Early Childbearing and Low Cognitive Ability

TABLE 4. Odds ratios (and 95% confidence intervals) from logistic regression analyses reflecting the risk of early childbearing, by selected characteristics, according to poverty status

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Nonpoor (N=1,216)</th>
<th>Poor (N=775)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cognitive ability</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fourth quartile (ref)</td>
<td>1.00</td>
<td>1.00</td>
</tr>
<tr>
<td>Third quartile</td>
<td>1.30 (1.10–1.60)***</td>
<td>1.00 (0.78–1.20)</td>
</tr>
<tr>
<td>Second quartile</td>
<td>1.40 (1.10–1.80)***</td>
<td>1.00 (0.70–1.30)</td>
</tr>
<tr>
<td>First quartile</td>
<td>3.00 (1.70–5.10)***</td>
<td>1.10 (0.60–2.10)</td>
</tr>
<tr>
<td>Age at first sex</td>
<td>0.41 (0.36–0.47)***</td>
<td>0.32 (0.27–0.39)***</td>
</tr>
<tr>
<td>Sexuality education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>0.66 (0.46–0.93)***</td>
<td>0.61 (0.41–0.89)***</td>
</tr>
<tr>
<td>No (ref)</td>
<td>1.00</td>
<td>1.00</td>
</tr>
<tr>
<td>Highest grade expected</td>
<td>0.79 (0.73–0.86)***</td>
<td>0.82 (0.75–0.90)***</td>
</tr>
<tr>
<td>(R^2)</td>
<td>0.33</td>
<td>0.40</td>
</tr>
</tbody>
</table>

**p<.01, ***p<.0001. Notes: Early childbearing is defined as having a first birth before age 18. na=not applicable. ref=reference group.

Women with low cognitive ability had nearly three times the odds of those with high cognitive ability of having two births before age 20, postponement of sex and having higher educational expectations both reduced a woman’s odds of having a second teenage pregnancy (0.7–0.9).

None of the possible interactions of the significant variables from the final logistic regression models were statistically significant. Poverty was the variable that most closely approached significance (p=16) and was considered a possible effect modifier. To examine this possibility, we stratified the sample by poverty status. Being in the lowest quartile of cognitive ability remained a strong predictor of early childbearing among nonpoor women (odds ratio, 3.0), but not for women in poverty (Table 4).

DISCUSSION

Our results convincingly show that low cognitive ability increases an adolescent’s odds of having an early birth. Two-thirds of women who had their first birth before age 18 had cognitive scores below the median of the entire NLSY sample. After we controlled for age, race and ethnicity, and geography, the percentile ranking of cognitive scores of adolescent women with and without early births still differed by 10–20 points; these data support the findings of other studies.

Although these results suggest a relationship between low cognitive ability and early childbearing, clearly, further research is needed to determine who is at greatest risk: women with mild, moderate or severe cognitive deficits.

We also found that women with low cognitive ability who have a first birth before age 18 have an increased risk of having a second before the age of 20. Nearly half of women with two teenage births had cognitive scores in the lowest quartile, suggesting that low cognition is an even greater risk factor for second early births than for first births. The reason for the increased risk is not clear.

Most second teenage pregnancies occur among sexually active young women who do not use contraceptives even though they do not want to become pregnant. Experiencing an unplanned pregnancy does not improve subsequent contraceptive behavior. Cognitive ability may influence many critical aspects of decision-making that influence young women’s sexual activity and contraceptive use. What many experts view as an unplanned action or consequence may, in fact, be caused by a young woman’s inability to make an informed, reasoned decision after weighing personal risk. Further research is necessary to illuminate this potential pathway to second pregnancies among teenagers.

In addition to examining the effects of low cognitive ability on first and second teenage births, we looked at the relationship between cognitive ability and other, well-documented antecedents of early childbearing. Low cognitive ability was associated with several reproductive risk factors (early age at sexual initiation, lack of sexuality education and lack of knowledge about when during the menstrual cycle a woman is most fertile) and social factors (educational aspiration, poverty and low self-esteem). These findings suggest that women with lower intellect are at increased risk of negative sexual outcomes. Consistent with these results, one study has indicated that as many as 68% of women with cognitive limitations will be sexually abused before the age of 18. Other experts suggest that such women are more vulnerable to sexual exploitation because of their need for attention and acceptance.

It is not clear from the data whether women with low cognition actually had less exposure to sexuality education or they were less likely to remember or effectively use the information they received. However, other research supports an association between low cognition and lack of sexuality education. Findings from a study of the information needs of people with cognitive limitations found that more than half wanted more information about contraception, dating and intimacy; one-third expressed a desire to know more about AIDS and pregnancy. Although health education programs are rarely designed to take into account adolescents with cognitive limitations, ensuring comprehensive sexuality education for such teenagers could help decrease sexual abuse among this population.

Furthermore, our data show that as cognitive ability increased, so did young women’s aspirations. Previous studies have shown a relationship between school experiences and adolescent pregnancy. Having low educational aspirations and experiencing a pregnancy as an adolescent are among the most commonly observed markers of deviant behavior associated with low intelligence and disadvantaged social status. Clearly, cognitive ability influences school success, and success in school raises educational aspirations. If young women with low cognitive ability have minimal success in school, they may feel bad about themselves and about their futures. In this light, early childbearing may appear to them to be an appropriate and positive life choice.