

# **Attitudes Toward Motherhood, Fertility Desires, and Birth Intentions by Disability Status among U.S. Women, 2006-2010**

Carrie L. Shandra, SUNY Stony Brook<sup>1</sup>

Dennis Hogan, Brown University

Susan E. Short, Brown University

## **Introduction**

Disability shapes participation in social roles. Surprisingly, although approximately 10% of women of reproductive age report disabilities, little demographic research has explored the relationship between disability status and attitudes toward motherhood and childbearing. This paper expands on prior research on the transition to adulthood among women with disabilities by focusing on the importance of motherhood as a feature of the successful life course, and as essential to women's own biographies. It presents the first summary of fertility attitudes and intentions by disability status for a nationally representative sample of U.S. women.

## **Background**

In the past four decades the position of persons with disabilities in the United States has changed dramatically. The de-institutionalization movement of the 1970s has resulted in many persons with physical, mental, and cognitive disabilities in activities of daily living moving out of institutions and into local communities. The scientific understanding of disability has been reconfigured to recognize that disability is a multidimensional status that is rooted both in individual persons and in interaction of persons with their environments (World Health Organization 2001). Among women of reproductive age these would include a) potentially disabling medical conditions (asthma, blindness, paraplegia), b) limitations in activities of

---

<sup>1</sup> Corresponding author. Email: [Carrie.Shandra@Stonybrook.edu](mailto:Carrie.Shandra@Stonybrook.edu)

daily living (getting in and out of a chair, walking short distances, bathing, feeding oneself, dressing, communicating), and c) limitations in social participation (participation in age and gender appropriate roles – spouse, worker, parent, driver, citizen).

The key element of the World Health Organization's framework is that it recognizes that disabilities are specific to particular environments that can either limit or promote the activities of persons with disabilities. For example, a person who cannot climb stairs is disabled in their ability to enter many buildings, but a person with a walker or wheelchair is not disabled in their access to a building with a ramp/elevator. A person who is unable to work an assembly line because of an inability to stand can do assembly line jobs if they are provided with a stool to sit on while doing the assembly activities. With recognition of the critical role of environment in translating disabilities into handicaps, there is now attention not just to rehabilitation but to 'enablement' that minimizes the handicaps associated with any particular medical condition and limitation in daily activities. The passage of the Americans with Disabilities Act in 1990 encapsulates this view into law – emphasizing the potential for all persons with disabilities to participate fully in American life, with appropriate medical care, rehabilitation, and accommodating social and physical environments.

During the period of institutionalization the sexual activities and reproductive potential of women with severe physical disabilities received limited attention. For those persons with limited mental capacity, living either in facilities or in the community, sterilization surgery was common (and often without consent). The situation now is dramatically different, although differences in reproductive behaviors remain between women with and without disabilities. Among adolescents, those with disabilities are far more likely to be unprepared for their initial sexual intercourse than those with disabilities – more often it is with someone

they do not have a romantic relationship with and in situations where they are 16 years old or younger with a partner 21 or older (in many states meeting the definition of statutory rape) (Hogan 2012). Girls with multiple or seriously limiting conditions are more likely than those without disabilities to want a pregnancy at first sexual intercourse (Shandra and Chowdhury 2012) and more likely to expect a teen pregnancy (Shandra 2011). However, other research has shown that early adult marriage and parenthood are practiced transition to adulthood options for women with cognitive, emotional, or mental health limitations (Wells, Sandefur, and Hogan 2003).

Other research on adult women with disabilities shows they often are sexually active, have a husband or partner, desire children, and are responsible for the care and nurture of those children. Women with limitations in motor skills, hearing and sight, limitations in self-care, mental illness, and other disabilities in daily activities are becoming pregnant at unprecedented rates (NICHD 2010). Ghidini and Simonson (2011) summarize research showing that at least 14% of women with spinal cord injuries have one or more pregnancies after injury and that the overall number of children born is similar to women without spinal cord injuries. Turk (2010) finds that while persons with cerebral palsy and spina bifida are less often sexually active and have lower rates of pregnancy compared to women without disabilities, they are at greater risk of preterm and Caesarian section deliveries. Kirschner (2010) reports that spinal cord injuries, cerebral palsy, multiple sclerosis, epilepsy, lupus, and rheumatoid arthritis are related to increased risk of preterm birth and/or low birth weight infants. Even so, women with disabilities can differ from women without disabilities in their desires to become a mother (Walsh-Gallagher, Sinclair, McConkey 2012).

This paper will use nationally representative data to examine how women with disabilities assess the rewards of motherhood, the importance of motherhood to their own identities, desire for motherhood, fertility intentions, and factors that may prevent them from becoming mothers. We consider how motherhood fits into the desired and anticipated transitions to adulthood of women with disabilities, whether they see motherhood as essential to their identities, and whether they are taking actions that will lead to pregnancy and childbirth. In addition to expanding studies of the transition to adulthood to include women with disabilities, this research will further inform researchers about the centrality of motherhood in women's lives, even in situations in which pregnancy is likely to be high risk and birth outcomes uncertain. This information will also lead to the better understanding of the adult planning aspect of the lives of women with disabilities.

### **Data and Measures**

To answer these questions it is essential that we use data that represents the entire reproductive age population of American women, including those who are not and have never been pregnant, making prenatal care or delivery-based sampling inappropriate. The National Survey of Family Growth (NSFG) is the premier U.S. survey for producing national estimates of factors affecting reproductive intentions and behaviors ([http://www.cdc.gov/nchs/nsfg/about\\_nsfg.htm](http://www.cdc.gov/nchs/nsfg/about_nsfg.htm)). We use the most recent NSFG data that was collected in a repeated cross-sectional survey with interviews conducted from June 2006 to June 2010 on representative samples of women age 15-44 years living in households in the United States. The annual samples are drawn independently and are pooled to represent the population of American women of reproductive age from 2006 to 2010. The sample included 12,279 women, of whom about 1,200 (10%) have a disability in activities. This paper

examines the situations of 3,457 childfree women age 18 to 44 years, of whom 322 have disabilities.

The NSFG ask women if they are “limited in any way in any activities because of physical, mental, or emotional problems?” Despite its simplicity, this measure provides a reasonable estimate of the proportion of women with disabilities in activities—about 10%, which is comparable to that of estimates for women of these ages based on the National Health Interview Surveys and the Surveys of Income and Program participation. The NSFG measure of disability refers to the present; it is not known when the onset of disability occurred. Accordingly, this paper focuses on differences in the attitudes, plans, and current behaviors of women. The NSFG provides detailed socioeconomic information for women as of the date of the survey, and information on the women’s family origins and current family situations—factors important in understanding fertility desires and family size intentions.

We examine four questions that measure childfree women’s attitudes toward motherhood and their intentions. The first (HAPPY) asks for level of agreement to the question, “People cannot really be happy unless they have children”. This is a four-category measure ranging from 1 (strongly agree) to 4 (strongly disagree), with higher levels indicating that women see motherhood as less important for happiness. The second (REWARD) asks, “The rewards of being a parent are worth it despite the cost and work it can be”, with responses ranging from 1 (strongly agree) to 4 (strongly disagree). Higher levels indicate less favorable assessments of motherhood. The third (BOTHER) is a four-category measure that asks, “If it turns out that you do not have any children would that bother you a great deal, some, a little, or not at all?”. Higher levels indicate women would be less bothered by not having children. Lastly, we also explore women’s own fertility intentions in a dichotomous indicator (INTEND) that predicts

whether the woman intends to have children (1) versus the reference category of not intending to have children (0).

Our analysis recognizes that women with disabilities and those without disabilities differ on numerous demographic and social indicators. Accordingly, our analyses control for race/ethnicity (Hispanic or non-Hispanic Black with the reference category of non-Hispanic white), age (including both linear and squared terms), poverty (two through four times the poverty level and greater than four times the poverty level with the reference category of less than two times the poverty level and below), education (high school, some college, college degree with the reference category of less than high school), married, and employed (whether the respondent was currently employed or temporarily on leave from a job).

### **Preliminary Results**

Our preliminary analysis focuses on women without children. We first estimate bivariate relationships between disability status, our four outcome variables (Table 1), and demographic controls (Table 2). Responses to these questions indicate that women with and without disabilities strongly believe that being a parent is worth it. Most women think a woman can be happy without having a child, and this is true both of women with and without disabilities. However, several significant differences emerge. Women with disabilities are somewhat less likely than women without disabilities to say they would be upset if they did not have any children. Furthermore, they are also less likely to report that they intend to have a child. Table 2 indicates notable demographic differences between women with and without disability. In this sample, women with disabilities are significantly less likely than those with disabilities to be financially secure (48% live in poverty versus 36%, respectively). They are also less likely to have a college degree and to be employed.

As a next step we estimate logistic regression coefficients considering the association between disability and attitudes toward motherhood, controlling for race/ethnicity, age, marital status, education, employment, and poverty status. Model 1 and Model 3 indicate no significant difference between having a disability and women's responses to the statements that they can't be happy unless they have children and feeling bothered if they were unable to have children.

The ordered logistic regression model examined in Model 2 indicates a positive relationship between having a disability and reporting that the rewards of being a parent are worth it. More specifically, for women with disabilities, the odds of strongly disagreeing with the statement versus the combined other categories are 1.4 times higher ( $e^{.349}$ ) than for women without disabilities, given the other variables are held constant. The binary logistic regression examined in Model 4 indicates a negative relationship between having a disability and fertility intentions. For a woman with a disability, the odds of reporting birth intentions are .059 times lower ( $e^{-.521}$ ) than for women without a disability.

These results indicate that women with disabilities are slightly less likely to regard the rewards of motherhood to be worth the costs but do not regard it as a general problem or as a disastrous development in their life course if they are unable to have a child. In these attitudes they are very similar to women without disabilities. That is, adult women with disabilities conceptualize and construct the parenting aspect of their life course as women without disabilities do, in spite of differences in such other aspects of the life course as educational attainment and employment. However, women who have a disability (and for whom it is possible to be a respondent to the verbal and computer assisted portions of the NSFG) are less

likely to report a birth intention. Lower intentions of a birth may result from their increased risk of pregnancy and delivery complications on average, and poorer birth outcomes.

### **Next Steps**

These results suggest important differences in fertility attitudes and intentions among childfree women with and without disabilities. Our next steps for this paper will be two-fold. First, we will expand our sample to consider how disability may affect how all women – those who are mothers as well as those who are childfree – think about parenting and fertility. In addition to the questions explored here, the NSFG includes information about childrearing attitudes that will help us understand the saliency of motherhood for women with disabilities. Expanding our perspective to include mothers will also allow us to assess how disability may be associated with subsequent births and intended parity. This population faces different constraints than women without disabilities throughout the life course – particularly when considering educational and employment opportunities. Motherhood, therefore, may become a particularly salient role, despite the increased challenges women with disabilities may face during and after pregnancy.

Second, we will look to explain *why* women with disabilities may have different fertility attitudes and intentions. More specifically, we will examine if differences in fecundity help explain the differences observed in Tables 2 and 3 for childfree women. We will also conduct formal tests of mediation to examine if discrepancies by disability status can be explained by differences in employment, partnership, and education – statuses that typically vary among those with and without disability. Women with disabilities have received limited attention in nationally representative studies of parenthood expectations and behaviors. Taken together,



we hope these results will provide a comprehensive summary of fertility attitudes and intentions by disability status for a contemporary sample of U.S. women of reproductive age.

### **Works Cited**

Ghidini, Alessandro and Maureen R. Simonson. 2011. "Pregnancy After Spinal Cord Injury: A Review of the Literature." *Topics in Spinal Cord Injury Rehabilitation* 16(3):93–103

Shandra, Carrie L. 2011. "Life Course Transitions among Adolescents with and without Disabilities: A Longitudinal Examination of Expectations and Outcomes." *International Journal of Sociology* 41: 67-86.

Shandra, Carrie L. and Afra R. Chowdhury. 2012. "The First Sexual Experience among Adolescent Girls With and Without Disabilities." *Journal of Youth and Adolescence* 41(4):515-532.

Walsh-Gallagher, Dympna, Marlene Sinclair, and Roy McConkey. 2012. "The Ambiguity of Disabled Women's Experiences of Pregnancy, Childbirth and Motherhood: A Phenomenological Understanding." *Midwifery* 28: 156-162.

Wells, Thomas, Gary D. Sandefur and Dennis P. Hogan. 2003. "What Happens after the High School Years among Young Persons with Disabilities?" *Social Forces* 82: 803–832.

World Health Organization. 2001. *International Classification of Functioning, Disability and Health*, Geneva: World Health Organization.

**Table 1. Attitudes toward Motherhood by Disability Status, U.S. Women**

Attitude	Disabled	Not Disabled	<i>p</i>
	%	%	
<i>People can't really be happy unless they have children</i>			
Strongly agree	1.2	1.0	
Agree	4.4	3.8	
Neither	0	0.4	
Disagree	46.4	48.6	
Strongly disagree	46.4	48.0	
<i>Rewards of being a parent worth it</i>			
Strongly agree	37.7	43.8	
Agree	51.3	48.7	
Neither	1.8	1.3	
Disagree	7.8	5.2	
Strongly disagree	1.5	1.0	
Feeling if can't have children			*
Very upset	32.8	36.9	
Upset some	29.5	29.3	
Upset a little	13.9	15.9	
Not upset at all	23.8	17.9	
Intend to have a child			***
Yes	42.8	23.8	
No	57.2	76.2	

Note: \* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$  (two-tailed tests)

**Table 2. Sample Demographics by Disability Status, U.S. Women**

Demographics	Disabled	Not Disabled	<i>p</i>
Race: Black	10.2	15.2	*
Race: Hispanic	10.5	16.5	**
Age	28.1	25.4	***
Poverty: 2 to 4 times poverty	29.8	36.5	*
Poverty: 4 plus times poverty	22.0	27.5	*
Education: High School	25.3	22.0	
Education: Some College	35.2	34.5	
Education: College	28.3	33.0	†
Married	15.7	16.0	
Employed	59.0	76.0	***

Note: †  $p < .10$ ; \* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$  (two-tailed tests)

**Table 3. Logistic Regression, Views of Motherhood by Disability Status, U.S. Women**

	HAPPY	REWARD	BOTHER	INTEND
	(Model 1)	(Model 2)	(Model 3)	(Model 4)
Disability	0.078 (0.219)	0.349* (0.165)	-0.227 (0.155)	-0.521* (0.240)
Race: Non-Hispanic Black	0.011 (0.168)	0.204 (0.149)	0.017 (0.138)	0.398 (0.217)
Race: Hispanic	-0.821*** (0.179)	0.035 (0.136)	0.368** (0.126)	0.552* (0.227)
Age	0.122 (0.075)	0.142* (0.068)	0.185** (0.063)	0.015 (0.085)
Age squared	-0.002 (0.001)	-0.002 (0.001)	-0.001 (0.001)	-0.003* (0.001)
Poverty: 2-4 times	0.329* (0.139)	-0.386** (0.121)	-0.079 (0.111)	0.226 (0.176)
Poverty: 4 plus times	0.214 (0.159)	-0.198 (0.137)	-0.019 (0.129)	0.184 (0.190)
Education: High School	0.384 (0.238)	-0.066 (0.189)	-0.134 (0.167)	0.212 (0.258)
Education: Some College	0.413 (0.231)	-0.265 (0.192)	-0.342* (0.168)	0.696** (0.244)
Education: College	0.532* (0.255)	-0.411 (0.215)	-0.792*** (0.183)	1.219*** (0.270)
Married	-0.351* (0.167)	-0.030 (0.144)	-0.420** (0.130)	0.258 (0.207)
Employed	0.226 (0.141)	0.056 (0.120)	-0.065 (0.114)	0.110 (0.177)
Constant 1	-2.511* (1.046)	1.703 (0.901)	2.610** (0.841)	2.437* (1.131)
Constant 2	-0.805 (1.016)	4.793*** (0.904)	4.044*** (0.843)	
Constant 3	2.624* (1.023)	6.645*** (0.945)	4.953*** (0.841)	
Log Likelihood	-2175.45	-2991.26	-4351.30	-1365.87

Source: National Survey of Family Growth, 2006-2010. \* p < .05; \*\* p < .01; \* p < .001; two-tailed tests. Analyses are weighted.

Data shown are ordered logistic (Models 1-3) and binary logistic (Model 4) regression coefficients with robust standard errors in parentheses.