The Role of Disability on Risky Sexual Behaviors among American Teenagers

Objectives: Risky sexual activity among adolescents is a considerable health risk which increases both the likelihood of unplanned pregnancy and the contraction of sexually transmitted disease. Prior research on sexual activity emphasizes the importance of demographic and socioeconomic indicators on risk behaviors for all adolescents. However, little is known about the factors that contribute to the increased likelihood of engaging in risky sex behaviors for young adults with disabilities. This study explores the mechanisms that influence teenagers with special health care needs to engage in sexual behaviors which may have a detrimental affect on adolescent health. We investigate the effect of disability status on the likelihood of participating in sexual intercourse with strangers or drug users, the decision not to use condoms at first sex, and the tendency for numerous sexual partners. We also consider the effects of youth well-being, the family organization and ecology in addition to demographic and socioeconomic indicators.

Background: Prior research indicates that it is important to consider disability status in predicting adolescent outcomes for two reasons. First, studies suggest that the presence of special health care needs in adolescents increases the likelihood of depression, low self-esteem, illegal substance use, and high-risk intercourse (Ramrkha et al 2000). Second, teenagers with disabilities are also more likely to grow up in poverty, in single-parent homes, and lower in socioeconomic status (Rogers and Hogan 2003). These characteristics of "risky family environments" – as well as other home dynamics such as parental monitoring and quality youth-parent relationships - play an important role in mediating the same types of behavioral outcomes irrespective of youth health status (Zaff and Moore 2002). Therefore, the sexual risk of youth with disabilities is two-fold; both disability status and at-risk home environments are likely to impact sexual outcomes. The link between these two pathways – and the implications affecting adolescent health - remains under-researched.

Studies on children with special health care needs suggest that disability status affects adolescent outcomes in several ways. Emotionally, children with disabilities are more

likely to report low levels of social attractiveness and feelings of inadequacy in group belonging (Dagnan and Sandu 1999). These indicators of low self-esteem are positively associated with sexual risk-taking behaviors (Seal, Minichiello and Omodei 1997) and are also linked to decreased confidence in proper condom and contraceptive use (Houlding and Davidson 2003). Structurally, women with disabilities face additional barriers to reproductive health and sexual risk - via physical and structural accessibility limitations, socioeconomic restraints, and educational gaps - which often restrict options for safe and effective contraception (Welner 1999).

As the primary source of sexual socialization for children, the family environment is also crucial in influencing teenage sexual intercourse experience. Socioeconomically, parent's education and poverty status are inversely related to teen's sexual health (Zelnik et al 1981, Upchurch et al 1998). Structurally, living with a single parent or stepparent reportedly doubles adolescent sexual risk (Flewelling and Bauman 1990), while residence with both biological parents is negatively associated with risky sex behaviors (Thornton and Camburn 1987). Finally, greater quality of youth-perceived family relations, effective communication about safe sexual behaviors, and increased monitoring of peer activities are all positively associated with lower sexual risk (Perrino et al 2000, Donenburg et al 2003). Furthermore, adverse childhood experiences and lower levels of parental involvement may lead teenagers to underestimate sexual risks and engage in risky sexual behaviors in order to establish interpersonal connections and gain social acceptance (Hillis et al 2001).

The physical development, academic transition, and evolving social and sexual encounters which take place throughout the teenage years make the home environment an important source of support and stability for all young adults. Teenagers with special health care needs, however, face dual pathways of risk – both via disability status and the greater likelihood of residing in strained households. Children with disabilities often require more extensive medical services and greater social resources than children without special health care needs, making the family environment especially crucial to this population's health and well-being. Furthermore, much of the responsibility for integrating children with disabilities into school and community life is contingent upon

family care-giving and support (Rogers and Hogan 2003), the same mechanisms which also influence sexual experience and ultimately, sexual health.

Dataset and Sample: The study uses the National Longitudinal Survey of Youth 1997 (NLSY97) which is a large, ongoing longitudinal survey, designed to be nationally representative of US residents born during the years 1980 through 1984. Seven rounds of annual interviews have been released. The sample for this study includes 4599 males and 4385 females who were 12 to 16 years old (as of December 31, 1996) at Round 1. At the end of round 7, they were 19 to 23 years old. Of the respondents, 1901 are Hispanic, 2335 are African American and 4665 are Non-Black and Non-Hispanic. In the sample, 4602 youths live in a household with both biological parents, 1356 young adults come from stepparent household, 2438 of the respondents are from single parent households, and 588 of the respondents have other type of living arrangement with no biological parent in the household.

A measure of youth disability in the NLSY97 was developed based on parent reports of four types of functional limitations, including learning or emotional disability, sensory limitations, physical disability, or chronic illness. These measures were collapsed by level of limitation to reflect disability status, ranging from no present disability to past disability (not currently limited), mild (limited a little), and severe (limited a lot). The validity of the disability measure was examined against other indicators associated with special health care needs, including overall health reports, school attendance records, and histories of remedial learning.

Of all the responding teenagers, 67.4% (5284 out of 7836) have not suffered from any types of disability either in the past or at the current period, 18.9% (1484) had suffered from disability in the past, 10.5% (826) have one or more mild disabilities, and 3.1% (242) have one or more severe disabilities. Of all the responding teenagers, 15.7% report having sex with a stranger or drug user in 2002, 12.2% report not using condom at first sexual intercourse and the mean number of sexual partners of the total population in 2002 is 2.6. Table 1 shows the relation between teenage disability status and involvement in the above mentioned risky sexual behaviors.

Table1. Disability Status, Risky Sexual Behavior, and Family Environment

	No Disability	Past Disability	Mild Disability	Severe Disability
Risky Sexual Behaviors				
Sex with stranger or drug user, 2002 (% of each disability status group)	14.87%	16.05%	18.43%	20.27%
Condom use at first sex (% of each disability status group)	88.77%	88.23%	85.12%	74.31%
Mean sexual partners, 2002 (For each disability status group)	2.50	2.55	3.26	3.55
Family Environment				
Poverty (100% ratio to poverty line)	24.34%	21.07%	29.37%	41.10%
Single Parent (% of each disability group living with one biological parent)	26.24%	25.86%	32.93%	37.39%
Both Biological Parents (% of each disability group living with both biological parents)	54.29%	52.32%	42.28%	31.53%
Parental College Education (% of each disability group with 1+ parent with college degree)	32.15%	31.64%	29.24%	20.50%

$p = <.001$ for all measures

The variation in sexual experience by disability status gives us the opportunity to examine the effect of disability on sexual behaviors which increase teenagers' health risk. Event history data also provides annual information about family situation, which can be used to measure shifting family environments as well as the instability of family situation. This study attempts to disentangle the dual effects of disability status and family environment on the likelihood of adolescent involvement in risky sexual behavior by investigating the effects of a special health care need on risky sexual behavior as well as the extent to which disability status is mediated by family and socioeconomic predictors.

Method: Logistic regression models will be used to investigate the effect of disability on teenagers' risk of becoming involved in risky sexual behavior — (1) the risk of having sexual interaction with strangers or drug users, (2) the risk of not using contraception at first sex, and (3) the risk of having numerous sexual partners. Interaction between

disability and family environment will be used in the model to test for the mediating effect of family environment. We are also planning to use additional statistical methods if necessary as suggested by further examination of the data to disentangle these two pathways of risk.

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