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Are Teen-Tot Services Better Than Traditional Primary Care for Teen Mothers and Their Infants?

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Source: Lewin A. Mitchell S, Beers L, et al. Improved contraceptive use among teen mothers in a patient-centered medical home. J Adol Health. 2016;59(2):171-176; doi:10.1016/j.jadohealth.2016.04.007. See AAP Grand Rounds commentary by Dr. Charlene Wong (subscription required).

At first, I wasn't going to comment on this article because it centers on my own institution, perhaps clouding my judgment. However, once I read the article, I thought it illustrated some important cautionary lessons about how to spot misleading statements in original research. Basically, I think the authors put a positive "spin" on their findings that isn't justified.

The study looked at use of contraceptives of any type, as well as condom use separately, in teenage mothers who received care at teen-tot clinics where both mother (under 19 years of age for this study) and baby (less than 6 months old) are seen by the same doctor (n=73), compared to care provided in more standard primary care offices (n=50). The main interventions for the teen-tot encounters, in addition to 1 provider seeing both mother and infant, are the availability of social work services and mental health screening and treatment.

The authors concluded that the teen-tot program "is an effective intervention for improving contraceptive use among teen mothers..." This presumably was based on the finding that the odds ratio for effective contraceptive use (including abstention) at 12-month followup in the teen-tot program mothers was 3.35, statistically significant with a p value of 0.01. Similarly, condom use odds ratio was 2.29 (p=0.04). Buried in the body of the article, however, are the results of the logistic regression model that attempted to correct for a variety of covariates that might influence the findings. When this was done, the odds ratio for any contraceptive use dropped to an insignificant level. The biggest factor affecting contraceptive use was whether the mother was romantically involved with the baby's father; these women had considerably lower rates of contraceptive use.

The authors correctly pointed out the standard limitations of this type of study: small sample size, use of questionnaires/self-reporting, and limits of generalizability given that virtually all the mothers were African-American and of lower socioeconomic status. I also wondered about whether the accessibility of the different clinics was similar; for example, offering appointments at more convenient times such as nights or weekends can greatly impact healthcare utilization. From a statistical reporting standpoint, I would have liked to see a power analysis for their sample size.

If you just read the abstract of the study, you might be led to believe that the authors were justified in their bottom-line statement that I quoted above. However, their data actually show that they failed to show a difference in the 2 approaches. But hey, this was a study from an institution in Washington, DC, during a big election year, so perhaps the authors got carried away in their enthusiasm and took a lesson from the political spinmasters. It is the responsibility of journal editors to help contain these overstatements, and the Journal of Adolescent Health didn't rise to the occasion.

The authors mentioned that they are planning a 2-year follow-up report that will include pregnancy rates, which is a more definitive outcome than self-reported contraceptive use. I hope they also are tracking rates of sexually transmitted infections, another important outcome. I look forward to their next publication.

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