

CHAPTER I

INTRODUCTION

Marriage has become an increasingly important topic in academic and policy research. A burgeoning literature suggests that marriage has a wide range of benefits, including improvements in individuals' economic well-being and mental and physical health, as well as the well-being of their children (Lerman 2002; Ross et al. 1990; Waite and Gallagher 2000; Wilson and Oswald 2005). Inspired, in part, by these potential benefits of marriage, several large-scale federal initiatives have been launched in recent years that aim to encourage and support marriage.

This synthesis focuses on recent research evidence concerning one of these potential benefits of marriage—the effects of marriage on health. In general, married people are healthier than those who are not married across a wide array of health outcomes (Schoenborn 2004). The existence of an association between marriage and health does not necessarily imply that marriage causes better outcomes, however. In particular, people who marry may already be healthier than those who do not, and this may be the reason for the better health of married adults. An examination of the relevance of these patterns for public policy must include careful consideration of whether the association between marital status and various health measures indicates that getting and staying married actually improves health.

To provide a broad understanding of the current research on the link between marriage and health, we have synthesized recent literature across several fields, including public health, the social sciences, and medical science. We focus on research published in peer-reviewed journals and on studies using the most rigorous methods for determining whether the link between marriage and health is a causal one. A review of all the research that examines marriage and health is beyond the scope of this project. Therefore, we have narrowed our review to examine the research of most relevance to the U.S. policy community. In particular, we focus on research conducted with U.S. populations and completed since 1990. In addition, we focus on research that uses the most sophisticated statistical methods for determining whether marriage does indeed improve health outcomes. By focusing on the most compelling research evidence concerning the effects of marriage on health, we aim to provide an accurate portrayal of the current state of research—documenting what we do and do not know about the linkages between marriage and health.

In the rest of this chapter, we lay out the theoretical and practical structure of this review. First, we discuss how marriage may both affect, and be affected by, health outcomes and describe how we focus this synthesis on studies that carefully address this complex relationship. Next, we explain the parameters for our review, including the particular health outcomes we consider and the types of studies we review. Finally, we preview the findings summarized in the following chapters, which discuss the most recent evidence of the effect of marriage on health outcomes.

UNDERSTANDING THE MARRIAGE-HEALTH CONNECTION

Although the association between marriage and health is well established, the fact that married people generally have better health does not necessarily imply that marriage causes these better health outcomes. Instead, healthier people may be more likely than those who are less healthy to get and stay married, because they may be considered more desirable marriage partners in terms of their various attributes (such as physical attractiveness, earnings potential, mental well-being, degree of self-sufficiency, and likely longevity). Social scientists describe this pattern of married people being more likely to marry as the “selection” of healthy people into marriage. If the only reason for the correlation between marriage and health is the selection of healthier people into marriage, then marriage is not causing better health. Instead, the observed health differences between married and unmarried people are the result of healthier people being more likely to marry.

Alternatively, marriage may have real health benefits, and the association between marriage and health outcomes may represent a true causal link. This view is sometimes known as “protection theory,” because marriage is seen as protecting people against poor health outcomes. Marriage could improve health outcomes in a variety of ways. Marriage potentially offers both economic and social advantages. In particular, marriage may result in two incomes, as well as economies of scale, improving the economic well-being of those who marry (Lerman 2002). This increased economic well-being could, in turn, improve health outcomes by increasing access to health care or lowering stress. In addition, a spouse may play an important role in monitoring and encouraging healthy behaviors (such as good eating habits and regular exercise), as well as in discouraging unhealthy ones (such as smoking or heavy drinking) (Umberson 1987). Marriage also may provide an emotionally fulfilling, intimate relationship, satisfying the need for social connection, which could have implications for both physical and mental health (House et al. 1988). Finally, some speculate that society stigmatizes single people (DePaulo and Morris 2005). If this is true, entry into marriage represents adhering to cultural norms and, thus, yields mental health benefits through social acceptance. Most researchers conclude that the association between marriage and health represents a combination of selection and protection (Lillard and Panis 1996; Murray 2000; Waite 1995). In other words, marital status both affects, and is affected by, health outcomes.

Because marriage is likely to be both a cause and a consequence of these health outcomes, a central challenge of studying the relationship between marriage and health is disentangling the influences of selection and protection and isolating the true causal influence of marriage on health. Addressing these issues requires careful analysis and

advanced statistical methods that are not always used in studies examining the link between marriage and health. In reviewing the literature in this area, we have paid particular attention to the care with which studies have addressed selection. Our review highlights the research that has most thoroughly addressed the role of selection in the association between marriage and health and, thus, focuses on studies that provide the most compelling evidence on whether marriage has a true causal influence on health outcomes.

SCOPE OF THE SYNTHESIS

A large body of literature addresses the link between marriage and health, and a review of all this research is beyond the scope of this synthesis. Therefore, to focus our review and make it both manageable and as relevant as possible, we have developed parameters to guide our identification of the research to review. In particular, we have selected health measures from a broad range of outcome areas that are important indicators of well-being and have been the subject of numerous studies. In addition, we have focused on the most up-to-date, rigorous studies, to provide a summary of the current state of knowledge. In this section, we describe the health outcomes we examine and the kinds of studies we review.

Health Outcomes

Health is a multidimensional concept that encompasses a large array of measures, including behavioral, physical, and emotional outcomes. We have selected health outcomes from five broad topic areas and focused our review on those outcomes likely to be of most interest to the health policy community. In particular, we focus our synthesis on the following outcomes:

- ***Health Behaviors.*** One important way that marriage may affect overall health is by increasing the likelihood that people will engage in healthy behaviors (such as exercise and eating a balanced diet), while also reducing various risk-taking behaviors (such as smoking or drinking heavily). For this review, we focus on health behaviors that have well-documented connections with physical health outcomes. In particular, we examine the evidence on the effect of marriage on alcohol and drug use, smoking, body weight, and exercise.
- ***Health Care Access and Use.*** Marriage may also affect health by influencing health care access and patterns of health care use. For example, marriage might improve access to care by increasing the material resources available to purchase care or by affording access to a spouse's health insurance policy. To the extent that marriage improves access to care or influences patterns of health care use, it might also have consequences for health care costs. To summarize research in this area, we focus on the links between marriage and three main health care outcomes: (1) health insurance status; (2) health care use (for example, use of cancer screenings and hospital care); and (3) total health care costs.

- ***Mental Health.*** Marriage may also affect physical health through its influence on mental health. A vast literature links mental health to marital status and marital quality. To remain within the resource constraints for this review, we focus on one specific measure of mental health: the presence of depressive symptoms. Depression is one of the most common forms of psychological distress and can be highly debilitating. It is also highly correlated with physical health. For these reasons, it is a logical outcome to examine as part of our research synthesis.
- ***Physical Health and Longevity.*** The ultimate concern of this review is whether marriage affects physical health and longevity. Rigorous research on the effects of marriage on particular physical health outcomes is limited. In our synthesis, we describe the evidence from several of the strongest recent studies in this area. Most commonly these studies examine self-rated measures of general health status. However, we also summarize one study of the effects of marriage on cardiovascular disease. Studies of marriage and longevity typically examine the effect of marital status on mortality risk over a specific time period. Unlike the effects of specific physical health outcomes, the effect of marriage on longevity has been studied extensively.
- ***Intergenerational Health Effects.*** A couple's marital status might also have long-term consequences for the health of their children. For this review, we focus on a growing body of research linking parental marital status in childhood with health outcomes experienced much later in adulthood. Studies in this area also link parental marital status with adult longevity. These studies represent an emerging area of interest on the lingering effects of early childhood experiences.

Search Parameters and Methods

A voluminous research literature discusses the link between marriage and these health outcomes. A full review of all the relevant research concerning the possible effects of marriage on these outcomes is beyond the scope of our current effort. Therefore, to further target the review, we have used the following additional parameters:

- ***Studies Published Since 1990.*** To ensure that we focus on the most relevant and up-to-date research, we concentrate on studies published since 1990. Because the institution of marriage itself has evolved, its health consequences may have also changed. A policy-relevant research synthesis requires a focus on the most recent research evidence.
- ***Studies Published in Peer-Reviewed Journals.*** To ensure that the review focuses on the highest-quality research, we focus the synthesis on studies published in peer-reviewed journals.

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- ***Studies of U.S. Populations.*** Marriage and its health consequences may vary across different countries and cultures. Therefore, we focus on studies that have been conducted with U.S. populations, because they are of most relevance to the U.S. policy community.
 - ***Studies That Carefully Address Selection and Causality.*** Many studies examine the correlation between marriage and health but do not carefully consider whether this correlation represents a true causal link. In this synthesis, we highlight studies that have considered this issue carefully and addressed it through detailed controls for background characteristics and the use of other statistical techniques.
 - ***Studies That Focus on the Link Between Marriage and Health Outcomes.*** Many studies of health outcomes use marital status as one of many covariates and do not focus particularly on the link between marriage and health. We selected studies that had a particular focus on the marriage-health connection, because these studies are more likely to have addressed issues of selection and causation more carefully.¹

To identify relevant articles, we used several research-oriented search engines. First, we used EBSCOhost, which indexes more than 3,600 peer-reviewed publications, including research in such fields as economics and sociology. To supplement EBSCOhost, we also searched for articles using MEDLINE® and PsycInfo®. MEDLINE uses the National Library of Medicine’s online database, and contains information on medical and health sciences. PsycInfo is a database of more than 2,000 peer-reviewed journals that covers the behavioral sciences and mental health. Through these three databases, we were able to search for literature in many disciplines, such as medicine and epidemiology, as well as psychology and other social sciences.

The search terms we used corresponded to the parameters described above. Specifically, we restricted the search to literature published in 1990 or later and only included peer-reviewed sources. To identify relevant articles, we used particular search terms, such as “marital,” “marriage,” and “family structure” and paired these with each of the health outcomes of interest, such as “mortality” or “depression.”

¹ This review does not examine the effect of cohabitation on health or the differing health effects of marriage and cohabitation. In the large majority of studies we examined, cohabitation was treated as equivalent to being single. Therefore, in most cases, when these studies compare the health outcomes of those who are married to the health outcomes of those who are not, cohabiters are included in the “not married” group. In a few studies, cohabitation was treated as a separate status, distinct both from being married and being single. None of the studies included in our review treated cohabitation as equivalent to marriage.

OVERVIEW OF THE SYNTHESIS

In the rest of this report, we discuss the recent research on marriage and selected health outcomes. In each chapter, we discuss what is currently known about the potential effects of marriage on each set of health outcomes, highlighting the research with the strongest methodologies. We note any relevant gender or racial differences, discuss possible discrepant findings, and, when appropriate, offer explanations for why the discrepancies may have occurred.

We begin with a review of the research evidence concerning the effects of marriage on health-related behaviors. In Chapter II, we focus on the effects of marriage on four sets of health behavior outcomes: (1) drinking and marijuana use, (2) smoking, (3) bodyweight, and (4) exercise. We focus our review on studies that use longitudinal data and relate changes in marital status to changes in various health behaviors, because these analyses provide more compelling evidence of a causal link between marriage and these behaviors. We find that there is substantial research evidence suggesting that, for young adults, marriage reduces heavy alcohol consumption for both men and women, as well as substantial evidence for young men of a reduction in marijuana use associated with marriage. There is also strong evidence suggesting that both men and women experience modest weight gain during marriage. The evidence on marriage's effect on physical activity is more limited, but it suggests that marriage leads to reductions in exercise, particularly for men. There is no consistent evidence of an effect of marriage on smoking.

In Chapter III, we examine the links between marriage and health care access and use. We consider three main health care outcomes: (1) health insurance status, (2) health care use, and (3) health care costs. The best studies in this area relate transitions in marital status to subsequent changes in either access to care or patterns of health care use. Studies show that transitions out of marriage often lead to loss of health insurance coverage—particularly for women—as people lose access to a spouse's health insurance plan. Studies of the effect of marriage on health care use and cost suggest that marriage may reduce health care costs through its effects on the number of doctor visits, the length of hospital stays, and the likelihood of nursing home admissions. Researchers conclude that married people—particularly married men—may spend less time in the hospital and in nursing homes because their spouses can provide informal care for them at home.

In Chapter IV, we examine the effect of marriage on mental health, focusing on depressive symptoms. The link between depressive symptoms and marital status is especially well studied, with research covering many decades. Recent work consistently indicates that—for both men and women—marital entry decreases depressive symptoms while marital dissolution increases them. Similarly, those who are stably married report fewer depressive symptoms than do similar adults who are stably unmarried—even after controlling for baseline health—which also suggests that marriage reduces the prevalence of depressive symptoms.

In Chapter V, we examine the effect of marriage on physical health and longevity. In general, however, this research has used estimation techniques that do not fully address the

potential selection of healthier people into marriage. Therefore, the current research offers limited evidence on the effects of marriage on general physical health or specific physical health outcomes. Limited evidence suggests that transitions into and out of marriage are related to changes in men's self-rated health and that divorce has a significant negative effect on women's physical health; however, these findings are based on a limited range of physical health indicators and do not adequately assess the possible long-term effects of marriage on general physical health status. We also examine the effects of marriage on longevity. The pattern that married people live longer has been found for more than 100 years and across many countries. Isolating and controlling for the effect of selection is a challenge, however, and many studies are unable to address it adequately. Unlike the other health outcomes we examine in our review, the strongest evidence of an effect of marriage on longevity comes more from the robustness of the relationship across a wide range of studies than from the particular results of any single study.

In Chapter VI, we switch our focus from the health effects of marriage on those who are married to examine the possible intergenerational health effects of marriage. In particular, we review the evidence on the possible long-term consequences of marriage for the physical health outcomes of a couple's children. Due, in part, to the relatively limited availability of data linking parental marital status in childhood with adult physical health outcomes, the research in this area is generally more speculative and based on less rigorous statistical methods than most of the other evidence featured in this review. The studies that are available, however, suggest that growing up with two parents does improve long-term physical health outcomes, particularly for men.

In Chapter VII, the concluding chapter, we summarize the findings presented in Chapters II through VI to provide a cogent description of the current state of research. We also discuss the gaps and limitations in the research literature, as well as logical next steps for future research. By laying out the strengths and weaknesses of existing work, we aim to provide a document that accurately and clearly portrays the current state of knowledge on the linkages between marriage and health.