collected in 1995 for 1991 behavior may introduce recollection bias:** In order to compare behavior in 1991 and 1995, the *AFH* study relies on women's recollection of sexual behavior extending as far back as four or more years, and places those reports on an equal footing with data collected in 1995 about recent experiences. However, many people report an earlier age for their first sexual experience in retrospective reports than they do when interviewed closer to the time of the event. Such a reporting bias would create the illusion that the decrease in sexual activity among unmarried teenagers between 1991 and 1995 was larger than it actually was. In contrast, the AGI analysis focused on survey data from 1988 and 1995 in order to take advantage of information gathered in similar ways at both points in time, and relied on a relatively short recall time, ensuring greater accuracy.

4) **Ignoring available data and failing to investigate possible changes in sexual behavior and contraceptive practice among sexually experienced teenagers weakens conclusions:** Whereas AGI's analysis measures the impact of abstinence (defined as never having had sex) as well as four different measures of the frequency and continuity of sexual behavior, the *AFH* study focuses simply on changes in the proportions of teenagers who had had sex within the past year. Further, the AGI analysis assesses the

contributions of various measures of contraceptive use towards declines in the teenage pregnancy rate among sexually experienced young women. The *AFH* analysis ignores available data and does not investigate the reasons behind those declines. In contrast, AGI's analysis estimates the relative contributions of both abstinence and behavior change among those who had had sexual intercourse, including the frequency of sexual intercourse, levels of contraceptive use and the types of methods used.

Future research, relying on newer data, will shed light on whether and how these patterns may have changed in the late 1990s and the current decade. The AGI analysis, however, currently offers appropriate and more complete answers regarding why teenage pregnancy rates and birthrates have declined.

For a background document providing a more in-depth analysis of the AFH *article, please contact Rebecca Wind at 212-248-1953.*

Click here to read the Occasional Report: Why is Teenage Pregnancy Declining? The Roles of Abstinence, Sexual Activity and Contraceptive Use.