Cohabitation, Gender and Physical Health: Evidence from the National Health Interview Survey

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INTRODUCTION

This study examines the physical health of cohabitors in the United States compared to married, divorced/separated, never married and widowed people. It also distinguishes between current cohabitors who have been previously married and those who have never been married, an important distinction because of the health effects of transitions into and out of marriage and the likely sociodemographic differences between the two groups, which has often been omitted from previous studies. Further, research shows that the benefits of marriage are gendered. Specifically, men experience greater health benefits from marriage than women (Lillard and Waite 1995; Lillard and Panis 1996; Williams and Umberson 2004). We account for this uneven effect of marital status by analyzing males and females separately. The goal of the present study is not to test the selectivity or causation theories, but rather to shed light on the physical health of previously married and never married cohabitors, as they compare to the other major marital groups.

The protective effects of marriage on health and mortality have long been noted (Verbrugge 1979; Hu and Goldman 1990, Goldman 1993, Hahn 1993; Ross, Mirowsky and Goldsteen 1990). The married are advantaged in their mental health and longevity.

Two main theories have been proposed to explain these differences in health and mortality between the married and unmarried: social causation and social selection (Joung et al. 1997).

Social causation theory posits that marriage itself is protective, with one possible mechanism being that those who are married engage in healthier behaviors than the unmarried. Some of the factors that have been used to explain the difference in mental health among marital groups include: greater social integration, social support, social control over health-threatening behaviors, and economic well-being. Yet, this idea of social causation has been criticized (Joutsenniemi et al. 2006; Lund et al. 2002).

Testing the social selection theory, which focuses on the selection of people (who are presumably healthier) into marriage, necessitates longitudinal data and consequently has been attempted less often. One exception is the study by Lillard and Panis (1996), who find that among men, there are both positive and adverse selection processes at work in the transition to marriage. Other researchers simply control for selectivity in their analyses (Wu et al. 2003). Because longitudinal data help to establish causal order (Shadish et al. 2002), fewer conclusions have been drawn about the selection argument thus far.

This health gap between married and unmarried persons has led researchers to turn to a growing sector of the population: cohabitors. Because cohabitors are living with

a partner outside of marriage, they are an important group to study as they share some of the characteristics of the married. In fact, some studies suggest that cohabitation status should replace marital status because it accounts for more variation in mortality (Lund et al. 2002). Nearly a quarter of unmarried persons between ages 25 and 34 are currently cohabiting (Waite 1995 cited in Horwitz and White 1998). While some cohabitating unions are alternatives to marriage, many either dissolve within a few years or are soon transitioned into a marriage (Thornton 1988; Manning and Smock 2002).

How does the physical health of cohabitors compare to that of the married? If social causation theory is correct, then do the protective effects of marriage extend to cohabitors as well? If they do, we might expect cohabitors to exhibit health outcomes similar to the married. On the other hand, cohabitation may not provide the same amount or type of protections that marriage does, whatever they may be. In this case, if cohabitors' health is more similar to the never married, this may indicate support for the social selection argument because it may be that cohabitors are not healthy enough to select into marriage, and thus turn to the alternative of cohabitation. Other indirect factors may also affect selectivity; for example, cohabitors may have risky health behaviors that make them an unattractive partner on the marriage market. Further, some cohabitors may be divorced or widowed, distinguishing them from never married cohabitors who are

likely younger and have never experienced a marital transition, either into or out of marriage.

Studies have addressed the relationship between cohabitation and mortality (Lund et al. 2002) and cohabitation and mental health (Horwitz and White 1998; Brown 2000; Brown, Bulanda and Lee 2005; Joutsenniemi et al. 2006; Pevalin and Ermisch 2004), finding that cohabitors do not experience the same mortality benefits as the married. Yet the findings on the mental health of cohabitors are conflicting. While Brown (2000) finds that cohabitors actually have worse mental health than the married due to relationship instability, Horwitz and White (1998) find no difference between the two groups, except that men have more alcohol problems.

As Williams and Umberson (2004: 82) point out, "research describing the effect of marital status and marital transitions on mental health cannot be automatically generalized to physical health." Nevertheless, despite the increase in rates of cohabitation in the United States and interest in the mental health of cohabitors, fewer studies have attempted to determine the relationship between physical health and cohabitation. One study conducted in Finland found that between 1978 and 2001, the self-reported health status of Finns improved, and that while some marital status differences remained, cohabitors were not significantly different from marrieds (Joutsenniemi et al. 2006). As Brown et al. (2005) assert, little is known about the physical health of cohabitors. In

addition to the dearth of research on the subject, few studies distinguish between never married and previously married cohabitors—a distinction that may be crucial to the study of cohabitors' health.

Given that many marriages today begin with cohabitation (CITE), and that most cohabiting unions are temporary and result in either dissolution or progression to marriage, we expect to find that cohabitors reflect an intermediate status between the married and the never married or divorced. Thus, we postulate that cohabitors in general are less advantaged in their health than the married, but are more advantaged than the never married or divorced. Further, we conjecture that never married cohabitors' health will resemble the married, as they are . We also expect that, because previously married cohabitors have experienced the stress of transitioning out of marriage, they will more closely resemble in health the divorced/separated.

We will also examine the impact on health of the interaction between marital status and gender by conducting separate regressions for males and females and expect to find that the impact of cohabitation on health varies by gender. Specifically, we propose that cohabitation will be more advantageous for males than for females. Because marriage has been found to have greater positive effects on health for males (Lillard and Waite 1995; Lillard and Panis 1996; Williams and Umberson 2004), we expect that cohabitation, which provides some of the same benefits of marriage such as social

support and expanded social networks, will be more positively related to males' health than to females' health.

First, we briefly describe the sociodemographic and health differences between marital groups in this study. Next, we present results from multivariate regression analyses comparing the physical health of cohabitors, measured through functional limitations and self-rated health, to the married. We also conduct separate analyses for males and females to account for the varying effects of cohabitation on health by sex. Finally, we will conclude with implications for the study of physical health and cohabitation and directions for future research.

METHODS

Data

The aim of this paper is to examine the physical health of cohabitors, as well as subgroups of cohabitors, particularly the never married and the previously married, and compare it to the married, never married, widowed, and divorced/separated. To this end, we will be analyzing pooled data from the 2000-2003 Person files of the National Health Interview Survey (NHIS), an annual multipurpose health survey conducted by the Centers for Disease Control and administered by the Census Bureau. The survey, when weighted, is a nationally representative sample of the U.S. non-institutionalized

population. Though the Person file contains information on all persons within a household, and there was a small minority of respondents under the age of 18 who were married, divorced/separated, widowed or cohabiting, we limit our analyses to persons age 18 and over. We also exclude from the analyses cases that are missing data on marital status, self-reported health status, nativity, education, and health coverage. In addition, we exclude those who are married, living with someone other than the spouse (N=59) as they are likely to be different from both the married and the cohabitors. The final sample size is 278,117 respondents.

In Table 1, we present the weighted characteristics of the sample by marital status. The mean age of respondents in the sample is 45.1 years. Most (52%) are female, White (72.8%), with a high school education (57%). Most respondents have a yearly family income over $20,000 and do have health coverage and are born in the United States. In terms of health, only 14.3% of the sample reports any functional limitation. Most respondents (87.8%) report excellent, very good, or good health. Thus, the sample as a whole is in fairly good health.

Dependent Variables

Physical health will be measured in two ways: functional limitation and self-rated health. A dichotomous variable will be used to indicate whether a respondent currently

has at least one functional limitation. We will also distinguish between physical limitations which were either present at birth or developed during childhood and those that onset after age 17. Of the 36 limitations addressed in the NHIS, we exclude only one, pregnancy- related limitation. Self-rated health is a subjective report by the respondent, with 5 categories which will be collapsed into two: excellent/very good/good (hereafter "good"), and fair/poor. This is one of the most common measures of health, and is widely proposed as a valid indicator of health (Williams and Umberson 2004). It has also been found to be correlated with mortality (Idler and Benyamini 1997).

Independent Variables

As we will be comparing the physical health of cohabitors to other groups, marital status will be the main independent variable. The marital status categories are: married; never married; cohabiting, previously married or cohabiting, never married; divorced/separated (hereafter "divorced"); widowed. The previously married cohabitors consist of those who are divorced, separated or widowed and currently cohabiting, while never married cohabitors are those who have never been married, but are currently living with a partner.

Because of the documented socio-demographic and health differences between marital status groups, age, sex and race will be included in the models to control for their

potential confounding effects. A quadratic measure of age will also be included to capture the possible curvilinear relationship between age and health. Recent research has found that some Hispanic immigrant groups are advantaged in their health outcomes compared to the U.S.-born; thus, nativity will also be included as a control (Hummer et al. 2007). Other factors that can affect whether one has a functional limitation or reports poor self-rated health are education, income, and health insurance. Finally, we will control for age at onset of limitation, as this is likely correlated with self-rated health. The following factors will be controlled for in the regression analyses: age, age-squared, sex, race, nativity, education, health coverage, income,[1] and age at onset of limitation.

[1] Income categories are: less than $20,000, more than $20,000 and refused. The omitted category in the regressions is more than $20,000. Results for the refused category are not presented in the tables.

Analyses

We will be conducting multivariate regression analyses in Stata 10.0 in order to account for the complex, multi-stage survey design. First, we will conduct a logistic

regression analysis to determine the odds of functional limitation for cohabitors versus the married. Then, we will conduct separate analyses for males and females, to assess the effects of gender and marital status on functional limitation. Next, we will turn to self-rated health. Three logistic regressions predicting poor self-rated health will be analyzed, again first for the whole sample and then separately for males and females. We will also conduct adjusted Wald tests after each of the aforementioned regressions to test for differences between cohabitors and the other marital status groups, particularly between never married and previously married cohabitors and between cohabitors and the never married and divorced.

To summarize, in Table 1 we present the weighted characteristics of the sample along key variables. Next, we present the full model regression results with functional limitation as the dependent variable in Table 2. Three regressions are presented: One for the whole sample, and two for males and females separately. Finally, in Table 3, we present three logistic regressions using self-rated health as the dependent variable, again for the whole sample and then for males and females separately.

PRELIMINARY RESULTS

Descriptive Statistics

When analyzing the characteristics of the sample by marital status, clear patterns emerge (Table 1). The married (N=157,595) are one of the oldest groups (on average 47.5 years of age), are mainly white (76.6%), U.S.-born, with at least a high school education (55.4% have a high school education and 26.6% have a college education or higher), family income over $20,000 and most have health coverage. The never married (N= 52,282) are the youngest of the groups, at 29.5 years of age. Among them, 46.1% are female, 19% are black (compared to 7.4% among the married). They are also less educated, possibly because of their relatively young average age. Finally, a larger percentage of the never married compared to the married have family income below $20,000 and have no health coverage.

The divorced/separated (N=28,124) have an average age slightly higher than the married (48.4 years compared to 47.5 years), have a large minority of blacks (16.9%), are less likely to be foreign-born than the married, and are one of the poorest of all the marital groups, with 33.1% of the divorced/separated reporting incomes below $20,000, and 20.4% having no health coverage. The widowed group is oldest, at an average of 72.4 years, with the largest majority female (81.8% of widows are female), majority white, mostly U.S.-born, and are least likely to be college educated. Although widows are the poorest of the groups, they are least likely to have no health coverage, a fact likely explained by Medicare. Lastly, cohabitors (N= 15,228) are on average about 12 years

younger than the married, are also majority white (70.2%), have a high school education and are poorer than the married. They are also most likely out of all marital groups to have no health coverage.

As predicted, however, there are differences among cohabitors. Those who have never been married (N=9,923) are nearly 15 years younger on average than previously married cohabitors (N=5,855). Never married cohabitors are also more likely than the previously married cohabitors to be foreign-born, a characteristic that may be related to health advantages over the U.S.-born (Hummer et al. 2007). Thus, it is likely that there are differences in health outcomes between both cohabitors and the married, as well as among cohabitors. To explore whether these differences exist net of other factors like age, we will examine differences in health by marital status in our analyses, also comparing previously married and never married cohabitors.

The groups most likely to report excellent/very good health are the never married cohabitors and the never married (Table 1). While only 64% of the married report excellent or very good health, 71.5% of the never married cohabitors and 69.9% of the never married do so. The group with the worst self-reported health is widows, then the divorced/separated. The same pattern emerges for functional limitation: cohabitors are the best off, with 9.8% reporting at least one functional limitation. Substantially fewer never married cohabitors report limitation (6.5%) than the previously married cohabitors

(15.2%). The next most advantaged group is the never married, with only 10.5% reporting a limitation, followed by the married and then divorced/separated. The widowed are worst most likely to report functional limitation.

These results are not surprising, given the younger ages of the better-off groups. For example, the never married are on average 29.5 years old and cohabitors 35.3 years, while the divorced are 48.4 and the married are 47.5 years old. Further, females make up the majority of the divorced/separated and widow groups. As females have been found to have higher levels of morbidity than males, the finding that these female-dominated groups report worse health and more functional limitations is not surprising (Verbrugge and Wingard 1987). Hence, multivariate regression analyses are in order to control for these confounding factors and assess the net impact of marital status on health.

Regression Analyses

Functional Limitation

The logistic regression results in Table 2 present the full models regressing marital status on functional limitation, controlling for sociodemographic characteristics. In Model 1, we examine the sample as a whole, and find that nearly all of the control variables are statistically significant, meaning they are significant predictors of functional limitation. Age is positively correlated with limitation, and age-squared does capture the

curvilinear relationship between age and limitation. Females have lower odds of limitation than males, though the difference is marginally significant (OR=0.98, p<.1). The odds of foreign-born are half those of the U.S.-born. Hispanics and Blacks have significantly lower odds of limitation than Whites, though those of "Other race" are not significantly different from Whites. Education is also related to limitation—the higher one's education, the lower the odds of limitation. The impact of income is staggering. The odds of those with less than $20,000 yearly family income are two and a half times those who make over $20,000. Finally, those reporting no health coverage have lower odds of limitation than those with health coverage.

Turning to marital status, we first note that all of the marital groups are significantly different from the married, even when controlling for age and other sociodemographic characteristics. More specifically, all groups have higher odds of reporting an activity limitation than the married. The highest odds ratio is for the never married, whose odds of limitation are twice those of the married. The divorced fare almost as bad as the never married (OR=1.86, p<.001), but their odds are still significantly lower than the never married (F=8.41, p<.01).

How do cohabitors compare? Both never married and previously married cohabitors have significantly lower odds of limitation than the never married and the divorced. There is no significant difference in odds ratios between the two cohabitor

groups—the never married and the previously married cohabitors ($F=2.41$, $p>.1$). Though their odds of limitation are significantly lower than the never married and the divorced, they still fare worse than the married. Cohabitors' odds of limitation are about 50% higher than the married. Though the descriptives in Table 1 reveal that fewer cohabitors than the married suffer from functional limitation, when we control for all the sociodemographic characteristics, it becomes apparent that cohabitors actually fare worse than the married, and better than the never married and divorced.

Self-Rated Health

Next, we turn to self-rated health. As this is a more subjective measure of health, we expect that there will be greater variation in the results by marital status group. Table 3 presents the odds ratios of reporting poor health by marital status, again distinguishing between never married and previously married cohabitors. This regression yields an unexpected finding: the never married and widowed have significantly lower odds of poor health than the married, while the divorced have similar odds of poor health compared to the married. This finding conflicts with previous research on marital status and health, which has found that the married have better health than the unmarried.

When including sociodemographic controls, only previously married cohabitors, the never married and the widowed are significantly different from the married in their

odds of reporting poor health. In contrast to the results for functional limitation, for self-rated health the previously married cohabitors fare worse than the other groups, including never married cohabitors ($F=4.90$, $p<.05$) and the divorced ($F=19.49$, $p<.001$). Controlling for age, sex, race, nativity, income, education, and health coverage, never married cohabitors have slightly higher odds of reporting poor health than the married, though the difference is not statistically significant, and the divorced are not significantly different from the married. One possible though clearly speculative explanation for this involves functional limitation (more prevalent among the never married) conditioning subsequent health expectations. The story would be that among those who have functional limitations (particularly from an early age), small episodes of illness are less likely to cause people to report lower health status . (We will elaborate on this.) In addition, never married cohabitors are more likely than the never married to report poor health ($F=10.33$, $p<.001$), another finding that contrasts with those for functional limitation. Those with a limitation present from birth or childhood increases have 13 times the odds of reporting poor health compared to females with no limitation, while those with limitations from adulthood have 10 times the odds as those with no limitation.

Thus far, we have seen that the relationship between marital status, particularly cohabitation status, and health is dramatically impacted by what measure of health one examines. For functional limitation, cohabitors, regardless of whether they are previously

married, seem to be an intermediary between the married and the never married or divorced. Yet, when measuring self-rated health, cohabitors are worst off: the previously married cohabitors have significantly higher odds of poor health than any other group, including never married cohabitors, whose odds are slightly but insignificantly higher than the married. In the next section, we address the interaction between gender and marital status.

The Interactive Effects of Gender and Marital Status on Health Outcomes

Although there are clear differences in health by marital status and depending on health measure, we have not yet explored whether males' and females' health statuses are related in distinct ways to marital status. First, we will explore differences between male and female marital groups in functional limitation (Table 2, Models 2 and 3) and then we will turn to marital group differences in self-rated health by gender (Table 3, Models 2 and 3).

Among males, every marital group is more likely to report a limitation compared to the married (Table 2, Model 2). The never married men are worst off, with over twice the odds of limitation as married men. The divorced are also highly disadvantaged, reporting nearly twice the odds of the married. As there is no significant difference between cohabitor subgroups ($F=.31$, $p>.1$), all cohabiting males are significantly better-

off than the never married and the divorced, but are significantly more likely than married males to report limitation. Divorced males are not significantly different from the married, but their odds of reporting limitation are slightly higher.

As with the males, compared to married females, all other females have higher odds of reporting limitation (Table 2, Model 3). Whereas the sample as a whole is not differentiated by cohabitor subgroups in odds ratios of limitation, female never married cohabitors have significantly lower odds of limitation than previously married female cohabitors ($F=7.26$, $p<.01$). Previously married cohabitors' odds of limitation are almost twice those of married females. Previously married female cohabitors are less likely to have a limitation than the never married and the divorced, but the difference is not statistically significant ($F=1.13$, $p>.1$).

For males, when analyzing self-rated health, only two groups have significantly different odds of reporting poor health compared to the married: the previously married cohabitors and the widowed (Table 3, Model 2). Previously married cohabiting males are the only group with statistically higher odds of poor health compared to married males. Whereas among females, there is no difference in odds between never married and previously married cohabitors, for males there is a difference between cohabitor sub-groups ($F=3.21$, $p<.1$). Never married male cohabitors are not significantly different from married and never married males in odds of reporting poor health, while previously

married cohabitors have significantly higher odds of poor health than married and divorced males ($F=6.51$, $p<.01$).

Among females, all marital groups except the divorced are significantly different from the married in the odds of reporting poor health (Table 3, Model 3). As with male divorcées, female divorcées' odds of poor health are not significantly different from married females, though they are slightly lower. While the widowed and never married females have lower odds than married females of reporting poor health, cohabiting females, regardless of subgroup, have higher odds of having poor health. For females, there is no difference between never married and previously married cohabitors in their odds of reporting poor health ($F=1.19$, $p>.1$). Cohabiting females have higher odds of reporting poor health than married, divorced and never married females.

These interactive models reveal that there are, indeed, differences by gender in the relationship between cohabitation and health status. In measuring functional limitation, male cohabitors, regardless of previous marital status, have higher odds of limitation compared to the married, but lower odds than the never married males and divorced males. Among females, like males, cohabitors have significantly higher odds of limitation than the married. However, never married cohabiting females have lower odds of limitation than previously married cohabiting females, never married females, and divorced females, while previously cohabiting females have the same odds as divorced

females. In other words, cohabitors, regardless of gender, have higher odds of limitation compared to the married, but for females, being a never married cohabitor is the next best thing to being married and being a previously married female cohabitor is equivalent to being divorced or never married, while for males being a previously married cohabitor is better than being divorced or never married.

For self-rated health, only previously married male cohabitors are significantly more likely to have poor health than the married and the divorced, while never married male cohabitors are not different from the married, never married, or divorced males in odds of poor self-rated health. Cohabiting females—irrespective of whether they are never married or previously married—are significantly more likely than all other marital groups to report poor health. Hence, for self-rated health, cohabitors' position in relation to the married and other marital groups depends on his/her sex, with male cohabitors having lower odds of limitation compared to the never married and divorced, and female cohabitors having higher odds of poor health compared to their never married and divorced counterparts. These results evidence the importance of considering gender and marital status together when analyzing physical health. Male cohabitors appear to be disadvantaged only in relation to the married, and for self-rated health the divorced. Female cohabitors' position with regards to health depends on the health measure and previous marital status.

DISCUSSION

This paper reveals some important health differences between cohabitors and the married. It also evidences the need for research to examine subgroups of cohabitors—the never married and the previously married—which sometimes have divergent health outcomes, as well as the interaction between gender and marital status. In accordance with Wu et al.'s (2003) findings, overall cohabitors appear to fall somewhere between the married and the divorced in their health outcomes. For functional limitation, cohabitors' odds are greater than those of the married, but lower than the divorced and never married. However, the health measure used can be pivotal: for self-rated health, the married are actually one of the disadvantaged groups—a finding that conflicts with previous research. Nevertheless, previously married cohabitors seem to be the most disadvantaged group with respect to self-rated health, while never married cohabitors' self-rated health resembles the married. Also, in many cases, never married cohabitors are better off than previously married cohabitors. While the findings presented here uphold some previous studies' findings that cohabitors have poorer health than the married, we also add that never married cohabitors may not, in fact, be much worse off than the married in some health outcomes. For example, for self-rated health, never married cohabitors' odds are not significantly different from the married.

Gender differences in the relationship between cohabitation and health are also significant. The relationship between cohabitation and health is much more complicated for females than it is for males, who appear to be nearly universally advantaged compared to the never married and divorced, and some (specifically, never married cohabiting males) are even as well off as the married.

Another important finding is that analyzing different health measures can produce conflicting or differing results. In this study, cohabitors reported worse self-reported health compared to the divorced and never married, despite having relatively lower odds of functional limitation. One possible explanation for the divergent results for limitation and self-rated health has to do with mental health. Brown (2000) finds that cohabitors may experience worse mental health because of their instable relationships. While functional limitation is a physical measure of health, subjective assessments of health may also take mental/emotional health into account as well.

This study is not without limitations. The most apparent drawback is the cross-sectional nature of the data. Another issue affecting these findings has to do with the availability of data from the NHIS. We were limited in the number and breadth of controls we were able to include. Most importantly, we cannot assert what the self-rated health of the person was before entering into the cohabiting union, nor whether there was functional limitation present before the union. However, for the small percentage of the

sample which has a limitation since childhood, we can deduce that the limitation was present before the union. We also have no measure of the length of the cohabitation or the expectations for marriage, or of health behaviors—all possible influential factors in the health outcomes of cohabitors. Also, the subjective nature of self-rated health and reporting of functional limitation bring into question the differences in reporting behavior. Yet, studies have found that there are no consistent differences in health reporting behavior among men and women (Verbrugge 1989). We are not aware of any study finding differences in health reporting by marital status, thus, we have no reason to believe these findings are artifactual. Despite these limitations, this study contributes to the small body of knowledge on cohabitors' physical health and reveals the importance of gender, they type of health measure being analyzed, and distinguishing between subgroups of cohabitors in studies of cohabitation and health.

In light of our findings, future research should address the dynamic relationship between marital status and health by analyzing the interaction between gender and marital status. This study has found that female cohabitors may experience different health outcomes than male cohabitors, thus the interaction should be included as an important determinant of health. Another distinction that proved significant in this study and should be included in future research is the identification of cohabitors as either never married cohabitors or previously married cohabitors. Finally, it is imperative that

the multi-faceted nature of health be addressed in research by studying various aspects of health. As we have shown, different health measures can yield varied results, and research should not generalize findings based on one measure to all other health measures.

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TABLES

Table 1. Characteristics of Sample by Marital Status (%)

	All (N=278,117)	Married (N=157,595)	Cohabiting (N=15,228)	Never Married (N=52,282)	Divorced/ Separated (N=28,124)	Widowed (N=17,658)	Cohabit- Prev. Married (N=5,855)	Cohabit- Never Married (N=9,923)
Funtional Limitation	14.3	11.6	9.8	10.5	22.4	42.0	15.2	6.5
Child Onset limitation*	2.1	1.2	2.0	4.6	3.2	2.5	2.3	1.9
Self-Rated Health								
Excellent/V. Good	62.4	64.0	65.7	69.9	54.0	38.3	57.3	71.5
Good	25.4	25.0	24.6	22.7	28.2	33.4	28.4	22.1
Fair/Poor	11.6	10.6	9.2	7.0	17.4	27.6	14.1	6.1
Age (mean)	45.1	47.5	35.3	29.5	48.4	72.4	44.4	29.4
Female	52.0	49.5	49.0	46.1	60.8	81.8	50.9	47.8
Foreign-born	15.3	16.7	12.8	14.1	11.8	12.4	9.7	14.8
Race								
White	72.8	76.6	70.2	62.1	69.6	78.2	77.3	66.2
Black	11.3	7.4	13.7	19.0	16.9	12.0	11.0	15.1
Hispanic	11.1	11.1	12.7	13.0	10.8	6.5	9.1	14.9
Other	4.6	4.9	3.2	5.8	2.7	3.2	2.6	3.6
Education								
Less than H.S.	16.5	14.3	17.4	17.0	17.3	33.3	17.1	17.8
H.S.	57.0	55.4	61.5	61.4	62.1	51.6	66.0	59.5
College+	22.9	26.6	17.9	19.0	18.6	10.5	14.4	20.6
Income, Less $20K	19.1	10.6	18.6	28.9	33.1	47.9	16.3	20.0
No Health Coverage	15.9	11.6	31.5	25.6	20.4	5.2	26.9	34.1

*Note: Limitation existed prior to age 18

Table 2. Odds Ratios from Logistic Regression: Functional Limitation

	All	Male	Female
Marital Status (Married)			
Cohabiting- Never Married	1.43 ***	1.46 ***	1.40 ***
Cohabiting- Previously Married	1.58 ***	1.38 ***	1.78 ***
Never Married	2.02 ***	2.25 ***	1.83 ***
Divorced/Separated	1.86 ***	1.80 ***	1.90 ***
Widowed	1.38 ***	1.41 ***	1.42 ***
Age	1.08 ***	1.09 ***	1.07 ***
Age squared	1.00 ***	1.00 ***	1.00 ***
Female (Male)	0.98 †	-	-
Foreign-born (U.S.-born)	0.53 ***	0.48 ***	0.57 ***
Race (White)			
Hispanic	0.81 ***	0.82 ***	0.81 ***
Black	0.96 †	0.96	0.97
Other	1.03	1.08	0.99
Education (Less than H.S.)			
High School	0.64 ***	0.65 ***	0.63 ***
College+	0.36 ***	0.35 ***	0.38 ***
Income (More than $20K)			
Less than $20K	2.54 ***	2.86 ***	2.32 ***
No Health Coverage	0.71 ***	0.68 ***	0.74

*** p<.001, **p<.01, * p<.05, † p<.1

NOTES: Reference groups are in parentheses

Table 3. Odds Ratios from Logistic Regression: Poor Self-Rated Health

	All	Male	Female
Marital Status (Married)			
Cohabiting- Never Married	1.09	1.06	1.17 *
Cohabiting- Previously Married	1.28 ***	1.26 **	1.30 ***
Never Married	0.91 **	0.97	0.89 **
Divorced/Separated	1.00	1.02	1.00
Widowed	0.72 ***	0.74 ***	0.80 ***
Age	1.10 ***	1.11 ***	1.10 ***
Age squared	1.00 ***	1.00 ***	1.00 ***
Female (Male)	1.04 **	-	-
Foreign-born (U.S.-born)	0.91 **	0.89 **	0.94 †
Race (White)			
Hispanic	1.64 ***	1.52 ***	1.74 ***
Black	1.73 †	1.53 ***	1.88 ***
Other	1.39	1.44 ***	1.33 ***
Education (Less than H.S.)			
H.S.	0.58 ***	0.61 ***	0.57 ***
College+	0.29 ***	0.29 ***	0.28 ***
Income (More than $20K)			
Less than $20K	1.71 ***	1.77 ***	1.67 ***
No Health Coverage	1.19 ***	1.15 ***	1.22 ***
Limitation (No limitation)			
Child onset	13.08 ***	12.19 ***	13.86 ***
Adult onset	10.40 ***	10.39 ***	10.41 ***

*** p<.001, **p<.01, * p<.05, † p<.1

NOTES: Reference groups are in parentheses