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Divorce and Health: Current Trends and Future Directions

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Abstract

OBJECTIVE—Social relationships play a vital role in health and wellbeing, and it follows that loss experiences can be highly stressful for some people. This paper reviews what is known about the association between marital separation, divorce and health outcomes.

METHODS—Key findings in the area of divorce and health are discussed, and the review outlines a series of specific questions for future research. In particular, the paper integrates research in social epidemiology with research in social psychophysiology. The former approach provides a broad-based estimate of the association between marital status and health outcomes, whereas the latter approach studies mechanisms of action and individual differences associated with increased risk for poor outcomes.

RESULTS—The experience of separation or divorce confers risk for poor health outcomes, including a 23% higher mortality rate. However, most people cope well and are resilient after their marriage or long-term relationship ends. Despite the fact that resilience is the most common response, a small percentage of people (approximately 10–15%) struggle quite substantially, and it appears that the overall elevated adverse health risks are driven by the poor functioning of this group. Several candidate mechanisms and novel (ambulatory) assessment techniques are discussed that may elucidate the poor outcomes among people who adapt poorly to separation.

CONCLUSIONS—To increase knowledge on the association between divorce and health, three primary areas require more research: (a) genetic and third variable explanations for divorce-related health outcomes; (b) better studies of objective social behavior following separation; and, (c) increased attention to interventions targeting high risk adults.

Keywords

Divorce; marital separation; relationships; stress; health; resilience

In the last four decades, relationship research has burgeoned into a legitimate scientific enterprise (1). High quality social relationships are positively associated with increased life satisfaction and psychological well-being (2) and negatively associated with morbidities and mortality from a range of disease processes (3). Meta-analytic findings indicate that the

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effects linking low social integration to increased risk for all-cause mortality are as robust as many other public health risk factors (4, 5). Animal studies suggest the neuropeptide oxytocin, which is associated with social bonding, may be health protective (6) and that disease-relevant biological changes may have their roots in early care giving, especially as gene expression is established in the context of care giving environments (7, 8). Similar patterns of gene expression – e.g., over-expression of inflammatory signaling pathways – are observed among adults who are low in social embeddedness (9). Relationship quality predicts time to death following treatments for a range of medical conditions (e.g., 10). Brain regions associated with the detection of physical pain are also sensitive to social rejection (11); early assessments of preschoolers' attachment relationships are strong predictors of self-reported health in adulthood, nearly three decades later (12); and, the quality of marital interactions during daily life is associated with carotid artery intima-medial thickness, a marker of subclinical cardiovascular disease (13). These examples, from all corners of psychosomatic medicine and other areas where the biopsychosocial model plays a critical role, share one common theme: relationships and social connection are central to human health.

Because high quality relationships *may promote* positive health and wellbeing—we have only limited evidence that these effects are causal, a point to which I return below— it stands to reason that social separations and loss place people at unique risk for poor health. Indeed, a large literature also links marital status to morbidity and mortality. Increased risk of death from all causes following conjugal bereavement, the so-called 'widowhood effect', is well documented (14, 15). Similarly, relative to married adults, separated or divorced adults evidence substantially increased risk for death from multiple disease processes. Figure 1 displays the results from a large meta-analysis (including studies that assessed over 6.5 million people, 160,000 deaths, and 755,000 divorces from 11 different countries) examining the association between divorce and all-cause mortality (16). As shown, on average, separated/divorced adults were 23% more likely to have died at the successive follow-up period (in the 32 prospective studies included in the meta-analysis) relative to their married counterparts. In addition, divorced men were significantly more likely to die early than were divorced women. These findings were subsequently replicated in a sample of 600 million adults (17). In the remainder of this review, I break down the epidemiological association between divorce and death by discussing research relevant to the question of who is at the greatest risk for poor health when marriage comes to an end and why.¹ In doing so, this article provides a selective review of the literature on the health consequences of separation and divorce, especially the topics of individual differences and potential mechanisms of change. An interesting feature of the work in this area is that although the *average effect* linking divorce with risk for early mortality suggests elevated risk, the *modal effect* is one of psychosocial resilience (cf. 18) and the bulk of the risk for poor outcomes appears to be limited to a sub-set of adults. Before addressing these topics in detail, I consider two orienting questions. Why is the study of divorce and health important for psychosomatic medicine? What is the organizing theory behind this work?

¹For simplicity, we refer to separated and divorced adults as *divorced* throughout this proposal. When distinctions between marital separation and legal divorce are meaningful, we use more precise terminology.

Relevance for Psychosomatic Medicine and Organizing Theory

As a field, psychosomatic medicine seeks integrative approaches to human disease processes, including an understanding of how social factors are associated with health-relevant physiology. (For distinctions between social psychophysiology, health psychology and psychosomatic medicine, see 19.) As I have written elsewhere, the study of divorce provides an ideal “model system” for understanding how these processes may unfold (20), and there are several compelling reasons why studying divorce is an excellent means of studying stress and health more generally. First, marital dissolution remains relatively common, with roughly 40% of first marriages ending in divorce (21); up to 75% of people who end a first marriage will remarry, and the divorce rate of second marriages is considerably higher than first marriages. Thus, in absolute terms, more than 2 million adults are newly affected by marital separation *each year*.

Second, for the vast majority of these people, even for people who report relatively transient disturbances in psychological wellbeing, the transition out of marriage constitutes a significant life stress (18, 22, 23). In the original Social Readjustment Rating Scale (24), for example, divorce was rated as the second most stressful experience a person could have, sandwiched between the death of a spouse and a jail term among the top of the list. It is easy to see why this is the case. For many people, marital separation means substantial financial upheaval, the renegotiation of parenting relationships and co-parenting conflict, changes in friendships and social networks, moving locally or relocating cities, as well as a host of psychological challenges, including re-organizing one’s fundamental sense of self: *Who am I without my partner?*

Third, and most critically, although each of these challenges present numerous interpersonal and logistical obstacles, most people are psychologically resilient in the face of divorce (25). A large, prospective study of German adults, for example, demonstrated that the vast majority, nearly 72% of over 600 divorces, could be considered to have a resilient outcome, with little self-reported change in life satisfaction across a 9-year period that included the divorce (26). In contrast, 19% of people in the sample demonstrated what the authors referred to as a “moderate-decreasing” trajectory, with declines in life satisfaction that precede and follow the divorce year, but also seem to level off in the mid-range of overall functioning. Similarly, a recent study of adults who divorced after 25 years of marriage found that 79% of people could be described as either “average copers” (with average levels of life satisfaction and self-reported health, and little depression) or “resilient” (with high levels of life satisfaction and self-reported health, and the lowest levels of depression) (27). These studies and the broader literature on resilience following divorce (28) illustrate a key point: Most people fare well, but some people suffer quite a lot. Who are the people at greatest risk for poor outcomes? What mechanisms explain their declines in wellbeing and, potentially, physical health?

Taken together, these three observations—that divorce is common, highly stressful for many people, but also quite variable in terms of distal outcomes—make the study of marital dissolution ideally suited to informing our understanding of stress and health more generally. In addition, social baseline theory (29) and attachment theory (30, 31) provide

excellent frameworks for understanding the importance of close relationships in promoting psychological wellbeing and physical health. These theories can be used to derive specific hypotheses about the consequences of separation or loss (e.g., see 32, 33). Social baseline theory proposes that the presence of other people, especially close others, helps guide the way people perceive threat in the environment; social embeddedness represents the default—or, baseline—state for emotion regulation, largely because this state allows for the sharing and conserving of physiologically “costly” metabolic resources for dealing with environmental challenges (29). Holding the hand of one’s partner (especially a partner in a high quality relationship), for example, attenuates women’s neural response to threat relative to being alone or to holding the hand of a stranger (34).

The obvious implication of this work is that transitioning out of a relationship means that people shoulder the burden of moving from their innate, prepared baseline state for dealing with task demands to – quite literally at times – an “alone condition” in which emotional challenges require greater physiological effort and output. This perspective is consistent with the ideas outlined by Sbarra and Hazan (32), who suggested that one function of normative attachment to another person is coregulation—the dyadic maintenance of physiological homeostasis within an intact relationship (cf. 35, 36), and that the loss of coregulation portends a physiological stress response.

Attachment theory provides an excellent vantage point for understanding why the challenges of the so-called alone condition may be especially difficult for some people after divorce (37). One of the most robust and well-replicated findings in the literature on social separations is that individual differences in attachment styles, which are presumed to be relatively stable person variables (38), are associated with divorce adjustment (39) and moderate the ways in which people respond to non-marital breakups (40). Attachment styles reflect how individuals view themselves and others in close relationships and play a critical role in regulating the experience of felt security (37). In the face of real or perceived threats to felt security, when the primary strategy of attachment figure proximity seeking is not a viable option, people high in attachment anxiety and avoidance engage in different secondary strategies to regulate distress—essentially, two different emotion regulation strategies. People high in attachment anxiety often engage in *hyper activating strategies*, including repetitive efforts to feel close to, or reunite with, the attachment figure that render the system chronically activated. In contrast, highly avoidant individuals tend to engage in *deactivating strategies* by becoming hyper self-reliant and down-regulating the attachment system to minimize their distress. Hyper activating strategies, in particular, have clear health-relevant physiological correlates (41–46). Thus, attachment theory is highly generative for not only understanding who may be at greatest risk for poor outcomes when relationships end, but also for understanding the mechanisms that may explain these outcomes (a point to which I return below).

Studying Moderators to Understand Mechanisms

When attempting to deconstruct the association between marital separation/divorce and distal health outcomes, two of the observations I outlined above stand in opposition. How is it possible that most people are resilient in the face of divorce but that divorce also carries

with it a significant risk for early death? Consider this oft-asked question by a divorced adult who becomes aware of these findings: “*Even though I am actually happier now than I was prior to my divorce, are you also saying my health is at risk?*” One critical detail to remember about meta-analysis is that this statistical approach deals, for the most part, with an arithmetic average of weighted effect sizes. Statistical averages are highly susceptible to the influence of outliers; thus, if some people suffer much more than others when marriage ends, it is entirely possible for an average effect to suggest that exposure to divorce is associated with poor outcomes while the modal response is a fairly quick return to life as normal.

Thus, in the study of divorce and health, it appears that individual differences moderate many of the outcomes of interest, and that a relatively small percentage of adults – perhaps 10 to 15% – fare quite poorly when their marriage comes to an end. Recent research provides evidence to support this assertion. Using two waves of data from the nationally-representative Midlife in the United States (MIDUS) study, Sbarra, Emery, Beam, and Ocker (47) compared rates of major depressive disorder (MDD) among people who were married at the first wave of the study and then divorced at the second wave relative to those people who were continuously married at both assessments. As shown in Figure 2, the effects of divorce on the probability of depression depend almost entirely on adults’ history of MDD at the first MIDUS assessment. For people *without a history of MDD*, the experience of marital separation and divorce do not significantly elevate risk for a future depressive episode. In contrast, roughly 6 out of 10 people with a history of MDD who also become divorced will experience a subsequent depressive episode. In the U.S. population, the lifetime prevalence of MDD is roughly 17% (48); the rates observed by Sbarra et al. (2013) for people with a history of MDD who experience divorce are substantially elevated. This effect fits well with classic diathesis-stress models of psychopathology (49). After divorce, risk of poor mental health outcomes appears limited to people who have struggled prior to the end of marriage.

We have also shown that a similar type of moderating effect is observed in the study of divorce and mortality. Specifically, it appears that the association between divorce and risk for early death depends on how researchers define a person’s marital biography (i.e., their personal history of moving into and out of marriage). Using data from the Charleston Heart Study that followed over 1600 adults across 40 years, Sbarra and Nietert (50) examined the association between marital status and risk for death from all causes. The risk associated with divorce varied quite substantially depending on whether a person was divorced at the inception of the study or whether they had reported being divorced *at some point* during the study. The former group—people who divorced and never re-married—were at substantially elevated risk for early death, evidencing a 66% greater chance of being dead at each successive follow-up period than the continuously married participants. In contrast, mere exposure to divorce was not associated with significantly elevated risk for early death. This finding raises a series of interesting questions: Does the amount of time spent living as a divorced/single adult explain the observed outcomes, perhaps as a function of cumulative exposure to psychological stress? Alternatively, are there personality or other individual differences that are common to both becoming divorced and never remarrying as well as

increased risk for early death? Regardless of the ultimate explanation, questions of this nature are focused squarely on individual differences that may confer risk and suggest that a smaller percentage of people may carry the bulk of the risk for poor outcomes following the end of marriage.

In terms of psychological characteristics associated with adjustment to divorce, it is well known that individual differences in attachment anxiety, as mentioned above, are associated with poor outcomes when people perceive a threat to their relationship and/or their security within the relationship. In a study of adults' adjustment to marital separation, for example, Lee, Sbarra, Mason, and Law (51) used language as a behavioral manifestation of attachment-related hyper activation. People higher in attachment anxiety who spoke about their separation experience in a highly immediate, experiential and self-focused manner demonstrated greater increases in systolic and diastolic blood pressure when thinking about their relationship history and separation experience relative to those people lower in attachment anxiety. People at high risk for poor outcomes following marital separation appear to employ coping strategies that are associated with a high degree of physiological activation and this study, focused on blood pressure reactivity, provides an example of the ways in which emotion regulation strategies around attachment themes can provide insights into processes that confer risk for poor distal health outcomes.

The findings discussed above provide clues about the potential mechanisms linking marital separation to poor health outcomes. People who have a hard time distancing themselves from their psychological experiences show excessive cardiovascular responding, which, if maintained over time, is associated with the development of cardiovascular disease (52). Conceptually, this work fits well with the larger literature on self-distanced reflection and evidence indicating that people who *recount* their experiences in a blow-by-blow manner rather than *reconstrue* their experiences to find meaning, are at heightened risk for mood disorders (e.g., 53)

The process of psychological distancing may be especially difficult for some people and in some contexts. For example, a recent study found that separated adults who reported a high degree of rumination, the tendency to reflect over one's experiences in a negative, self-focused, and over-general way (54), reported increases in separation-related emotional distress three months after engaging in a three session expressive writing intervention that encouraged them to express their emotions about the separation event (55). When assigned to control writing, which asked them to write in a concrete, non-emotional way about how they had spent and would spend their time in the next few days, however, high ruminators reported the lowest levels of separation-related emotional distress eight months later compared to people low in rumination assigned to either condition. For people with a tendency to ruminate and who are in the throes of coping with their separation, engaging in emotional writing may be an ill-advised prescription because it promotes recounting and self-focused reflection. In this circumstance, control writing may operate in a manner similar to behavioral activation treatment for mood disorders by focusing people on re-engaging with pleasurable activities and, colloquially, getting out of their heads about their separation and back into their day-to-day lives.

Proximal Psychosocial Mechanisms

We have suggested that the ability to gain a self-distanced perspective on one's separation may be a variable linking the end of marriage to health, but it is certainly not the only mechanistic pathway. Chronic psychological stress has health-compromising effects (56–60), and any efforts to understand pathways of action must consider divorce-specific variables above-and-beyond general psychological stress and loneliness. I would like to suggest three additional variables (two psychological and one health behavior) that deserve further consideration in this regard. Some of the earliest immunological work on divorce focused on attachment to/longing for an ex-partner (61). This research found that ongoing attachment to an ex-spouse was associated with impairments in cellular immune responses (e.g., antibody titers to latent herpes virus) and remains one of the only investigations of the ways in which psychological responses to marital separation may be associated with health-relevant immunological changes. The field needs much more research in this vein; simply studying physiology as a marker of health relevance is not enough, and a number of researchers have called for the need to investigate *biologically plausible* pathways from life stress to disease outcomes (62).

Beyond self-distanced reflection and longing, other variables and processes may serve as potential proximal mechanisms leading to health-relevant biological changes. In a prospective study of breakups following non-marital dissolution (63), improvements in self-concept clarity (knowing who you are as a person after a separation) earlier in the study were associated with future increases in future psychological wellbeing. There was no evidence in this study that people begin to feel better, and then have a greater sense of who they are in the aftermath of their breakup; the direction of the effect seems to operate from self-concept clarity to psychological wellbeing. Self-concept clarity was a key variable in the early empirical study of divorce (23), yet no studies to date have examined this variable with respect to biomarkers of interest.

Finally, given well-known theories regarding the social control of health (64), it is also important to investigate whether and how the end of marriage is associated with changes in health-promoting and/or health-compromising behaviors. Sleep is a salubrious health behavior that affects nearly every aspect of psychological functioning, and sleep problems are linked to a variety of physical morbidities. With respect to divorce outcomes, a recent study demonstrated that sleep problems within the first 10 weeks following marital separation were unassociated with adults' resting blood pressure (65); ongoing sleep problems lasting longer than 10 weeks after the separation, however, were associated with future increases in resting blood pressure. This work suggests that sleep problems that extend beyond a few months after the physical separation may presage worsening physical health. Sleep is one of many health-promoting and/or -compromising behaviors that could link divorce to pathophysiology, and future research will benefit by studying how psychological responses to divorce work in tandem with changes in health behaviors to predict long-term outcomes (see 16).

Future Directions and Conclusions

This review concludes by highlighting three areas of study that can greatly enhance what we know about social relationships and health, and, in particular, the associations between marital separation, divorce, and health outcomes.

First, the observation that changes in marital status (or the dissolution of any partnership, for that matter) might be associated with long-term disease outcomes has spurred a wealth of excitement in the field and a fervent search for explanatory mechanisms. However, divorce is non-random, and it is not yet known whether the alleged health consequences of divorce follow from the end of marriage (social causation) or exist as a function of third-variable processes that also operate to select people out of marriage (social selection). In this respect, the study of divorce and health may be a bit ahead of itself; at this point, it would be ideal to begin asking basic questions about the putatively causal effect of divorce on subsequent health outcomes. The field of behavior genetics provides an excellent method for studying this issue directly (66). To truly separate *selection* from *causation* explanations, it will be critical at some point in the near future to conduct co-twin controlled research in which monozygotic (MZ) and dizygotic (DZ) twin pairs who are discordant for divorce are compared in terms of their health outcomes. (For an excellent example of this approach, see 67.) Genetic influences on depression, hostility, or substance abuse, for example, may explain elevated risk for poor outcomes following the end of marriage (cf. 68).

Hypothetically, if the death rate of the MZ twins exposed to divorce exceeds that of their co-twin and is substantially larger than the death rate differences observed in DZ twins, this would suggest that the end of marriage exerts a causal influence on the outcome in question. All of the variables and processes described in this paper may be related to health outcomes of interest, but until co-twin studies are completed, it would be premature to suggest the health relevant changes are a consequence of the end of marriage itself.

Second, one of the more glaring omissions in the study of divorce and health is that the work in this area focuses largely – almost exclusively – on individual differences in psychological responses to the end of marriage and how variables tapping *intrapersonal* psychological functioning are related to health-relevant outcomes (69). We have learned a great deal about adults' subjective responses to divorce, but we know very little about how social behaviors change after a relationship ends, and the types of *interpersonal* changes that may promote good outcomes. How much time do people spend alone? How much time do they talk about their ex-spouse and divorce? How much time fighting with their ex- is a lot of fighting? And, perhaps most importantly, are any of these daily behaviors associated with adults' health outcomes? One tool for studying these questions a bit more precisely is the Electronically Activated Recorder (EAR; 70). The EAR is a reliable and valid naturalistic observation tool that periodically records snippets of sounds from participants' momentary environments (71–77). The EAR operates through application software running on the mobile operating system iOS (commonly referred to as “an app” for the iPhone or iTouch devices); participants in the study wear an iTouch device with the EAR installed during their waking hours for an entire weekend. The sampled sounds, which are collected at 30 second intervals every 12 minutes (roughly 5% of the time between 0600 and 1159 each day), are then coded for aspects of participants' social interactions that are expected to play a critical

role in their adjustment to divorce. Currently, ongoing research with divorced adults who wear the EAR is beginning to yield new insights into how people spend their time, with whom they associate, and the topics of their conversations following their recent marital separation. Supplemental Digital Content 1 provides an example of a transcript for a single EAR file recording from one of the study participants (the woman).

From the transcript, it is immediately obvious that you cannot capture this type of rich social interaction from self-report data, nor can laboratory interactions' assessments of interpersonal behaviors provide as detailed a picture of how social processes unfold in their natural environment. Each audio file is coded by multiple judges who rate the presence or absence of many different specific behaviors (e.g., whether the person is alone or with others; whether the topic of discussion is divorce-related or not) and affective states (e.g., the presence of negative affect or the absence of negative affect), which, when summarized across multiple recordings, yields a quantitative picture (in the form of a percentage of time, for example, the participant was alone on a given EAR weekend—i.e., 32% of all sound files) that can be used in empirical analyses (see 72, 75). The EAR has the potential to reshape our understanding of how people cope with stressful life events, and it will be critical for future studies to compare and contrast what people say they do and what they actually do (to cope with their separation) on a day-to-day basis (e.g., 78).

Finally, the field needs better interventions for separated and divorcing adults. In general, the study of social relationships and health lacks clinical trials demonstrating that changes in social functioning are associated with changes in health (79). Despite the fact that over two million adults face divorce each year and that 10–15% of these people suffer considerable emotional distress, no easily administered and few empirically-validated interventions exist that are specific to this population (see 80). One intriguing place to begin would be to expand the control (time use) writing condition, which Sbarra and colleagues (55) found led to the greatest improvement for people who reported a strong tendency toward psychological rumination, especially the style of self-reflection known as brooding. Conceptually, several lines of work are consistent with the potential value of time use writing for ruminators/brooders. The brooding component of psychological rumination is an abstract and negative form of self-reflection that is concurrently and prospectively associated with mood disturbances (e.g., *Why me?*). Nolen-Hoeksema and colleagues found that for dysphoric adults, self-focused (relative to self-distanced) reflection causes people to have more negative feelings and cognitions, and that distraction yields mood improvements for these same people (54). Self-distanced reflection, the ability to reason about one's experience in a manner that is not egocentric (i.e., self-immersed), is a key variable for promoting positive adjustment to difficult experiences and for mitigating the psychological toll of depressive states (53, 81). Asking high ruminators to reflect over how they spent their time and how they will spend their time in a highly objective and concrete way may promote self-distancing and counteract tendencies toward self-immersion, which maintains distress over time.

Behavioral activation is a well-established treatment for major depression (82), and it is possible that the control writing instructions activate divorcing adults, especially those at risk for poor outcomes, in a way that helps them re-engage in their daily lives without

focusing on the emotional pain of their loss. In situations that are defined primarily by how people deal with feelings of regret, shame, loss, and self-identity disruption, concentrating on what you do with your time may provide the precise antidote necessary to gain psychological distance from painful emotional thoughts.

Other intervention strategies may also be useful following the end of marriage, but the essential task for building treatments that work is identifying targets of interest. For example, one of the main divorce intervention studies focuses on forgiveness (80, 83), and it may be useful to expand this work to integrate the topic of self-compassion, which correlational research shows is associated with positive outcomes after marital separation (84). Many separating and divorcing adults experience profound loneliness (85), and interventions designed to target loneliness may prove useful in time (86). Finally, other intervention strategies may be adopted to target people who have difficulty “letting go” of their separation experience. For example, Acceptance and Commitment Therapy (ACT; 87) provides many tools and methods for helping people become more mindful about and accepting of painful thoughts. As a treatment modality, ACT may be ideally suited for people who are at risk for poor outcomes following divorce. One important question for all future intervention research in this area concerns the magnitude of the dosing that is required to effect positive change. Are three days of self-distanced writing too little to bring about positive outcomes? Alternatively, can we observe improvements in divorce-related recovery by modifying empirically-supported treatments like ACT without requiring that people participate in a full-course of ACT therapy?

Many of our most deeply felt emotions are expressed in the context of close relationships, and relationship stress or loss can be profoundly difficult for some people. This paper reviewed what is known about the association between marital dissolution and health, with a focus on the individual difference variables that place some people at risk for poor outcomes, as well as the potential mechanisms that may explain this risk. I also detailed three important areas for further study: genetically-informed designs that can answer questions about social causation/social selection, the use and potential of naturalistic observational methods for understanding the daily social lives of separated adults, and the need for improved intervention research that targets adults who are at high risk for poor outcomes. Research addressing these questions will move the field forward in a number of ways and inform not only the understanding of divorce and health, but also the study of attachment, stress and coping more generally.

Supplementary Material

Refer to Web version on PubMed Central for supplementary material.

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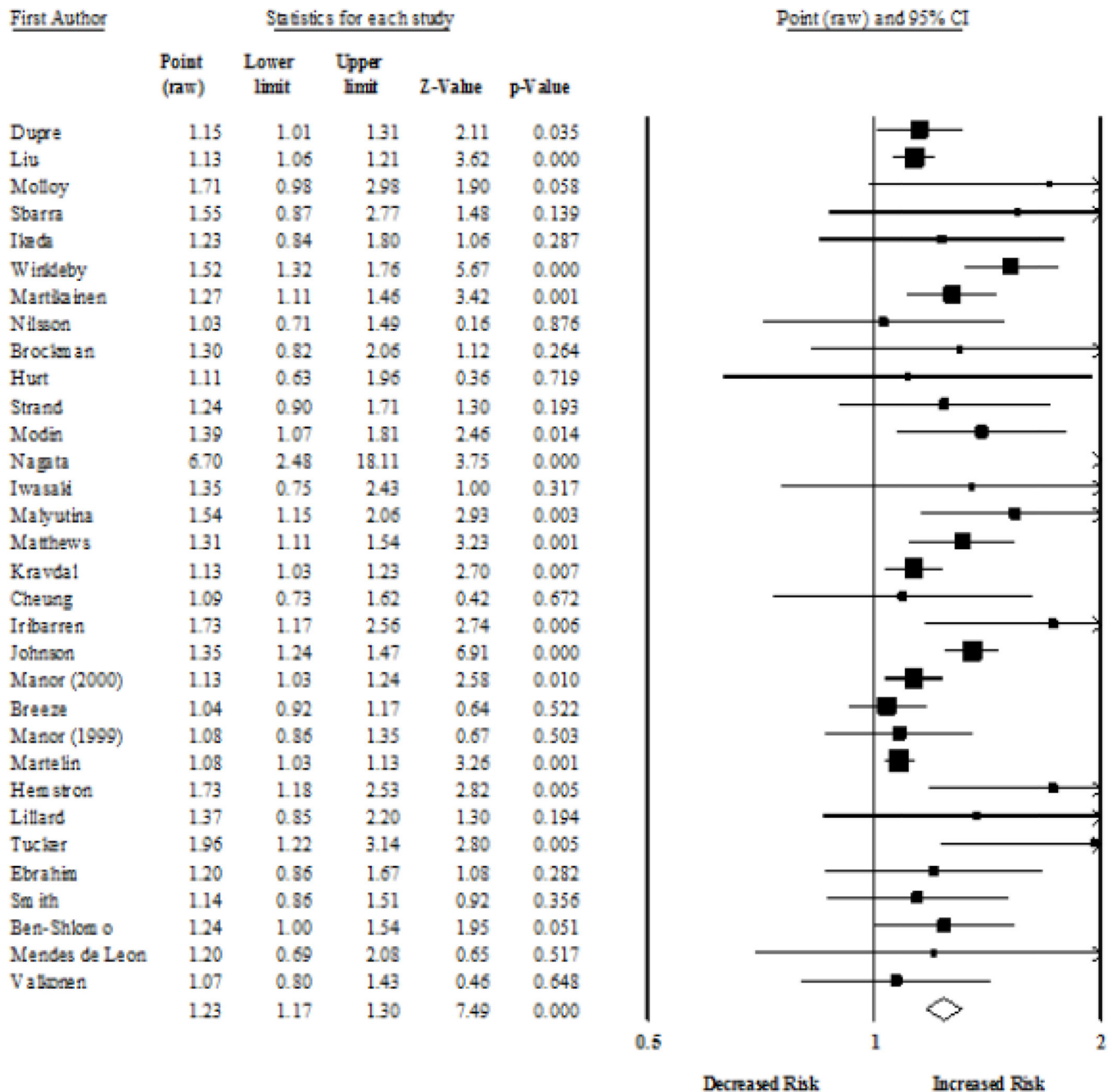


Figure 1. Reproduced from Sbarra et al.(16). Forest plot illustrating the raw risk hazard (RH) statistic and associated 95% confidence interval for each study in the meta-analysis. The RH statistic quantifies risk for early death among separated/divorced relative to married adults in each study; the estimates are displayed according to their proportional (inverse variance) weighting in the random effects meta-analysis. Results from the overall meta-analysis are presented in the final row of the table, and the overall meta-analytic effect is illustrated by the diamond marker.

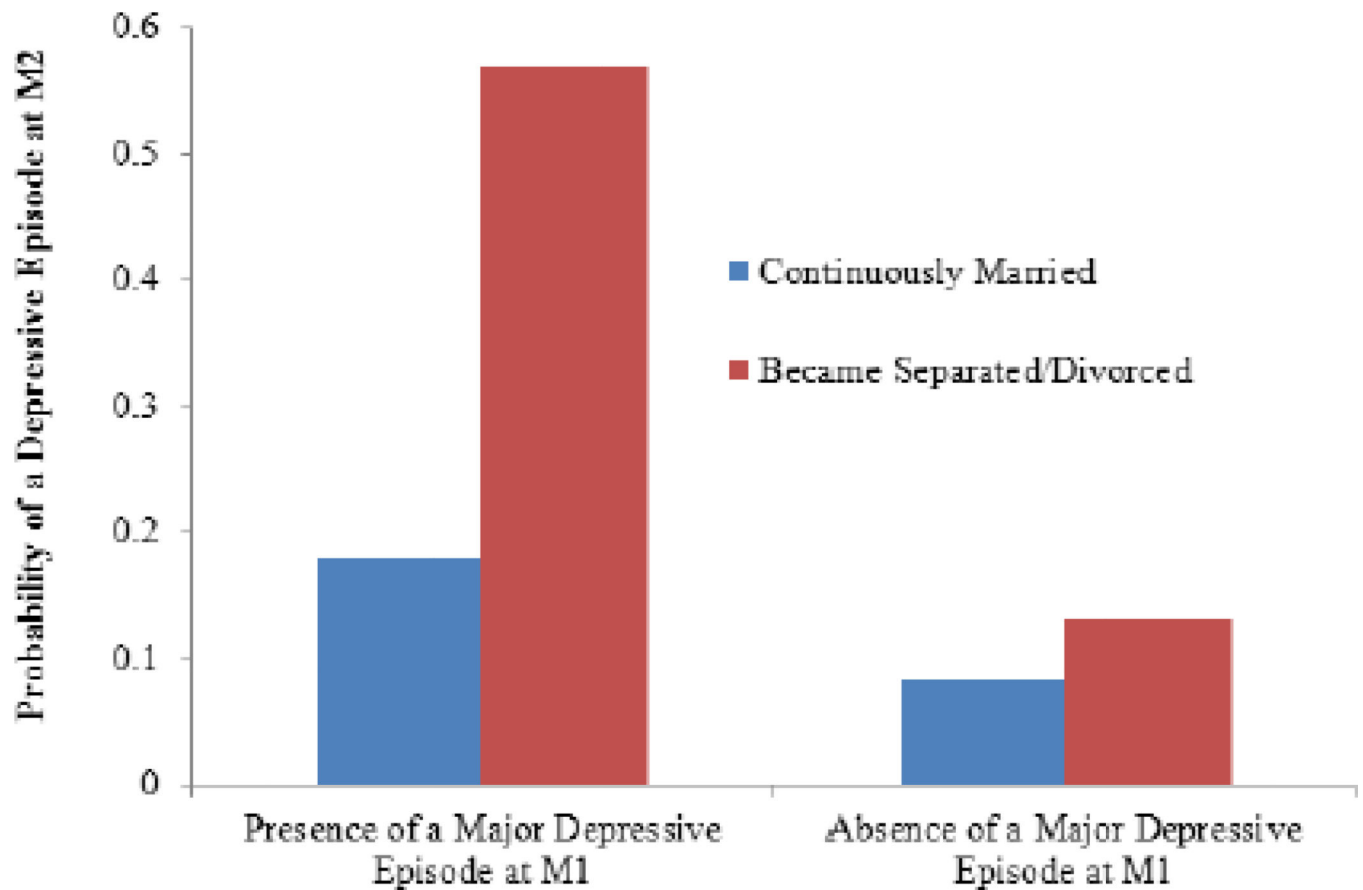


Figure 2.

Reproduced from Sbarra et al. (47). Probability for a Major Depressive Episode (MDE) in the second wave of the Midlife in the United States (MIDUS) Study (M2) as a function of participants' marital status and depression at the first MIDUS assessment (M1). The greatest risk for a MDE was observed among people who experienced a separation/divorce between M1 and M2 *and* who also experienced a MDE at M1.