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Comment   Amitabh Chandra

In this remarkable chapter, we learn that the health of spouses is positively correlated. To illustrate with a few examples from the analysis, consider a simple regression of a wife's health outcome on her husband's (adjusting for the ages of both partners): in the United States, if the husband has arthritis the wife is 10 percentage points more likely to have this condition; if the husband is in fair or poor health, then his wife is about 20 percentage points more likely to be similarly disposed. These associations are similar, but slightly larger, in the United Kingdom and are noted for adult health, adult behaviors (such as smoking), childhood health (as measured by height), and background (such as education). It is also interesting to note that these associations are larger for the first relationship than subsequent ones. So much for the idea that first love is a little foolish.

There are several implications of these findings that are worth exploring. The first, and most salient, is the linkage to Nicholas Christakis's work on "Mortality after the Hospitalization of a Spouse," which was published in the *New England Journal of Medicine* and summarized in many news outlets (Christakis and Allison 2006). In this work, Christakis's team makes three points: First, that having a sick spouse is about one fourth as bad for a partner's health as having a spouse actually die. Second, some spousal diseases, such as hip fracture or psychiatric conditions, were nearly as bad for partners as if the spouse actually died. Third, the period of greatest risk is over the short run, within thirty days of a spouse's hospitalization or death, when the

risk of death upon a spouse's hospitalization is almost as great as that when a spouse dies. When this chapter came out the principal concern with these findings was that the husbands and wives suffered correlated health shocks (and that it was the common shock, as opposed to the health of one partner, that resulted in their correlated outcomes). But what we learn from the new chapter by Banks, Kelly, and Smith is that another source of bias may also be at work: if the marriage markets result in assortative mating (where healthy men marry healthy women and unhealthy men are more likely to be matched to unhealthy women), then it may be unsurprising to find that one spouse's hospitalization predicts another spouse's hospitalization. I do not believe that the entirety of Christakis's results would be defined by this explanation, and it is highly unlikely that the increased risk of hospitalization within thirty days of a spouse's hospitalization would be, but the point here is that assortative mating in health means that the Christakis studies are biased in the direction of finding what they did. Exploring the empirical content of this hypothesis would be a fruitful area for future research, especially because the odds ratios for elevated hospitalization in the Christakis studies are small (less than 1.5) and we know that it does not take a lot of selection to undo these effects.

The chapter also opens up a number of interesting questions for future research. Do "spousal health effects" (what I call assortative mating on health) persist even after controlling for race and income? First, this is an important distinction to what is presented in the chapter, because to the degree that most marriages in the United States are still within race and within income group, it is possible that the facts presented here are picking up assortative mating on the basis of race and income. Second, the analysis motivates us to ask whether assortative mating on the basis on health increased over time? I would suspect that it has, if nothing else, because of the increasing concentration of income, wealth, and opportunity. Robert Mare, the distinguished sociologist at UCLA, has noted that the fraction of marriages that are educationally homogamous (i.e., marriages where both spouses have the same educational levels) have increased from 44 percent of all marriages in 1960 to over 55 percent in the 2000s. Building on my first comment, these trends may imply higher assortative mating on the basis on health (either causally or because both trends have a common causal factor).

Understanding why assortative mating occurs is beyond the scope of this chapter, but certainly within the scope of economics. In the world of biology, scientists have studied assortative mating in arthropods in great detail (arthropods are invertebrate animals having an exoskeleton, a segmented body, and jointed appendages; they include insects, arachnids, and crustaceans). The leading theories are: (a) mate choice—where larger (healthier?) arthropods are better able to exercise choice; (b) mate availability—where larger agents are differentially available for mating; and (c) mating constraints—where size differences (here, health differences) cause

physical or energetic difficulties. The role of the last constraint is likely to be falling in human populations as a result of superior medical care (sick children are more likely to be healthy adults today than in the past). But the case for the mate choice hypothesis is likely increasing.

An increasing amount of assortative mating has large implications for inequality and the political economy of transfer programs. Healthier and richer parents are more likely to produce healthier children who will receive many educational advantages. Connecting the theory to the evidence, for human marriage markets as opposed to arthropods markets, would make a terrific research program.

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