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Partner Characteristics and the Initiation and Maintenance of Healthy Lifestyle Changes

Extended Abstract Prepared for PAA 2011

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Short Abstract

This project extends the literature on how marital relationships affect health by highlighting several possible mechanisms through which partnership and spousal characteristics are correlated with lifestyle, chronic disease management, and health outcomes. I use the Health and Retirement Study to explore the relationship between partnership characteristics, gender, and three aspects of health behavior changes and trajectories. I explore whether marital status and partners' characteristics are associated with the probability of making a healthy lifestyle change upon diagnosis with a new chronic condition for which behavior change is important for disease management. Second, I examine the probability of healthy lifestyle changes upon a *spouses'* diagnosis with a new chronic condition. Third, I examine whether marital status and partners' characteristics are associated with adherence to healthy lifestyle changes, once initiated. Last, I explore whether these three changes differ by gender.

Motivation

Now that chronic diseases are the primary cause for mortality in the U.S. and other developed countries (Omran 1971), the management of chronic conditions is increasingly important for improving life expectancy. One central part of chronic disease management is health behaviors. Doctors urge patients with many new conditions to quit smoking and limit alcohol consumption. Moreover, patients with hypertension, heart disease, and diabetes are recommended to start exercising or increase physical activity (ACCF/AHA Expert Consensus Document 2009). Researchers in public health and the medical sciences seek to understand the best points of intervention, and methods to encourage patients to adopt healthier lifestyles (AHA 2006). There is great debate about how to encourage people to stop smoking, cut back on drinking, or adopt exercise routines. However, there is relatively little research at the population level about the social context in which people make such changes and for how long they are able to sustain them. While there is some evidence from clinical trials that shows that partner support aids smoking cessation (Park et al. 2004), there is little population level data on the prevalence of these changes within couples.

Sociologists, economists, and demographers have long studied why those who are married have better health, and lower mortality (Waite & Gallagher 2000). While some argue that this is due to the selection of healthier people into marriage, most the literature has concluded that people, especially men, gain from the healthier lifestyles of their partners (Umberson 1987). However, documenting causal effects is extremely difficult for several reasons. First, there is a large degree of assortative mating on health and health behaviors (Meyler, Stimpson & Peek 2007). Couples usually live together in households and are both subject to events that affect the entire household, such as macro forces such as environmental changes or micro events that are experienced by members of the same family, for example children's illness. Third, couples affect each other, and disentangling the mechanisms is difficult, even with population level survey data. Qualitative work has highlighted the ways in which people affect the health behaviors of their spouses (Bove, Sobal, & Rauschenbach 2003; DeVault 1991), that are often hard to identify in survey data. This project extends the literature on how marital relationships affect health by highlighting several possible mechanisms through which partnership and spousal characteristics are correlated with lifestyle, chronic disease management, and health outcomes.

Research Questions

In this paper, I explore the relationship between family characteristics and three aspects of health behavior changes and trajectories. First, I explore whether marital status and partners' characteristics are associated with the probability of making a healthy lifestyle change upon diagnosis with a new chronic condition for which behavior change is important for disease management. I hypothesize that social support will be an important predictor of a healthy change. Moreover, gender differences in the type of social support suggest that the association will be stronger for men than for women.

Second, I examine the probability of healthy lifestyle changes upon a spouses' diagnosis with a new chronic condition. I hypothesize that spouses will be more likely to make lifestyle changes when their spouses get new chronic conditions, and that they will more often make changes for behaviors that have externalities (i.e. smoking) than those that do not (i.e. physical activity). Moreover, I hypothesize that women will be more likely to make lifestyle changes in response to a spouses' condition than men.

Last, I examine whether marital status and partners' characteristics are associated with adherence to healthy lifestyle changes, once initiated. I hypothesize that partnership and having a partner practicing the healthy health behavior will be associated with better adherence over time. Moreover, I will test whether when partners make lifestyle changes jointly, whether they adhere to them longer.

Data and Method

To analyze family characteristics and health behavior changes and trajectories, I will use the Health and Retirement Study, a nationally representative longitudinal study of health and aging in the United States (Juster & Suzman 1995). One advantage of using the HRS is that it allows the analysis of health behavior changes over a 16 year period. This is important because we observe respondents' trajectories starting from when they are in their 50s, when most are still relatively healthy, into their 60s and early 70s, a period during which many report new chronic conditions and change their health behaviors. A second advantage is the ability to take into account confounding factors such as health status, existing chronic conditions, and changes in marital status and work hours, which in prior studies have been linked to behavioral change

(Evanson, Rosamond, Cai, Diez-Roux, & Brancati, 2002; Umberson, 1992). Last, cohabiting and married partners are included in the study, allowing analysis of spouses' covariates.

For the first part of the analysis, I will analyze all respondents, whether partnered or not. In the rest, I will analyze the subset of respondents that are married or partnered during the study. To examine the relationships between marital status, spouse characteristics, and health behavior changes, I will draw on two types of regression models- logistic regression models and conditional logit models with fixed effects, and discrete-time event history analysis (Allison 1982). Both will account for the fact that data about individuals in couples will be correlated with each other (Kenny, Kashy & Cook 2006).

Planned Work

Over the next several months, I will do careful descriptive analysis on the probability of the aforementioned changes among couples. The characteristics of partners that I will examine are partner gender, educational attainment, health behaviors, health status, and cognitive ability. Last, I will discuss new directions for research on gender and health as well as couples and health interventions, based on the population-level findings.

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