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.

Data sources for the analysis

The meta-analysis synthesized findings from three HHS-funded grant programs:

The Teen Pregnancy Prevention (TPP) Program, funded by the Office of Adolescent Health (now the Office of Population Affairs), devoted the majority of funding to programs with some evidence of effect (Tier 1); a smaller portion of funds were dedicated to program models that incorporated innovative and untested additions to evidence-based programs or were previously untested approaches (Tier 2).

The Personal Responsibility Education Innovative Strategies (PREIS) program, administered by the Family and Youth Services Bureau (FYSB), supported grants to implement innovative or untested adolescent pregnancy prevention strategies with a focus on interventions that filled gaps with new, promising programs for high-risk youth.

The Personal Responsibility Education Program (PREP), also administered by FYSB, funded state, Tribal, and competitive grants to support projects to educate youth on both abstinence and contraception, including specific high-risk populations. PREP projects implemented effective, evidence-based program models and incorporated adulthood preparation subjects.

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.

Disclaimer: This publication was prepared by Abt Associates under Contract No. HHSP233201500069I from the Office of Population Affairs (OPA). Its contents are solely the responsibility of the authors and do not necessarily represent the official views of OPA or the U.S. Department of Health and Human Services.

