Prevalence of Current Pregnancy Among U.S. Women with and without Chronic Physical Disabilities

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Abstract

Background—The number of U.S. women of childbearing age who have chronic physical disabilities (CPD) is increasing. However, little is known about their reproductive experiences. Historically, women with physical disabilities have confronted stigmatized attitudes about becoming pregnant.

Objectives—Explore the national prevalence of current pregnancy among women with and without CPD; examine differences in current pregnancy prevalence between these two groups of women.

Research Design—Bivariable and multivariable analyses of cross-sectional, nationally-representative National Health Interview Survey (**NHIS**) data from 2006-2011.

Subjects—47,629 civilian, noninstitutionalized women ages 18-49

Measures—NHIS asks women ages 18-49 if they are currently pregnant; it also asks about various movement difficulties. We used responses from 8 movement difficulty and other questions to identify women with CPD.

Results—6,043 (12.7%) sampled women report CPD. Compared with other women, women with CPD are significantly: older; more likely to be black and less likely to be Asian or Hispanic;

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more likely to be divorced or separated; more likely to have less than a high school education; less likely to be employed; and have much lower incomes. Across all women, 3.5% report being currently pregnant: 3.8% of women without CPD and 2.0% with CPD. Controlling for sociodemographic factors, the adjusted odds ratio (95% CI) of current pregnancy is 0.83 (0.65, 1.05, p = 0.12) for women with CPD compared with nondisabled women.

Conclusions—Women with chronic physical disabilities do become pregnant, and their numbers will likely grow. Obstetrical practitioners therefore require training about the special needs of these women.

Keywords

disability; pregnancy; movement difficulties; National Health Interview Survey

Introduction

More than 1 million women of childbearing age in the U.S. report disabilities or needing assistance with activities of daily living, primarily because of chronic physical impairments that cause mobility difficulties.[1] Two trends make these numbers likely to rise in coming decades. First, dramatic medical advances now allow individuals born with significant physical disabilities and those who acquire physical disabilities early in life to live into childbearing years and beyond.[2,3] Second, while the relationship of youth and young adult obesity to mortality and disease risks remains controversial, evidence suggests that early obesity causes physical disability.[4,5] This increasing population of young women with physical disabilities will generate questions about their reproductive choices and experiences – questions that have received little attention to date. Indeed, historically women with physical disabilities have confronted stigmatization concerning their reproductive and sexual health;[6] some clinicians have viewed women with physical disabilities as asexual or unfit potential parents.[7-10] Qualitative studies, albeit with small sample sizes, have found that women with physical disabilities who become pregnant often confront negative or skeptical attitudes and sometimes outright opposition from health care professionals.[10-16]

Nonetheless, anecdotal reports suggest that growing numbers of women with physical disabilities are choosing to become pregnant and bear children. Significant improvements in medical care for both mothers and newborns – including technologically sophisticated obstetrical services, therapies for disabling health conditions, and neonatal intensive care – underlie these trends. In addition, changes in societal attitudes (e.g., decreasing stigmatization of disability) and expanding opportunities for participation in community life facilitated by disability civil rights laws, notably the 1990 Americans with Disabilities Act, provide increasing support for women with disabilities who desire pregnancy and motherhood. Despite this, little systematic information is available about the prevalence of women in the U.S. with physical disabilities who become pregnant.

Using the federal, cross-sectional National Health Interview Survey (NHIS), this study aims to produce the first nationally-representative estimates of the prevalence of "current pregnancy" among women with chronic physical disabilities defined by self-reported difficulties with one or more of 8 movement-related activities. We address three primary research questions: (1) What is the national annual prevalence of current pregnancy among women with and without chronic physical disabilities? (2) How do basic sociodemographic characteristics relate to current pregnancy? and (3) What is the association between chronic physical disability and current pregnancy after controlling for differences in various sociodemographic characteristics between women with and without disability?

Methods

Data

We downloaded NHIS Public Release data from 2006 through 2011 from the National Center for Health Statistics (NCHS) Web site. Continuously conducted since 1957, NHIS is the major source of health information for civilian, noninstitutionalized, community residents in the U.S. Since 1997, the Basic Module or Core questionnaire has contained 3 components: Family Core, Sample Adult Core, and Sample Child Core. The Family Core gathers information on all family members. One randomly selected adult (age 18) within each family receives the Sample Adult Core questionnaire, which collects more detailed health and functional status information. If the randomly sampled adult is physically or mentally unable to respond, a knowledgeable adult family member provides a proxy response. NHIS oversamples black and Hispanic populations, and since 2006 has oversampled Asian populations. Sophisticated sampling techniques and associated sampling weights produce nationally representative figures. In 2011, for example, the NHIS interview sample included 39,509 households, yielding 101,875 persons in 40,496 families; the Sample Adult Core included 33,014 individuals, including 465 with proxy responses.[17] The household response rate was 82.0%, and the conditional response rate for the Sample Adult Core was 81.6%.[17]

The Sample Adult questionnaire asks women ages 18-49 whether they are "currently pregnant." We therefore used the Sample Adult Core as our sampling frame, drawing our study population from the 157,351 total sampled cases across the 2006-2011 surveys. From these individuals, we first selected the 47,886 women ages 18-49. We then deleted: 108 (0.2%) women with missing responses to the pregnancy question; 144 (0.3%) women lacking any responses to the functional status questions used to identify disability (Table 1); and 7 women who reported Alzheimer's disease. Our final sample included 47,629 women ages 18-49; 263 (0.6%) of these women had proxy respondents.

Indicator of Chronic Physical Disabilities

To identify women with chronic physical disabilities involving impaired mobility, we started with the algorithm created by NCHS researchers using NHIS data to determine "movement difficulty severity" for *Disability and Health in the United States, 2001-2005.*[18] The algorithm uses responses from the "Adult Health Status and Limitations" section in the Sample Adult Core questionnaire, which inquires about various types of functional limitations using the following question stem:

> The next questions ask about difficulties you may have doing certain activities because of a HEALTH PROBLEM. By "health problem" we mean any physical, mental, or emotional problem or illness (not including pregnancy). By yourself, and without using any special equipment, how difficult is it for you to …

Response categories are: "not at all difficult" (score = 0); "only a little difficult" (score = 1); "somewhat difficult" (score = 2); "very difficult" (score = 3); "can't do at all" (score = 4); "do not do this activity" (score = 6); and "refused" and "don't know." For each respondent, the NCHS algorithm considers only movement difficulties with reported scores of 2, 3, or 4.

NCHS researchers combined responses from across 8 movement difficulty questions (Table 1) to create their movement difficulty indicator, which has 5 severity levels (level 1 = "least severe" to level 5 = "most severe"). The method then assigns weights to these movement items based on "how important a particular function would be to maintaining an independent lifestyle."[18] The sitting and stooping functions receive a weight of 1; the standing and carrying functions receive a weight of 2; the climbing and reaching functions receive a 3

weight; and the walking and grasping functions have weights of 4. For each of the 8 functions, the reported difficulty level score is multiplied by these weights; these figures are then added for all functional difficulties reported by the respondent; and the total is divided by 8. These final numbers are divided into quintiles to produce the 5 severity levels. Applying the NCHS algorithm to the 47,629 women in our final sample identified 6,766 women with movement difficulties (Figure 1).

Next, we refined our chronic physical disability group in three steps (Figure 1). First, although the functional limitations question stem explicitly asks respondents not to mention difficulties caused by pregnancy, a follow-up question about what caused the limitation(s) found that 138 (2.0% of the 6,766 women) reported that pregnancy had caused their difficulties. Given the goals of our study, we eliminated these 138 women from our chronic physical disability group.

Second, we eliminated women whose movement difficulties were not caused by physical health conditions. After the questions about functional limitations, NHIS asks respondents "what condition or health problem causes you to have difficulty," going through a list of 35 specified causes (e.g., vision, hearing, arthritis, multiple sclerosis, cerebral palsy, heart or lung problems, various mental health and cognitive conditions, etc.), followed by an "other impairment/problem" slot (coded by NCHS for its public data set; pregnancy is recoded from the "other" responses). We eliminated 280 (4.1% of the 6,766) women from our physical disability group who reported the following conditions as the *only* cause of their movement difficulties: vision; hearing; "mental retardation"; "depression, anxiety, other mental health problem"; "alcohol or substance abuse"; and "other mental health problem, including bipolar disorder, schizophrenia, ADD" (attention deficit disorder).

Finally, among the remaining 6,348 women with a physical condition causing their movement difficulty, we removed those whose conditions were not described as "chronic." For each of the 35 specified and "other" causes, NHIS asks for the length of time that the condition has existed; NCHS then recodes the responses in several ways, including "chronic," "not chronic," and "not known if chronic." We eliminated 305 (4.8% of the 6,348) women who did not have "chronic" conditions from our chronic physical disability group.

After modifying NCHS's "movement difficulty severity method" with these three exclusions, the 47,629 women in our final sample split into 6,043 (12.7%) with chronic physical disability and 41,586 (40,863 + 138 pregnancy cause + 280 non-physical cause + 305 not chronic, 87.3%) without chronic physical disability. Among the 6,043 women with chronic physical disabilities, the distribution across the 5 NCHS movement difficulty severity levels was as follows: level 1, n = 2,084 (34.5%); level 2, n = 1,711 (28.3%); level 3, n = 1,280 (21.2%); level 4, n = 628 (10.4%); and level 5, n = 340 (5.6%). To have large enough numbers for analyses across the severity spectrum, we combined respondents falling into levels 3-5, thus constructing a 3-level chronic physical disability indicator.

Other Variable Definitions

Based on considerable population-based evidence,[18-20] we hypothesized that women with and without disabilities differ across basic sociodemographic characteristics, some of which might also be associated with the likelihood of being pregnant (e.g., age, race and ethnicity, marital status, education, income, employment, health insurance status). We therefore looked descriptively at basic sociodemographic characteristics between women with and without chronic physical disabilities and adjusted for selected characteristics in multivariable models predicting pregnancy. Information on most variables came from Sample Adult Core responses; three variables (household income levels imputed by NHIS,

income by poverty threshold, number of children in household) were Family Core answers linked to Sample Adult respondents. To facilitate analyses, we grouped age into 5 categories and combined response categories of other variables (Table 2). We used NCHS's health insurance variable that grouped insurance types into broad categories. Only 371 (0.8%) respondents were dually eligible for Medicare and Medicaid. Because of small numbers of "Medicare only" beneficiaries (n = 455, 1.0%), we combined them with these "duals."

Analysis

All analyses used SAS Version 9.2 (Cary, NC). When indicated (table footnotes), we conducted analyses using NHIS sampling weights to produce nationally-representative findings. Because of the strong relationship between age and disability level and between age and pregnancy, we used direct standardization to adjust certain numbers by age category. We used X^2 tests to assess bivariable associations. We used multivariable logistic regression to predict current pregnancy on the basis of data year, age group, race, ethnicity, marital status, income, and disability. Because of the relatively small numbers of pregnancies among disabled women in our sample, we limited the number of predictive variables to those we hypothesized would be the most important. To examine the contribution of different variables to predicting pregnancy, we sequentially eliminated each variable and examined the difference between the c statistic from that model and the c statistic from the complete model.

Results

Among women ages 18-49, 12.7% report chronic physical disability (CPD). As noted above, our CPD algorithm considers 8 different types of movement difficulties (Table 1). Among the women with CPD, 42.2% have only 1 type of movement difficulty, while 20.3% have 2, 14.6% have 3, and 34.9% have 4 or more types of movement difficulties.

Women with CPD differ statistically significantly in their basic sociodemographic characteristics from other women (Table 2): they are older; more likely to be black and less likely to be Asian or Hispanic; more likely to be divorced or separated; more likely to have less than a high school education and less likely to have college or higher education; less likely to live in households containing children; less likely to be employed; and have much lower incomes. Possibly because of "safety net" insurers (Medicaid and Medicare through disability eligibility), women with CPD are more likely to have health insurance than other women; they are also more likely to have a usual source of care. Similar significant differences occur by severity of CPD (Table 2): age increases monotonically with CPD severity, as does racial and ethnic distribution, marital status, education, income, employment status, insurance status, and having a usual source of care.

Pregnancy Prevalence by Sociodemographic Characteristics and CPD

Across all women ages 18-49, 3.5% report being currently pregnant, including 3.8% of women without CPD and 2.0% of women with any CPD (Table 3). Pregnancy prevalence falls monotonically across the CPD severity levels (from 2.6% to 1.8% to 1.5%). For each sociodemographic and other characteristic, Tables 3 shows the weighted percent of women who report current pregnancy. The statistically strongest associations involve age, with the highest rates of pregnancy among women ages 25-29 across most subgroups of women. (As noted on Table 3, some cell sizes were less than 5; in those situations, X^2 tests may not be valid.) Marital status is also significantly associated with current pregnancy across most subgroups of women. Perhaps because of very large sample sizes for analyses of either all women or of only women without CPD, more sociodemographic associations are statistically significant when assessing all women or only nondisabled women. For women

with CPD, the only significant associations with current pregnancy involve age, marital status, and not working because of disability.

Among women with CPD, current pregnancy rates vary by underlying specific functional limitations used by the NCHS algorithm to identify movement difficulties (Table 1). Women with problems involving the hands have the lowest rate (0.7%) of current pregnancy. Women who report difficulty standing for about 2 hours have the highest percentage of women with current pregnancy (4.1%) across the 8 functional limitation types.

Multivariable Regression Results

Table 4 shows findings from the multivariable regression using demographic characteristics and CPD (as a binary variable) to predict current pregnancy. All sociodemographic variables except household income are statistically significantly associated with current pregnancy. Women with CPD have a lower adjusted odds ratio of current pregnancy than do nondisabled women (0.83, 95% confidence interval 0.65, 1.05), although this finding is not statistically significant (**p = 0.12**). The model c statistic is 0.78. Disability status contributes virtually nothing to the model's predictive power; age is the single most powerful predictor, followed by marital status.

We also produced a multivariable model entering CDP as a three-level variable (data not shown). With no CDP as the reference group, the adjusted odds ratios (95% confidence intervals) for the three CDP variables are: level 1 = 0.95 (0.69, 1.30); level 2 = 0.70 (0.45, 1.09); and levels 3-5 = 0.77 (0.50, 1.19). None of these adjusted odds ratios are statistically significant.

Discussion

Extrapolating from these nationally-representative NHIS figures, during an average year, 8,336,964 civilian, noninstitutionalized U.S. women of childbearing age have at least some chronic physical disability unrelated to pregnancy, including 3,003,868 with severe disabilities. The NHIS findings also suggest that among American women ages 18 to 49, 2,358,850 are "currently pregnant" at a specific point (i.e., the NHIS interview date) in an average year. The percentage of women reporting being currently pregnant at a particular point each year falls monotonically as self-reported chronic physical disability severity rises. The NHIS figures translate into 163,732 currently pregnant women reporting at least some chronic physical disability, including 44,177 women who report the most severe chronic physical disabilities.

Women with chronic physical disabilities are much more likely than other women to be older and black. They are also more likely to confront socioeconomic disadvantages, such as being unmarried and having less than a high school education, low employment rates, and high poverty rates. They are less likely to live in households containing children. Controlling for key sociodemographic factors, women with chronic physical disabilities have lower adjusted odds of current pregnancy than do nondisabled women. Nonetheless, 2% of women with chronic physical disabilities ages 18 to 49 are currently pregnant in a given year.

These numbers provide the first glimpse of which we are aware into the pregnancy prevalence of American women with chronic physical disabilities. Our findings may be surprising given long-standing cultural stereotypes about the sexual desirability and reproductive activity of women with physical disabilities.[6-8,10-16,21] The absolute numbers and percentages of women with chronic physical disabilities who are pregnant every year are much smaller than those among nondisabled women. Nonetheless, these figures are sufficiently large to merit serious attention, especially since the number of women of

reproductive age with chronic physical disabilities will rise in coming decades. Whether obstetricians, nurse midwives, and other clinicians who care for pregnant women – and clinicians who provide preconception services and post-partum care – have sufficient training to serve women with chronic physical disabilities is unknown and will require additional research to explore. As noted above, other studies suggest that prenatal and childbirth care for these women needs to improve.[10-16]

Clearly, much more information is required about the pregnancy and childbirth experiences of women with chronic physical disabilties.[22] Additional insight is also needed about the quality of pregnancy-related health services and ways to improve care for women with chronic physical disabilities who become pregnant. Although NHIS data are widely used to examine a broad range of health and health care questions about the civilian U.S., noninstitutionalized population, the quality of the pregnancy indicator – taken from a single question in the Sample Adult Core survey – is unknown.

Gathering information about pregnancy rates and outcomes among U.S. women is complicated, requiring input from various data sources, each with its own limitations. While vital statistics systems capture information on live births, analysts must obtain information about fetal loss and abortions from different data sets. For example, a 2012 NCHS report on pregnancy rates and outcomes sought information from a variety of sources, including the NCHS Vital Statistics Cooperative Program, abortion surveillance data gathered from states by the Centers for Disease Control and Prevention, and the National Survey of Family Growth.[23] Comparing estimates of pregnancy prevalence from the NHIS data and the NCHS report[23] suggests that NHIS might underestimate annual pregnancy rates. It is important to recall the content of the NHIS pregnancy question, which asks Sample Adult women whether they are "currently pregnant." Women may have given birth during the year of a particular NHIS but not be "currently pregnant" at the time of the interview.

In addition, several reasons could explain why NHIS responses might underestimate yearly pregnancy rates. For example, women might not know they are pregnant at the time of the NHIS interview; and women might not feel comfortable revealing their pregnancies to the NHIS interviewers (U.S. Census Bureau employees). For our purposes, the main question is whether the accuracy of NHIS pregnancy data is similar for women with and without chronic physical disabilities or whether it is biased. It is possible that women with disabilities may be less aware of being pregnant than are other women; studies find that they are less likely to discuss reproductive health with their primary care practitioners and to receive pelvic examinations.[7,24] This suggests that the numbers of pregnancies reported by NHIS respondents with chronic physical disabilities may be underestimated even more than for nondisabled women. Given these concerns, readers must use caution in interpreting the absolute numbers reported here.

Our study has other limitations relating to the data source. NHIS relies entirely on self reports of functional difficulties, the data used to generate our indicator of chronic physical disability. Respondents may either over- or underestimate their functional difficulties for a variety of reasons, including cultural and gender role expectations. In addition, although we used multiple years of data, the numbers of women with physical disabilities is relatively small, especially that subset who report being currently pregnant. We did not expand our data set by using earlier NHIS results because the sampling scheme and thus weighting approach changed substantially between 2005 and 2006, making it complicated to combine data across years before and after this change. We refined our sample of women with chronic physical disabilities by using other NHIS responses to determine both physical health causes and chronic conditions. The completeness and accuracy of this information, also provided by respondents without independent verification, is unclear.

Finally, we chose to focus our research on women with physical disabilities defined for our purposes as movement difficulties. Women with other types of disabilities, such as mental health, cognitive, or developmental disabilities, may face even more stigmatization concerning pregnancy than women with physical disabilities. The history of forced sterilization of women with developmental disabilities underscores that fear. Similarly, women with sensory disabilities – such as impaired vision or hearing – might have different reproductive health experiences and needs than women with movement-related physical disabilities.

Despite these limitations, our data offer new evidence about the prevalence of pregnancy among U.S. women with physical disabilities. Most striking is the suggestion that, after accounting for sociodemographic characteristics related to pregnancy, women with chronic physical disabilities become pregnant at similar rates as do other women. These findings refute long-held stereotypes about the reproductive choices and activities of women with chronic physical disabilities. They highlight a critical need for further research into the pregnancy outcomes of these women and the quality of their prenatal and childbirth care. Our findings underscore the priority of educating clinicians about caring for women with chronic physical disabilities who become pregnant.

Acknowledgments

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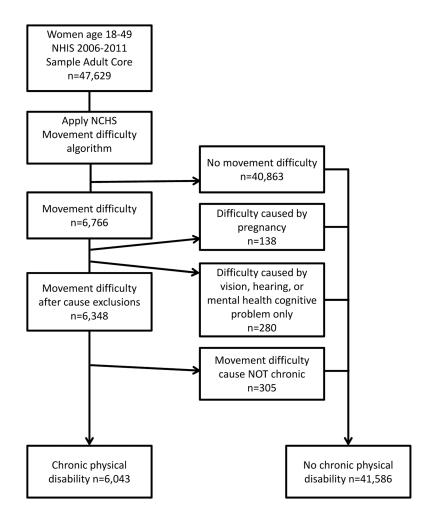
Figure 1. Assignment of Cases to Chronic Physical Disability Group

Table 1

Nature of Movement Difficulty and Percent Currently Pregnant Total n = 6,043

Nature of movement difficulty[a]	Unweighted N with difficulty	Weighted % with difficulty[b]	% currently pregnant[c]
…Walk a quarter of a mile—about 3 city blocks?	2,625	39.0	2.8
…Walk up 10 steps without resting?	1,973	27.9	2.6
…Stand or be on your feet for about 2 hours?	3,542	52.3	4.1
…Sit for about 2 hours?	2,504	35.9	2.9
…Stoop, bend, or kneel?	4,105	62.1	3.3
…Reach up over your head?	1,337	19.7	2.3
…Use your fingers to grasp or handle small objects?	1,075	17.1	0.7
… Lift or carry something as heavy as 10 pounds such as a full bag of groceries?	1,997	28.4	3.3

[a] Stem of question: "By yourself, and without using any special equipment, how difficult is it for you to …" Possible responses are: "not at all difficult," "only a little difficult," "only somewhat difficult," "very difficult," or "can't do at all."

[b] Percent of women in our final "chronic physical disability" group with each type of movement difficulty

[c] Percent with response of "somewhat difficult," "very difficult," or "can't do at all." These are the only responses used by the NCHS movement difficulty algorithm.

Table 2

Population Characteristics by Presence and Severity of Chronic Physical Disability Total n = 47,629

Characteristics	All women	Women without any CPD	Women with any CPD	Severity of CPD		
				1	2	3-5
Sample size by year: total number	47,629	41,586	6,043	2,084	1,711	2,248
2006	16.7%	16.8%	15.7%[#]	15.4%	15.4%	16.2%
2007	16.6	16.8	15.6	15.4	14.7	16.4
2008	16.7	16.7	16.1	16.8	15.4	16.1
2009	16.7	16.6	17.9	18.5	18.8	16.6
2010	16.7	16.6	17.3	17.2	17.6	17.0
2011	16.6	16.5	17.4	16.7	18.1	17.7
% of total sample in column	100.0%	87.3%	12.7%	4.4%	3.6%	4.7%
Age in years: mean (SD)	33.8 (0.1)	33.2 (0.1)	38.1 (0.2)	36.2 (0.3)	38.1 (0.3)	39.9 (0.2)
Age category:						
18-24	21.6%	23.1%	10.9% [*]	16.0%	11.1% [*]	5.7% [*]
25-29	15.4	16.3	9.2	12.6	8.8	6.1
30-34	14.7	15.2	11.4	11.7	11.4	11.1
35-39	15.0	14.9	15.7	15.3	14.4	17.2
40-44	16.2	15.4	21.9	18.9	24.3	23.0
45-49	17.1	15.1	30.9	25.7	30.0	36.9
Race: adjusted [a]						
White only	77.5%	77.5%	77.5% [*]	81.3%	76.7% [§]	74.2% [*]
Black only	14.3	13.9	16.6	13.0	16.6	20.4
Asian only	5.4	5.9	2.1	2.2	2.6	1.5
Other race including multiple	2.8	2.7	3.8	3.5	4.1	3.9
Ethnicity: adjusted [a]						
Hispanic	16.3%	16.7%	13.0% [*]	14.0%	12.6%	12.4% [#]
Not Hispanic	83.7	83.3	87.0	86.0	87.4	87.6
Marital status: [b] **adjusted** [a]						

Characteristics	All women	Women without any CPD	Women with any CPD	Severity of CPD		
				1	2	3-5
Single, never married	28.4%	29.2%	22.7% *	24.2%	23.1% +	20.9% *
Married/living with partner	60.6	60.8	58.8	62.0	58.8	55.8
Divorced/separated	10.2	9.2	17.0	13.1	16.9	20.8
Number of children living in household: [b]adjusted [a]						
0	41.1%	40.6%	45.0% *	40.8%	45.3%	48.8% *
1	23.2	23.1	24.0	25.5	23.8	22.7
2 or more	35.7	36.3	31.0	33.7	30.9	28.5
Education: [b]adjusted [a]						
Less than high school	12.6%	11.8%	18.5% *	13.2%	18.6% *	23.7% *
High school	23.9	23.0	30.0	26.9	30.0	33.0
Some college, associate degree	34.4	34.1	36.0	37.2	37.0	34.1
College, more than college degree	28.5	30.5	14.8	22.4	14.0	7.9
Employment: [b,c] adjusted [a]						
Working for pay at job or business	67.7%	70.2%	50.3% *	66.3%	57.0% *	29.1% *
Looking for work	5.9	5.7	7.2	7.8	8.2	5.9
Not working for pay and not looking for work	26.3	24.0	42.4	25.9	34.7	64.9
Not working because of disability: adjusted[a]	3.7%	1.3%	20.7% *	3.3%	13.2% *	43.9% *
Household income: [b] adjusted [a]						
< $34,999	32.4%	30.3%	46.6% *	34.0%	45.9% *	59.6% *
$35,000 – $74,999	29.9	30.0	29.7	36.0	29.1	24.0
> $75,000	30.0	31.6	18.7	24.7	20.7	11.1
Family income less than the poverty threshold: adjusted [a]	15.1%	13.9%	23.8% *	15.2%	23.1% *	33.1% *
Health insurance: [b]adjusted [a]						
Medicare only or dually eligible	1.5%	0.6%	7.6% *	1.7%	5.6% *	15.2% *
Medicaid	10.5	9.3	19.1	11.5	16.8	28.4
Private	63.2	65.7	45.6	58.2	48.0	31.1

Characteristics	All women	Women without any CPD	Women with any CPD	Severity of CPD		
				1	2	3-5
Other public health insurance	3.4	3.2	4.5	4.5	5.2	4.0
No health insurance	21.4	21.2	23.2	24.1	24.4	21.3
Has usual source of health care: adjusted [a]	84.3%	84.0%	86.2% *	83.9%	86.2% [§]	88.5% *
Currently pregnant: adjusted [a]	3.5%	3.8%	2.0% *	2.6%	1.8% [#]	1.5% [+]

p values for comparisons of women with and without chronic physical disability (CPD) and for women with CPD severity level 2 versus level 1 and levels 3-5 versus level 1

*
p 0.0001

[+]
p 0.001

[§]
p 0.01

[#]
p 0.05

[a]
= percents adjusted by age-category to account for possible confounding

[b]
= percents do not add to 100 because of other and missing responses (not shown)

[c]
= employment status in week prior to interview

Table 3

Population Characteristics by Chronic Physical Disability and Whether "Currently Pregnant" Total n = 47,629

Characteristics	All women		Women without any CPD		Women with any CPD		Severity of CPD					
							1		2		3-5	
	Pregnant		Pregnant		Pregnant		Pregnant		Pregnant		Pregnant	
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
Sample size by year: total number	1,685	45,944	1,557	40,029	128	5,915	62	2,022	34	1,677	32	2,216
% of total in yes/no columns	3.5%	96.5%	3.8%	96.2%	2.0%	98.0%	2.6%	97.4%	1.8%	98.2%	1.5%	98.5%
Age in years: mean (SD)	27.8 (0.18)	34.0 (0.08)	27.7 (0.18)	33.4 (0.09)	29.5 (0.86)	38.2 (0.16)	30.7 (1.32)	36.3 (0.29)	29.2 (1.50)	38.3 (0.26)	27.7 (0.34)	40.1 (0.2)
Age category:												
18-24	5.1%	94.9%*	5.1%	94.9%*	4.4%	95.6%*	3.0%	97.0%*	5.7%	94.3%!	6.7%	93.3%!
25-29	7.5	92.5	7.6	92.4	6.5	93.5	6.4	93.6	3.8	96.2	9.8	90.2
30-34	5.5	94.5	5.7	94.3	4.1	95.9	6.4	93.6	3.2	96.8	2.3	97.6
35-39	2.5	97.5	2.7	97.3	1.7	98.3	2.2	97.8	2.2	97.8	0.8	99.2
40-44	0.5	99.5	0.6	99.4	0.3	99.7	0.6	99.4	0.1	99.9	0.1	99.9
45-49	0.1	99.9	0.0	100.0	0.3	99.7	0.6	99.4	0.2	99.8	0.1	99.9
Race: adjusted [a]												
White only	3.5%	96.5%	3.8%	96.2%	1.7%	98.3%	2.3%	97.7%	1.5%!	98.5%	1.4%	98.6%!
Black only	3.4	96.6	3.5	96.5	2.8	97.2	4.2	95.8	2.3	97.7	1.9	98.1
Asian only	3.8	96.2	3.9	96.1	2.5	97.5	4.2	95.8	2.3	97.7	1.2	98.8
Other race including multiple	3.7	96.3	3.8	96.2	2.6	97.4	2.2	97.8	4.1	95.9	1.1	98.9
Ethnicity: adjusted [a]												
Hispanic	4.6%	95.4%*	4.9%	95.1%*	2.3%	97.7%	2.2%	97.8%	2.3%	97.7%	2.1%	97.9%
Not Hispanic	3.3	96.7	3.5	96.5	1.9	98.1	2.7	97.3	1.7	98.3	1.3	98.7
Marital status: [b] **adjusted** [a]												
Single, never married	1.5%	98.5%*	1.5%	98.5%*	1.4%	98.6%§	1.4%	98.6%#	2.0%	98.0%	0.8%	99.2%
Married/living with partner	5.5	94.5	5.9	94.1	2.7	97.3	3.6	96.4	2.3	97.7	1.9	98.1
Divorced/separated	3.2	96.8	3.5	96.5	1.5	98.5	1.7	98.3	1.0	99.0	1.3	98.7

Characteristics	All women		Women without any CPD		Women with any CPD		Severity of CPD					
							1		2		3-5	
	Pregnant		Pregnant		Pregnant		Pregnant		Pregnant		Pregnant	
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
Number of children living in household: [b] adjusted [a]												
0	3.1%	96.9% *	3.3%	96.7% *	1.2%	98.8%	1.9%	98.1% +	1.0%	99.0%	0.7%	99.3%
1	5.5	94.5	5.8	94.2	3.6	96.4	5.2	94.8	3.1	96.9	2.1	97.9
2 or more	3.2	96.8	3.5	96.5	1.7	98.3	2.2	97.8	1.3	98.7	1.3	98.7
Education: [b] adjusted [a]												
Less than high school	4.7%	95.3% *	5.2%	94.8% *	1.9%	98.1%	2.6%	97.4%	1.6%	98.4%	1.7%	98.3%
High school	3.5	96.5	3.8	96.2	1.7	98.3	1.2	98.8	3.0	97.0	1.3	98.7
Some college, associate degree	2.9	97.1	3.0	97.0	2.0	98.0	2.8	97.2	1.3	98.7	1.5	98.5
College, more than college degree	3.2	96.8	3.4	96.6	2.1	97.9	3.2	96.8	0.6	99.4	1.4	98.6
Employment: [b,c] adjusted [a]												
Working for pay at job or business	3.0%	97.0% *	3.1%	96.9% *	1.6%	98.4%	2.2%	97.8% §	1.0%	99.0% #	1.6%	98.4%
Looking for work	2.5	97.5	2.7	97.3	1.5	98.5	1.8	98.2	2.2	97.8	1.1	98.9
Not working for pay and not looking for work	5.1	94.9	5.6	94.4	2.5	97.5	3.8	96.2	2.8	97.2	1.5	98.5
Not working because of disability: adjusted [a]	2.9%	97.1% *	3.1%	96.9%	1.8%	98.2% §	3.2%	96.8%	1.1%	98.9% !	1.4%	98.6% #
Household income: [b] adjusted [a]												
< $34,999	3.3%	96.7%	3.5%	96.5% #	2.0%	98.0%	2.8%	97.2%	2.1%	97.9% #	1.4%	98.6%
$35,000 – $74,999	3.4	96.6	3.7	96.3	1.7	98.3	2.4	97.6	0.5	99.5	1.6	98.4
> $75,000	3.5	96.5	3.6	96.4	2.2	97.8	2.6	97.4	2.4	97.6	1.4	98.6

p values for comparisons by whether or not currently pregnant (paired columns)

*
p 0.0001

+
p 0.001

§
p 0.01

#
p 0.05

*
25% of the cells have expected counts < 5; X^2 test may not be valid

[a]
= percents adjusted by age-category

[b]
= does not show other and missing responses

[c]
= employment status in week prior to interview

Table 4

Associations of Demographic Characteristics and Having Any Chronic Physical Disability with Current Pregnancy Total n = 43,773

Characteristics	Adjusted odds ratio	95% confidence interval	p value
Survey year			
2006 (reference)	1.00		
2007	1.13	(0.90, 1.40)	0.29
2008	0.89	(0.71, 1.12)	0.32
2009	0.98	(0.81, 1.20)	0.87
2010	0.92	(0.75, 1.13)	0.44
2011	0.93	(0.75, 1.15)	0.51
Age category			
18-24 (reference)	1.00		
25-29	0.99	(0.83, 1.17)	0.86
30-34	0.63	(0.52, 0.76)	<.0001
35-39	0.28	(0.22, 0.35)	<.0001
40-44	0.06	(0.04, 0.09)	<.0001
45-49	0.01	(0.003, 0.03)	<.0001
Race			
White only (reference)	1.00		
Black only	1.53	(1.29, 1.82)	<.0001
Asian only	1.04	(0.81, 1.34)	0.75
Other race including multiple	1.13	(0.80, 1.61)	0.49
Ethnicity			
Hispanic	1.29	(1.10, 1.51)	0.002
Not Hispanic (reference)	1.00		
Marital status			
Single, never married	0.23	(0.19, 0.27)	<.0001
Married/living with partner (reference)	1.00		
Divorced/separated	0.40	(0.30, 0.53)	<.0001
Education			
Less than high school	1.33	(1.09, 1.62)	0.01
High school (reference)	1.00		
Some college, associate degree	0.86	(0.71, 1.05)	0.13
College, more than college degree	1.12	(0.92, 1.36)	0.27
Household income			
< $34,999	1.03	(0.87, 1.22)	0.73
$35,000 – $74,999	0.87	(0.73, 1.02)	0.09
> $75,000 (reference)	1.00		
Has any chronic physical disability			
No (reference)	1.00		
Yes	0.83	(0.65, 1.05)	0.12