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## ABSTRACT

This 7-year study examined the consequences of early pregnancy and parenting for girls with serious emotional disturbances (SED) and risk factors identified with teenage pregnancy. Risk factors that were examined included sociodemographic characteristics, psychological characteristics, and psychopathology. The 109 participants in the study were recruited from residential mental health and community-based special educational programs. Data collection procedures included interviews with girls, telephone interviews with their parents, and performance on psychological measures. Results indicated: (1) among the sample of 190 girls, 78 had children during the 7-year study; (2) age at first pregnancy ranged from 13 to 22 years; (3) girls of color were more likely to become pregnant earlier than Caucasian girls and almost twice as likely to get pregnant; (4) girls from lower income families were 45 percent more likely to get pregnant than girls from higher income families; (5) early pregnancy also was associated marginally with participants' mothers having been teenagers themselves when they first gave birth; (6) girls who dropped out of school were over 3 times more likely to get pregnant after dropping out than girls who did not drop out; and (7) conduct disorder was associated with early pregnancy, but not self-esteem or family cohesion. (CR)

# *Pregnancy in Adolescent Females with Serious Emotional Disturbance: Risk Factors and Outcomes*

## **Introduction**

Adolescent pregnancy has been of long standing societal concern. One aspect of concern has been the frequent difficulties experienced by young mothers in providing for and taking care of their children. Another aspect has been the economic cost of aid to teenage parents, which has been estimated at \$25 billion annually (Wilcox, Chase-Lansdale, Scott-Jones, & Osofsky, 1995). For teenage mothers with serious emotional disturbance (SED) these concerns are magnified because of the numerous complications associated with having a psychological disorder. Presumably, parenthood is more problematic for adolescent mothers with SED. On the other hand, these young mothers may experience positive psychological changes in their lives because of motherhood. For example, they may have higher self-esteem after giving birth in comparison with their peers who do not have children, and their self-esteem may increase over time as children mature. To answer questions regarding consequences of early pregnancy and parenting for girls with SED, we examined such outcomes as changes in self-esteem, family cohesion, living arrangements, income, and receiving public assistance. To determine those characteristics that predicted early pregnancy, we examined three groups of risk factors identified with teenage pregnancy. Risk factors that were examined consisted of the following: (a) sociodemographic characteristics (i.e., race/ethnicity, family income, age of the participant's mother when she first gave birth, and school dropout status); (b) psychological characteristics (i.e., self-esteem and family cohesion), and; (c) psychopathology (i.e., DSM-III-R diagnosis of conduct disorder, depressive/anxiety disorder, and alcohol/drug disorder).

## **Method**

Data for this study were part of the National Adolescent and Child Treatment Study (NACTS)—a longitudinal 7-year study of children with SED and their families (Greenbaum et al., 1996). Participants were recruited from residential mental health and community-based special educational programs in six states (i.e., Alabama, Mississippi, Florida, Colorado, New Jersey, and Wisconsin). Among the 202 girls in the NACTS sample, 190 met eligibility criterion (i.e., IQ greater than 55) for the current study. The resulting sample was predominately Caucasian (67%), with the remainder being African American (23%), Hispanic (7%), or other race/ethnicity (3%). Girls ranged in age from 8 to 18 years ( $M = 14.19$ ,  $SD = 2.24$ ).

Data collection procedures included face-to-face interviews with girls and telephone interviews with girls' parents. Instruments administered were the Child Behavior Checklist/4-18 (CBCL/4-18; Achenbach, 1991),

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the Diagnostic Interview Schedule for Children (DISC-C: Costello, Edelbrock, Dulcan, Kalas, & Klaric, 1984), the Family Adaptability and Cohesion Evaluation Scales (FACES III: Olson, Portner, & Lavee, 1985), and the Rosenberg Self-Esteem Scale (Rosenberg, 1965). Risk factors associated with pregnancy were analyzed using survival analysis (i.e., Cox regression), and outcomes were examined using growth curve analysis (i.e., hierarchical linear modeling).

## Results

### Risk Factors

Among the sample of 190 girls, 41% ( $n = 78$ ) had children during the 7-year study. An additional 7% ( $n = 14$ ) had pregnancies that did not result in live births (i.e., miscarriages or abortions). Age at first pregnancy ranged from 13 to 22 years ( $M = 17.48$ ,  $SD = 0.74$ ). Girls who had pregnancies were compared on all risk factors with those who did not get pregnant. Examination of race/ethnicity indicated that girls of color were more likely to become pregnant earlier than Caucasian girls. Results of survival analysis indicated that girls of color were almost twice as likely to get pregnant as Caucasian girls,  $\chi^2(1, N = 182) = 8.66$ ,  $p < .01$ , Risk Ratio = 1.91. Additionally, when household income was examined as a risk factor, girls from lower income families were 45% more likely to get pregnant than girls from higher income families,  $\chi^2(1, N = 147) = 5.35$ ,  $p < .05$ . Early pregnancy also was associated marginally with participants' mothers having been teenagers, themselves, when they first gave birth. Specifically, girls whose mothers were teen moms were 53% more likely to get pregnant than girls whose mothers were not teen moms,  $\chi^2(1, N = 144) = 3.41$ ,  $p < .06$ , Risk Ratio = 1.53. Another risk factor that was found to be a strong predictor for early pregnancy was school dropout. Girls who dropped out of school were over 3 times more likely to get pregnant after dropping out than girls who did not drop out,  $\chi^2(1, N = 125) = 21.83$ ,  $p < .001$ , Risk Ratio = 3.61. Neither self-esteem nor family cohesion was associated with early pregnancy,  $\chi^2(1, N = 115) = 0.03$ ,  $p > .05$  and  $\chi^2(1, N = 175) = 0.33$ ,  $p > .05$ , respectively. Among psychopathology risk factors, only conduct disorder was found to be a strong predictor of early pregnancy. Girls with conduct disorder were almost twice as likely to get pregnant early than those without a conduct disorder,

$\chi^2(1, N = 168) = 6.89$ ,  $p < .01$ , Risk Ratio = 1.79. A multiple predictor survival analysis that included all of the selected risk factors indicated that only conduct disorder and income were significant unique predictors of early pregnancy,  $\chi^2(1, N = 114) = 7.41$ ,  $p < .01$  and  $\chi^2(1, N = 114) = 4.53$ ,  $p < .05$ , respectively.

### Outcomes

Examination of outcome variables indicated that dropping out of school was more frequent for girls who had children. That is, girls who had children were over twice as likely to drop out of school when compared with girls who did not have children,  $\chi^2(1, N = 148) = 10.34$ ,  $p < .01$ , Risk Ratio = 2.25. Moreover, girls who had children were over three times as likely to be receiving public assistance as girls who did not have children,  $\chi^2(1, N = 129) = 16.41$ ,  $p < .001$ , Risk Ratio = 3.29. Girls who had children were also more likely to live independently (i.e., by themselves or with a nonfamily partner),  $\chi^2(2, N = 128) = 14.48$ ,  $p < .01$ , Risk Ratio = 1.74. Although univariate analyses indicated that having a child was significantly associated with increased self-esteem, subsequent multivariate analyses revealed that this relationship was confounded with girls' age (i.e., the effect of having a child on self-esteem could not be separated from the effect of girl's age on self-esteem).

### Conclusions and Implications

The results of the survival analyses indicated that the examined sociodemographic characteristics (i.e., race/ethnicity, income, participants' mothers age when they first gave birth, and school dropout status) are significant ( $p < .05$ ) predictors for early pregnancy. The findings also support previous research (e.g., Kovacs, Krol, & Voti, 1994) that found conduct disorder to be a strong predictor for early pregnancy among clinically referred girls. This study indicated that among girls with SED, those with conduct disorder and those who dropped out of school are at greatest risk of becoming pregnant earlier. Results support the need for indicated preventive intervention programs that contain a mental health component for girls with conduct disorder and an educational component for girls who drop out of school. The results did not support the hypothesis of positive psychological change as a consequence of child birth.

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