Sex Education and Sexual Experience among Adolescents

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Abstract: This paper examines the association between sex education and adolescent sexual behavior. Data from the 1981 National Survey of Children show that 15- and 16-year-olds who have been exposed to sex education are less likely to be sexually experienced, and are neither more nor less likely to discuss sex with parents at home. Retrospective or longitudinal data are needed to more directly test the causal link between sex education and experience. (Am J Public Health 1985; 75:1331-1332.)

Introduction

Sex education in the public schools is a controversial subject,\(^1\)\(^2\) despite the large majority of Americans who favored such programs since the 1940s,\(^2\) and the increasing implementation of such programs in the past decade or so. A number of critics argue that classroom instruction may actually promote sexual activity.\(^3\) Others have begun to question the efficacy of sex education on different grounds. In a nationwide assessment of model programs, Kirby found that sex education increased students' knowledge but had little or no effect on the timing of sexual behavior, on contraceptive use, or on pregnancy rates.\(^4\) An earlier study by Zelnik and Kim reached partly overlapping conclusions.\(^5\) Like Kirby, they found no consistent relationship between the reported exposure to sex education and the occurrence of sexual activity among their national sample of adolescents living in metropolitan areas. However, those exposed to sex education were more likely to practice contraception and less likely to become premaritally pregnant. Together these studies suggest that sex education does not promote precocious sexual intercourse, an important conclusion in need of further validation. However, little other systematic data exist on the relationship of sex education programs to adolescent sexual behavior and pregnancy,\(^6\)\(^7\) a situation that undermines attempts to assess the promise of sex education as a preventive strategy.

This paper examines a fresh source of data on the association between sex education and sexual behavior. Although these data do not permit tests of causal hypotheses because they contain no retrospective questions on dates of onset of sexual activity or dates of sex education, they do allow us to look for patterns of association that are either consistent with or inconsistent with such hypotheses.

Methods

Our information comes from the second wave of the National Survey of Children (NSC), conducted in 1981. The survey is based on a nationally representative household sample of children between the ages of 7 and 11 in 1976, the time of the first wave. A completion rate of 80 per cent was achieved at each wave. To ensure the representativeness of the results, weights have been assigned to take account of a designed over-sample of Blacks, designed subsampling for the second wave, and minor discrepancies between sample and United States Census estimates of the target population by age, sex, race, and residence. A full description of the data collection procedures is available in previous publications.\(^8\)\(^9\)

Our analysis is based on a set of questions asked of the nearly 500 15- and 16-year-olds in the sample. They were asked how many of their friends were sexually active; if they themselves had ever had sexual intercourse; whom, if anyone, in their family they talked to about sex; and if they had ever had a course on sex education at school. Except for the 16-year-old females, who may have underreported their own sexual activity,\(^10\)\(^11\) the rates of sexual activity reported in this survey are reasonably consistent with those reported in other surveys.\(^12\)\(^13\) As in other surveys, males were more likely than females to have had sexual intercourse (23 per cent vs 18 per cent) and Blacks more likely than Whites (36 vs 18 per cent).

There are inevitably some limitations in the data. With the cross-sectional design and lack of retrospective questions, we cannot test for a causal link between sex education and behavior. Moreover, the question on sex education is not very specific, permitting the respondent some latitude in interpretation. Finally, self-reports of sexual experience are subject to response bias, most often in the direction of underreporting.

Results

Sex Education and Sexual Experience

The data (Table I) show that the overall reported prevalence of sexual intercourse is over 50 per cent higher among youth who did not have a course in sex education (26 vs 17 per cent). This result is consistent with the notion that sex education is effective at reducing sexual activity; but there are other possible interpretations. For example, youth exposed to sex education programs that advocate postponement of sexual activity might be more likely to underreport their level of sexual experience. To narrow the range of interpretation, we tested this association in a number of ways.

- First, the association was examined within race/sex subgroups. The negative association between sex education and sexual activity held up for all subgroups except Black males. Indeed, the pattern of association was actually reversed slightly for Black males—37 per cent without sex education were sexually experienced, compared with 41 per cent for those with sex education. Since many Black males initiate intercourse at very young ages,\(^14\)\(^15\) sex education may be offered too late to affect them greatly.
- Second, the association was only diminished slightly in a multivariate analysis that held constant a variety of background factors that might have created a spurious connection between two variables: family income, mother's education, the mother's age at first birth, family structure, and community size.
- Finally, we reasoned that sex education programs, usually of limited duration, are likely to be less influential than peers, so that the association between sex education...
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TABLE 1—Percentage of 15- and 16-Year-Olds Who Are Sexually Active by Exposure to Sex Education, Gender, and Race (National Survey of Children)

<table>
<thead>
<tr>
<th></th>
<th>Exposed</th>
<th>Received</th>
<th>Did Not Receive</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total</strong>*</td>
<td>20.2</td>
<td>16.5</td>
<td>25.5</td>
</tr>
<tr>
<td><strong>White</strong>*</td>
<td>17.5</td>
<td>14.1</td>
<td>22.7</td>
</tr>
<tr>
<td><strong>Males</strong></td>
<td>20.1</td>
<td>16.4</td>
<td>27.6</td>
</tr>
<tr>
<td><strong>Females</strong></td>
<td>14.9</td>
<td>11.4</td>
<td>19.2</td>
</tr>
<tr>
<td><strong>Black</strong></td>
<td>35.6</td>
<td>34.4</td>
<td>36.6</td>
</tr>
<tr>
<td><strong>Male</strong></td>
<td>38.6</td>
<td>40.7</td>
<td>36.6</td>
</tr>
<tr>
<td><strong>Female</strong></td>
<td>32.8</td>
<td>27.5</td>
<td>36.7</td>
</tr>
</tbody>
</table>

Numbers are weighted to adjust for sample selection and attrition.
*Significant at .05 level.

and sexual experience will be weaker for those with many sexually active friends. Such was the case among Blacks, but among Whites the association held up regardless of the reported level of sexual activity among friends.

Families as a Source of Sex Information

The claims of some critics that sex education programs erode the influence of parents are not supported by our data. Adolescents who report that they received sex education at school were neither more nor less likely to say they usually could talk to their parents about sex. Further, both sex education programs and the ability to discuss sexual matters with parents were individually associated with a lower prevalence of sexual intercourse, although instruction at school is more strongly related to postponement of sex than is the ability to communicate with parents about sex (see Table 2). The lowest prevalence of all was associated with the joint occurrence of sex education and communication with parents.

Discussion

Although the efficacy of sex education cannot be demonstrated with these associational data, the results are at least consistent with the proposition that sex education programs reduce the level of sexual activity, and that they supplement, rather than undermine, the influence of parents. The association is robust under a variety of controls, and is attenuated in expected ways for specific population subgroups—Black males and those with many sexually active friends (at least among Blacks). The difficulty of establishing causality points to the urgent need for the collection of retrospective or, preferably, longitudinal data designed to aid intelligent planning in an area that is badly in need of concerted social action. There is an urgent need to demonstrate whether and under what conditions sex education can serve to lower the incidence of early pregnancy.

TABLE 2—Per Cent of 15- and 16-Year-Olds Who Are Sexually Active by Exposure to Sex Education and Communication with Parents (National Survey of Children)

<table>
<thead>
<tr>
<th></th>
<th>Exposed</th>
<th>Talk to Parents</th>
<th>Do Not Talk to Parents</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total</strong>*</td>
<td>20.2</td>
<td>18.0</td>
<td>22.4</td>
</tr>
<tr>
<td><strong>Received Sex Education</strong></td>
<td>(472)</td>
<td>(236)</td>
<td>(236)</td>
</tr>
<tr>
<td><strong>Did Not Receive Sex</strong></td>
<td>25.5*</td>
<td>20.7</td>
<td>31.0*</td>
</tr>
<tr>
<td><strong>Education</strong></td>
<td>(197)</td>
<td>(105)</td>
<td>(91)</td>
</tr>
</tbody>
</table>

Numbers are weighted to adjust for sample selection and attrition.
*Significant at .05 level.

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REFERENCES