

Neighborhood-Level Influences on Young Men's Sexual and Reproductive Health Behaviors

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We used data from the 2002 National Survey of Family Growth to examine the influence of neighborhood characteristics on young males' sexual and reproductive health (SRH). We linked census-tract data to construct a Neighborhood Disadvantage Scale for 1092 never-married males aged 15 to 19 years, and we examined the association of neighborhood disadvantage with 11 SRH behaviors for each male. We found significant associations between neighborhood disadvantage and measures of partnering and pregnancy. Public health research and policies must consider the role of neighborhood context when addressing health behaviors. (*Am J Public Health*. 2011;101:271–274. doi:10.2105/AJPH.2009.185769)

There have recently been improvements in young men's sexual and reproductive health (SRH), brought on by such factors as increased condom use and delays in the onset of sexual activity.^{1,2} Still, more progress is needed to achieve the relevant SRH goals of *Healthy People 2010*.³ There is a growing recognition of the potential importance of neighborhood-level influences on SRH, with research facilitated by the development of data sets that link individual- and neighborhood-level measures.^{4,5}

Although the last decade brought a new focus on the SRH of young men,^{6–8} most investigations of neighborhood influences were limited to young women.^{9–12} Existing studies of contextual influences on young men have used older data with severe limitations.^{13–15} In addition, experiences in specific communities may

not be generalizable to a broader population.^{16–18} For example, Cubbin et al. used nationally representative data on in-school youth in 1994 and 1995 to find that neighborhood poverty was associated with greater likelihood of sexual intercourse for young men, but there was no significant association with contraceptive use.¹⁹ However, their study excluded out-of-school adolescents, who are disproportionately represented in disadvantaged neighborhoods, and it is relatively outdated, given the more recent changes in SRH behaviors of adolescents.²⁰ Accordingly, this study aims to use recent linked individual- and community-level data to identify the influence of neighborhood disadvantage on the SRH of young men.

METHODS

Data for this analysis were drawn from the male cohort of the 2002 National Survey of Family Growth, a nationally representative survey of the noninstitutionalized population aged 15 to 44 years in the United States, conducted by the National Center for Health Statistics.²¹ These individual-level data are linked with a confidential contextual file containing information regarding the respondents' neighborhoods at the census-tract level that the National Center for Health Statistics created on the basis of data from the 2000 US Census. Our analytical sample included 1092 never-married males aged 15 to 19 years with complete data on relevant measures.

Measures

We examined 11 dichotomous dependent SRH variables across a range of partnership, contraception, and pregnancy measures. Theoretically exogenous independent individual- and household-level variables were identified on the basis of studies in the literature.^{22,23}

We calculated a composite Neighborhood Disadvantage Scale for each respondent on the basis of 5 measures of the census tract where he resided. We chose the measures to reflect dimensions of neighborhood disadvantage, including socioeconomic characteristics, norms and opportunity structures, and social disorganization. Scale values were determined by how many of the 5 characteristics were in the top quintile (extremely disadvantaged); the Cronbach α coefficient of 0.74

was acceptable.²⁴ (We excluded racial/ethnic composition variables from the Neighborhood Disadvantage Scale to avoid confounding true measures of socioeconomic status with noneconomic correlates.) A composite scale helps identify meaningful differences among neighborhoods, providing equal weights to each distinct neighborhood-level measure.^{12,13,25,26} The individual components of the scale revealed stark differences between the most disadvantaged neighborhoods and other neighborhoods (Table 1). For example, the average male unemployment rate for the population residing in the census tract was 13% in the extremely disadvantaged census tracts and 4% in the remaining census tracts.

Analytical Methods

We conducted logistic regression analyses to examine the associations between community-level disadvantage, as measured by the Neighborhood Disadvantage Scale, and young men's SRH. Although we were interested in the effect of neighborhood characteristics on individual behaviors, we did not use multilevel methods in this analysis because the low level of clustering did not allow such models to be applied to these data. We used the *svy* command in Stata version 10.0 (StataCorp LP, College Station, TX), with sampling weights, to adjust for the National Survey of Family Growth's complex sampling design.

RESULTS

The overall mean of the Neighborhood Disadvantage Scale was 0.98 (on a scale of 0–5). Most young men (51%) lived in a census tract with no characteristics of extreme disadvantage; 35% and 15% lived in tracts with 1 to 2 and 3 to 5 characteristics of extreme disadvantage, respectively. Young men from more disadvantaged neighborhoods were significantly more likely to be non-White, not reside with both parents, have a mother who had a child before age 20 years, and have household income below the poverty line than were those residing in non-disadvantaged neighborhoods (Table 2).

Table 3 reports the 11 partnering, contraception, and pregnancy outcome variables and their weighted mean values as percentages, and

TABLE 1—Neighborhood Disadvantage Scale Variables Among Never-Married Males Aged 15–19 Years: National Survey of Family Growth, United States, 2002

Neighborhood Characteristics	All Respondents	Most Disadvantaged 20% of Respondents	Other 80% of Respondents
% population with 1999 income below federal poverty level, mean	12	28	9
% population aged 18–24 y with no high school diploma or equivalent, mean	28	49	22
% men unemployed, mean	6	13	4
% family households with own children younger than 18 y with female householder, no husband present; mean	20	40	15
% 2000 population aged ≥5 y not in same house as in 1995, mean	46	65	41

it presents the results from multivariate regression models that estimate the association of the Neighborhood Disadvantage Scale with the

outcome measures. In multivariate models that control for individual- and household-level characteristics, the scale had positive significant

associations with ever having had intercourse, having had 3 or more partners, having gotten a partner pregnant, and reporting being pleased about a pregnancy. The scale was significantly associated with a reduction in condom utility²⁷ but not with condom use or overall contraceptive use.

DISCUSSION

We used recent national data to examine the influence of community disadvantage on multiple dimensions of young men's SRH. We found significant associations between a multi-item scale of neighborhood disadvantage and measures of partnering and pregnancy, independent of individual- and household-level measures. By contrast, however, contraceptive use was not significantly associated with neighborhood disadvantage. In general, young men living in

TABLE 2—Percentage Distribution of Never-Married Males Aged 15–19 Years by Individual- and Household-Level Characteristics and Score on the Neighborhood Disadvantage Scale: National Survey of Family Growth, United States, 2002

Individual- or household-level characteristic	%	Neighborhood Disadvantage Scale ^a Distribution, %				P
		Mean	0	1–2	3–5	
All respondents	100	0.98	51	35	15	
Race/ethnicity						
Non-Hispanic White	64	0.6	64	30	7	<.001
Non-Hispanic Black	14	2.0	17	44	39	
Hispanic	16	1.7	26	45	29	
Other	6	0.8	54	39	7	
Household income as a percentage of federal poverty level						
<100%	20	1.5	33	41	26	<.001
100%–199%	21	1.2	44	37	19	
≥200%	59	0.7	59	32	10	
Mother had children during her own adolescence						
Yes	25	1.4	40	37	15	<.001
No	75	0.9	54	34	12	
Lived with both parents at age 14 y						
Yes	69	0.9	54	33	12	<.001
No	31	1.2	42	37	21	
Religious event attendance at age 14 y						
Once a week or more	54	1.0	50	33	17	.531
Less than once a week	32	0.9	50	38	12	
Never	14	0.9	52	23	14	

^aEach measure of the Neighborhood Disadvantage Scale was numbered 0 to 5, with 5 indicating the most disadvantaged level.

TABLE 3—Percentages of Never-Married Males Aged 15–19 Years Exhibiting SRH-Relevant Behaviors and Attitudes and Association Between Neighborhood Disadvantage Scale and SRH Measures: National Survey of Family Growth, United States, 2002

Dependent Variables	%	Adjusted Odds Ratios ^a
Partnering		
Ever had vaginal intercourse	45	1.23**
≥3 partners in lifetime	23	1.23**
Contraception		
No contraceptive use at first intercourse ^b	18	1.01
No contraceptive use at last intercourse ^b	10	1.03
Used condom at first intercourse ^b	71	0.93
Used condom at last intercourse ^b	73	1.06
Used female contraception method at first intercourse ^b	19	0.80
Used female contraception method at last intercourse ^b	39	1.00
High condom utility	50	0.85**
Pregnancy		
Ever got partner pregnant	7	1.22*
Pleased if got partner pregnant	14	1.28**

Note. SRH = sexual and reproductive health.

^aAdjusted models control for race/ethnicity, age, whether mother had a child before age 20 years, household poverty level, living arrangements at age 14 years, and religious event attendance at age 14 years.

^bAmong those who had ever had vaginal intercourse (n = 529).

*P < .05; **P < .01.

more disadvantaged neighborhoods appeared to be at greater reproductive health risk than are their peers. The socioeconomic status of communities played a salient role in influencing the SRH of young men.

Although the general challenges and limitations of investigating the influence of neighborhood on individual behavior and outcomes have already been well-reviewed,^{5,28,29} there are several important limitations particular to this study. For example, race/ethnicity and neighborhood disadvantage are highly confounded. This is not a shortcoming of the data; rather, it is a harsh reminder of the ongoing residential segregation of American life.

Further research might consider in-depth analyses of neighborhoods at multiple points in time, as a way to gain analytical leverage from changes in neighborhood disadvantage. In addition, we identified associations between neighborhood characteristics and young men's SRH, but we did not identify specific mechanisms mediating the association. This makes it difficult to recommend specific policy interventions. Regardless, this

study provides unique descriptive information not available from other sources. Our findings suggest that public health research and policies must consider the role of neighborhood context when addressing health behaviors. ■

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This article was accepted May 30, 2010.

Contributors

L.D. Lindberg developed the conceptual framework for the analysis, participated in data analysis, interpreted the data, and led the writing of the article. M. Orr led the data analysis and participated in data interpretation and the writing of the article. Both authors approved the final version of the article.

Acknowledgments

This project was funded by the Ford Foundation.

The authors are grateful for the generous assistance of Rosemary Hyson at the Baruch College Census Research Data Center.

Note. The conclusions and opinions expressed here are those of the authors alone, and not of the funding organization.

Human Participant Protection

No protocol approval was necessary because data were obtained from secondary sources.

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Parental Eligibility and Enrollment in State Children's Health Insurance Program: The Roles of Parental Health, Employment, and Family Structure

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We examined eligibility and enrollment among parents of children in New Jersey's State Children's Health Insurance Program following expansion of parental eligibility for NJ FamilyCare coverage. Data were from the 2003 NJ FamilyCare Family Health Survey (n=416 families). Parental eligibility was higher in households without a full-time employed parent (odds ratio [OR]=5.50; 95% confidence interval [CI]=2.72, 11.14) and lower among single parents (OR=0.38; 95% CI=0.23, 0.61). Enrollment was higher among single parents (OR=2.24; 95% CI=1.17, 4.31). Roughly one third of eligible parents did not enroll, suggesting the need to increase awareness of parental eligibility and reduce barriers to enrollment. (*Am J Public Health*. 2011;101:274–277. doi:10.2105/AJPH.2010.194654)

Nationally the State Children's Health Insurance Program (SCHIP) has made considerable progress in reducing the number of uninsured children from low-income families, but the lack of insurance among their parents has been a substantial and growing problem.¹ Policymakers in many states have recognized the need to provide affordable coverage options for low-income parents. Child uninsurance is lower when eligibility is extended to parents,^{2–7} and

retention of children improves when their parents enroll.⁸ To enroll and retain more children and improve parental coverage, under an SCHIP 1115 Waiver, in 2000 New Jersey's SCHIP extended eligibility to parents in families with income up to 200% of the federal poverty level who were not covered by other means. Despite much research on the importance of parental eligibility under the SCHIP, little is known about which parents actually enroll in the program. We examined parental eligibility and enrollment in NJ FamilyCare in single- and 2-parent families by parental employment and health characteristics. We hypothesized that families with an ill parent, with no full-time employed parent, and single-parent families would be more likely than would others to be eligible for and to enroll in the SCHIP.

METHODS

We used data from the 2003 NJ FamilyCare Family Health Survey—the most recent available survey data with information to calculate parental eligibility, enrollment status, health, and employment characteristics. Families with children enrolled in NJ FamilyCare (New Jersey's SCHIP) in the year preceding May 2002 were randomly selected for a telephone survey of the adult most knowledgeable about children in the family. The sample was stratified by enrollment status in January 2003, NJ FamilyCare plan level (based on family income), and whether parents were enrolled.⁹ The response rate was 52%. Parents were omitted from the sample if their family income was higher than 200% of the federal poverty level at the time their child enrolled, because parents would not qualify under the NJ FamilyCare eligibility criteria (n=246). Among those in the income-eligible range, cases were omitted if parents were employed but temporarily not working (n=21); their child was disenrolled at the time of the survey (n=2); parental demographics were missing (n=4); or family income was missing (n=2). Some cases fit more than 1 exclusion criterion. Final sample size was 416.

We constructed counts of the number of parents in the family who were eligible for NJ FamilyCare, and the number of parents who enrolled in NJ FamilyCare among those who were eligible. Parents with other insurance (employer-sponsored insurance, private,