

## ***Dynamic Association Between Marital Quality, Sleep, and Nocturnal Blood Pressure***

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Marriage is a primary source of social support and conflict for most adults. The primary aim of my program of research is to evaluate the “dual-edged” nature of marriages and to understand how and why some marriages may be health-protective whereas others confer greater health risk. Marital quality has shown consistent associations with a diverse array of physical health outcomes, including cardiovascular disease (CVD) morbidity and mortality. However, the mechanisms underlying the health effects of marriages remain poorly understood. Sleep is a fundamental health behavior that has significant effects on physiology and well-being. Moreover, sleep is typically a ‘shared’ health behavior between husbands and wives. Thus, sleep may be a particularly important behavioral mechanism linking close relationships with physical health outcomes. However, there is a paucity of evidence that considers the dyadic nature of sleep or the degree to which sleep contributes to the association between relationship quality and physical health outcomes. The purpose of this pilot study is to collect preliminary data and demonstrate the feasibility of a study examining links between marital behaviors (support and conflict) and sleep in couples’ home environments. Specifically, the study employs daily diary assessments of marital interactions and daily mood measures, as well as daily sleep diaries to derive an index of sleep quality, and actigraphy measures to provide an objective measure of sleep continuity and duration. In addition, couples will be asked to complete two days of 24-hour ambulatory blood pressure (BP) monitoring, in order to derive measures of nocturnal blood pressure dipping. Emerging evidence highlights the prognostic utility of nocturnal BP levels; however, no study to date has examined the association between marital functioning and nocturnal BP. The general aims of this study are to 1) examine the association between positive and negative marital interactions and sleep quality and continuity; and 2) to examine the degree to which the dynamic association between marital interactions and sleep (i.e., the interaction) is associated with nocturnal BP and average mood ratings. The study cohort will consist of 20, first-time married couples in the first seven years of marriage. The present study affords the possibility to examine the cumulative impact of marital behaviors on novel risk factors that are particularly relevant within the couple system.