Meta-Analysis of Federally Funded Teen Pregnancy Prevention Programs: Final Study Report

Beginning in 2010, the U.S. Department of Health and Human Services (HHS) funded a variety of interventions and evaluations addressing teen pregnancy prevention. HHS also undertook a quantitative synthesis of the findings from all of these evaluation efforts, using meta-analytic techniques to systematically analyze and summarize the findings.

Purpose of the Meta-Analysis

The purpose of the meta-analysis—a statistical analysis of data from several evaluations—was to investigate whether and how individual elements of program design, program implementation, and/or participant demographics were associated with program impacts on adolescent sexual behavior.

The findings serve three related purposes: (1) to help program model developers design more effective programs; (2) to help practitioners select program models most appropriate for their communities and their local youth populations; and (3) to help guide decisions by federal, state, and local entities.

How was the study conducted?

Researchers extracted data from 53 independent evaluations using standard systematic reviewing and meta-analysis procedures. The evaluation samples included 57,354 youth and represented 45 distinct teen pregnancy prevention program models. The analysis focused on behavioral outcomes directly related to sex, contraception, and pregnancy that had been pre-specified in the studies’ analysis plans as being the most important (“confirmatory”) measures of program success.
Findings

On average, the HHS-funded programs in the meta-analysis had small favorable effects on their most important outcomes. In particular, these programs significantly reduced risky sexual behaviors as measured by their pre-specified confirmatory outcomes. However, the effect size was modest.

There was not much variation in effect sizes across the 53 evaluations, and as a result the researchers had little success identifying the potential sources (e.g., program or population characteristics) of the limited variation. However, researchers identified one program characteristic potentially linked to program effectiveness: program setting. In particular, programs delivered in classrooms were less effective than programs delivered in other settings such as clinics, after-school settings, participants’ homes, and online.

There were hints that two other program characteristics may be associated with program effectiveness: programs designed exclusively for girls and programs that delivered services to individual youth rather than groups of youth. The statistical evidence for these findings is weaker, but suggests areas that may be worth further examination in future studies.

Strengths and Limitations

HHS’s emphasis on rigor and transparency, along with a requirement that grantees collect standardized behavioral outcomes, ensured that findings could be meaningfully compared across evaluations. The number of newly funded evaluations also represented a dramatic expansion of the TPP evidence base. However, the sample is too small to support good estimates of how combinations of factors (such as group composition, age, and participant level of risk) affect success. As a result, most analyses in this report were limited to the effect of a single variable.

Conclusions

On average, these HHS-funded programs caused a small reduction in risky sexual behaviors and their consequences. This is promising news for the field. The finding that programs delivered in classrooms are less effective than programs delivered in other settings—and hints that programs designed for girls and those programs with individualized delivery may be more effective than other programs—suggest the need for a better understanding of whether combinations of factors ultimately influence engagement in risky behaviors. Increases in the number of well-designed studies can increase our ability to investigate clusters of program and individual characteristics.

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