Implementation and Baseline Findings from a Randomized Controlled Evaluation of the Parent Corps Substance Use Prevention Initiative

Jennifer C. Gard, MPH, Olivia Silber Ashley, DrPH, Beth M. Lasater, MSPh, Linda Bailey-Stone, BS, David Heller, BS, Cindy Herman-Stampf, PhD, Karl Baum, PhD, David Roe, MA, Michael Bradshaw, BS, Paula Jones, BS, Kelly Arey, MA® - RTI International, Research Triangle Park, NC, Corporation for National and Community Service, Washington, DC

1. Background
- Despite evidence of parents' influence on adolescent substance use effectiveness of parent-led prevention group approaches have not been fully evaluated
- Few outcome evaluation studies regarding young high-risk populations
- Methodological problems have included:
  - Small sample size
  - Lack of rigorous research design methodology
  - Little longitudinal data
- Programs have shown effectiveness in changing parent behavior but not adolescent substance use (Hiller, Grunbaum, & Berenberg, 1998)
- Parents involved in parent-led prevention activities may not be the same adolescents most at risk (Ritzler, Grunbaum, & Berenberg, 1998)
- High levels of parental monitoring of adolescents' activities
- Few outcome evaluation studies regarding young, high-risk populations (DeMarsh & Kumpfer, 1986)
- Methodological problems have included:
  - Small sample size
  - Lack of rigorous research design methodology
  - Little longitudinal data

2. Parent Corps
- One of four prevention priorities in President George W. Bush's 2003 National Drug Control Strategy
- A year-long effort to create a national training system and network of parents to form groups engaged in local substance abuse prevention
- Developed and implemented by National Families Action in 1996
- Funded by the Corporation for National and Community Service
- Program goals:
  - Parent involvement in substance abuse education
  - Parent involvement in substance abuse prevention
  - Evaluation funded by the Corporation for National and Community Service and conducted by RTI International in five states
  - Random sample of parent-child pairs at each school
  - Calculation of participant recruitment rates and program activities
  - Examination of characteristics of parent leaders and parent volunteers
  - Impact evaluation baseline findings:
    - Compared treatment and control group characteristics at baseline, using percentages, students' t tests, and chi-square tests
  - Compared with the 2003 NSDUH, Parent Corps evaluation adolescent participants reported:
    - Less likely to be heavy users
    - Less likely to be light users
    - Compared with the U.S. population, parent respondents are:
    - More likely to have married
    - More educated
    - 48% of parents reported receiving help with community services among at-risk schools

3. Objectives
- Describe Parent Corps program delivery
- Examine baseline findings from the impact evaluation of Parent Corps

4. Methods
- Implementation evaluation:
  - Mail survey in October 2005 to 20 parent leaders and 180 parent volunteers
  - 95% response rate among parent leaders
  - 90% response rate among parent volunteers
- Impact evaluation:
  - Group randomized experimental design
  - 22 schools matched into pairs in five states
  - Random sample of parent-child pairs in each school
- English-speaking parents living with a child aged 12 to 18 in grade 7, 8, 9, or 11
- 20% of schools in each state
- 60% cooperation rate among parents
- 46% cooperation rate among parents
- Household telephone interview with parent-child pairs from October 24 to January 2005
- Parents involved in parent-led prevention activities may not have adolescents most at risk (Klitzner, Gruenewald, & Bamberger, 1990)
- Good comparability of treatment/control groups
- 95% response rate among parent leaders
- 20% response rate among parent volunteers
- High levels of parental monitoring of adolescents' activities

5. Data Analysis
- Examine characteristics of parent leaders and parent volunteers
- Examined program evaluation findings:
  - Compared treatment and control group characteristics at baseline, using percentages, students' t tests, and chi-square tests
  - Compared with adolescents responding to the 2003 NSDUH:
    - Parent Corps evaluation adolescent participants reported:
      - Lower frequency of past-month cigarette and marijuana use
      - Lower frequency of lifetime tobacco and illicit drug use
      - Lower frequency of most recent tobacco or illicit drug use

6. Implementation Evaluation Results
- At 19 of 20 Parent Corps schools, one parent leader was hired and trained and each school recruited and managed parent volunteers
- Parent leaders and volunteers recruited parents at school and home via telephone and e-mail
- Each parent leader recruited and trained a median of 10 parent volunteers
- Parent volunteers reported spending little time on Parent Corps activities
- Only half recruited other parents into the program
- Most parent leaders and parent volunteers are female

7. Impact Evaluation Baseline Results
- No statistically significant differences among treatment and control groups of adolescents regarding lifetime substance use and most demographic characteristics
- Compared with adolescents responding to the 2003 NSDUH:
  - Parent Corps evaluation adolescent participants reported:
    - Higher prevalence of lifetime alcohol use but lower prevalence of most recent alcohol use
    - Lower prevalence of lifetime tobacco or illicit drug use, as well as lower prevalence of most recent tobacco or illicit drug use
    - Lower frequency of past-month cigarette and marijuana use

8. Discussion
- Implementation evaluation findings:
  - 1 out of the 20 Parent Corps schools did not implement the program
  - Lower parent volunteer participation and recruiting
  - Parent volunteer rates may not be well-defined
- Impact evaluation baseline findings:
  - Good comparability of treatment/control groups
  - Low risk adolescents, as in previous evaluations of parent-led prevention groups

9. Limitations
- All data are self-reported
- Possible recall bias
- No records review for implementation evaluation
- Poor response rate among parent volunteers prohibiting many planned analyses
- Low response rates among parent-child pairs may not reflect the opposite study condition
- Telephone surveys have been shown to produce less valid results than other self-report methods (Aquilino, 1994; Tanner, Leesley, & Gilbert, 1992)

10. Implications for Future Prevention Programs
- Implications of Parent Corps may need to be improved
- Retention and supervision of parent volunteers is needed
- Targeting of more diverse populations of adolescents may be beneficial
- Future funding should focus on implementation improvements until effectiveness data are available to inform decisions about expansion or dissemination
- Impact evaluation will improve missing data, weight responses to the demographic profile of each school, and control for baseline differences and contamination between study conditions