

# Extending the Bereavement Exclusion for Major Depression to Other Losses

## Evidence From the National Comorbidity Survey

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**Context:** Symptoms of intense bereavement-related sadness may resemble those of major depressive disorder (MDD) but may not indicate a mental disorder. To avert false-positive diagnoses, *DSM* criteria for MDD exclude uncomplicated bereavement of brief duration and modest severity. However, the *DSM* does not similarly exempt depressive reactions to other losses, even when they are uncomplicated in duration and severity.

**Objective:** To test the validity of the *DSM* exclusion of uncomplicated depressive symptoms only in response to bereavement but not in response to other losses.

**Design:** Community-based epidemiological study.

**Participants:** From the National Comorbidity Survey (NCS) of 8098 persons aged 15 to 54 years representative of the US population, we identified individuals who met MDD symptom criteria and whose MDD episodes were triggered by either bereavement ( $n=157$ ) or other loss ( $n=710$ ).

**Intervention:** We divided the bereavement and other loss trigger groups into uncomplicated and complicated cases by applying the NCS algorithm for uncomplicated

bereavement to the reactions to other losses. We then compared uncomplicated bereavement and uncomplicated reactions to other losses on a variety of disorder indicators and symptoms.

**Main Outcome Measures:** Nine disorder indicators, as follows: number of symptoms, melancholic depression, suicide attempt, duration of symptoms, interference with life, recurrence, and 3 service use variables.

**Results:** Episodes of uncomplicated depression triggered by bereavement and by other loss have similar symptom profiles and are not significantly different for 8 of 9 disorder indicators. Moreover, uncomplicated reactions, whether triggered by bereavement or other loss, are significantly lower than complicated reactions on almost all disorder indicators.

**Conclusion:** The NCS data do not support the validity of uniquely excluding uncomplicated bereavement but not uncomplicated reactions to other losses from MDD diagnosis.

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**A** COMMON CRITICISM OF THE *DSM* symptom-based diagnostic criteria is that their failure to consider stressful contexts results in false-positive diagnoses, that is, the classification of psychiatrically normal persons as mentally disordered.<sup>1,2</sup> False-positive diagnoses can potentially lead to stigmatization, inappropriate care, and inflated epidemiological prevalence rates that undermine the credibility of the diagnostic system.<sup>2</sup> Conversely, restricting diagnostic criteria to exclude persons without mental disorder but with symptoms can inadvertently lead to false-negative diagnoses, that is, classification of genuinely disordered individuals as nondisordered, potentially leading to failure to obtain needed treatment.

This false-negative/false-positive tension is nowhere more apparent than in the *DSM-IV* bereavement exclusion for major depressive disorder (MDD). A diagnosis of MDD requires at least 1 major depressive episode (MDE) not caused by bipolar or nonaffective psychotic disorders. Criteria for an MDE require at least 5 of 9 symptoms including sadness or lack of interest or pleasure, at least 2 weeks' duration, clinically significant impairment or distress, and exclusion of substance-induced and general medical etiologies. However, some individuals who meet these symptom and impairment criteria are not experiencing a mood disorder but intense normal sadness in response to bereavement.<sup>3</sup> The *DSM* criteria for MDE use an exclusion criterion in an attempt to prevent

false-positive diagnoses, requiring that the symptoms cannot be better explained by bereavement.

Bereavement can sometimes trigger genuine mood disorders. Thus, excluding all cases of bereavement from MDEs would yield false-negative diagnoses. The *DSM* addresses this problem by using unusual duration, impairment, or symptoms to identify exceptions to the bereavement exclusion that likely represent true disorder. The *DSM-IV*, for example, classifies bereavement responses as MDEs if the symptoms last more than 2 months or if there is marked functional impairment, morbid preoccupation with worthlessness, suicidal ideation, psychotic symptoms, or psychomotor retardation.

The *DSM* uses the term “complicated bereavement” for bereavement that triggers MDD. However, this term has recently become widely used to also denote a non-depressive mourning-related pathologic condition including such symptoms as unremitting yearning and sense of loss.<sup>4-6</sup> To avoid confusion, we refer to bereavement-triggered depressive disorder as *complicated bereavement-triggered depression*.

The *DSM* criteria for MDD ignore the many other kinds of serious losses that can cause intense symptoms of normal sadness. (We use the term “sadness” as a generic label for normal and abnormal depressive responses to various losses.) This asymmetry raises the question of whether the *DSM* is justified in singling out bereavement as the only type of loss that produces normal intense sadness symptomatically similar to MDE.

Historical precedent, common sense, and research on loss responses all suggest that many types of losses can trigger intense normal sadness. From early Greek and Roman physicians through Kraepelin and Freud to pre-*DSM-III* diagnostic manuals, psychiatric thought generally differentiated depressive disorder from symptomatically similar sadness resulting from various losses including not only bereavement but also romantic betrayal and rejection, economic misfortune, severe physical illness, loss of cherished possessions, and failure to attain important goals, among others.<sup>7-9</sup>

As is the case in bereavement,<sup>10,11</sup> ample research suggests that many other types of loss, such as marital dissolution, unexpected job loss, and natural disasters, can trigger intense sadness that soon after the loss may satisfy MDD symptom criteria yet often naturally desists with time or when circumstances improve.<sup>12-21</sup> Such intense sadness responses to major nonbereavement losses are generally considered normal.<sup>7,8,22</sup> Moreover, the evidence suggests that intense sadness is a biologically designed response to a broad range of circumstances, including separation from a love object and loss of social status.<sup>23,24</sup> Evolutionary approaches to the distinction between normal and disordered functioning,<sup>25-28</sup> therefore, imply that depressive symptoms should not automatically be classified as a disorder, even at levels that satisfy *DSM* symptom criteria, without considering the nature of their trigger. From this perspective, bereavement may be considered a model for other types of loss responses, which might similarly be grounds for exclusion from a diagnosis of MDD.

Like bereavement, other stressors may also trigger complicated, truly disordered reactions. Consequently, if the

bereavement exclusion were extended to other stressors to avert false-positive diagnoses, the distinction between complicated vs uncomplicated bereavement would also have to be applied to other stressors to avoid false-negative diagnoses.

Our overarching view is that the *DSM* uncomplicated vs complicated bereavement distinction reflects likely nondisorder vs disorder but that grief is not unique in this regard and the same approach has comparable validity for reactions to other types of loss. We tested 2 specific hypotheses predicted by this view. First, uncomplicated bereavement and uncomplicated reactions to other losses are no different across a range of variables generally considered indicative of disorder (eg, duration, recurrence, and service use). Second, uncomplicated responses to bereavement and to other losses are less severe on such disorder indicators than are complicated reactions to either type of trigger. In effect, the second hypothesis is a validity check on the uncomplicated-complicated distinction.

## METHODS

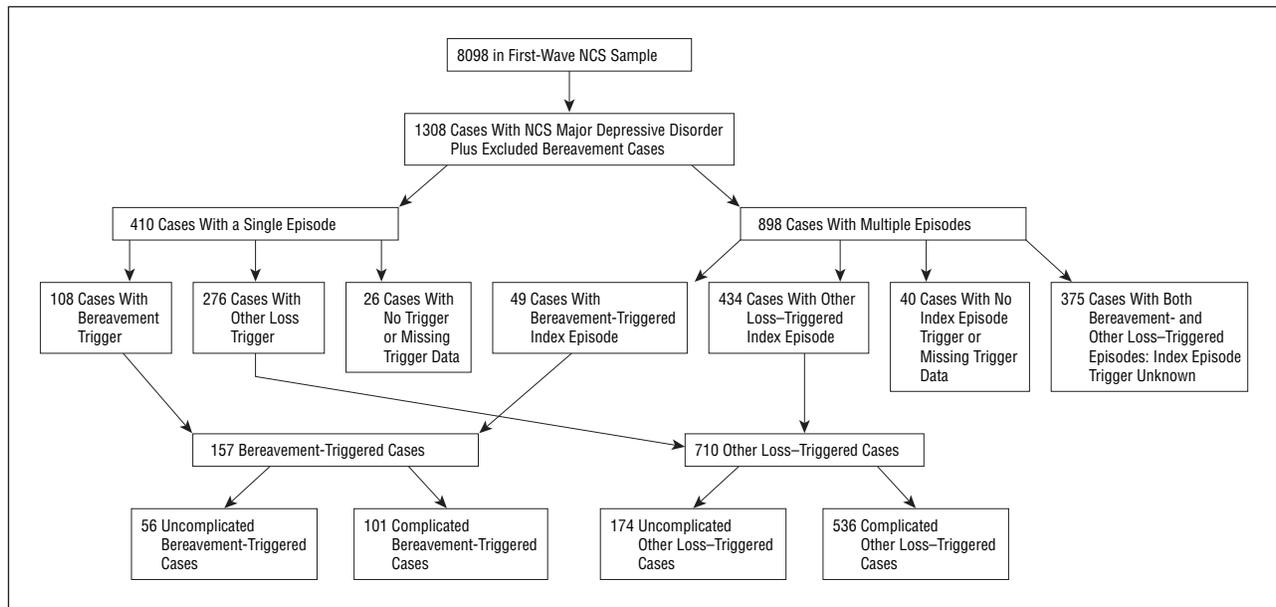
### SAMPLE

It is difficult to compare complicated and uncomplicated episodes in clinical samples, which generally exclude individuals falling under the bereavement exclusion and contain few non-disordered individuals. Thus, we used publicly available data from the first-wave National Comorbidity Survey (NCS), a community-based epidemiological survey administered between September 14, 1990, and February 6, 1992, to 8098 persons aged 15 to 54 years who are representative of the US population.<sup>29</sup>

The NCS uses *DSM-III-R*-derived algorithms for diagnosing disorders, including MDD. Note that *DSM-III-R* criteria for MDD differ from *DSM-IV* criteria because they do not require clinically significant distress or impairment in addition to symptoms. The NCS operationalization of *DSM-III-R* MDD criteria require that a respondent satisfy 4 criteria. First, during a 2-week index episode (for individuals with multiple episodes, the index episode is the episode with the most symptoms), the respondent must report at least 1 symptom from each of 5 symptom groups or more (constructed to reflect *DSM* MDD symptom groups), none of which are from organic causes. For example, 1 symptom group includes lost appetite, lost weight, increased appetite, or increased weight; another includes trouble in concentrating, slow thinking, or inability to make decisions. As in the *DSM*, 1 of the 5 endorsed symptom groups must be either the sad-blue-gloomy group or loss of interest. Second, the condition is not covered by the bereavement exclusion (see “Uncomplicated vs Complicated Responses”). Third, the respondent must never have had mania or hypomania. Fourth, the respondent does not have delusions or hallucinations indicative of nonaffective psychotic disorder, as indicated by either psychotic diagnoses or the occurrence of psychotic ideation for 2 weeks outside of affective episodes.

### ANALYTIC SAMPLE

To test our hypotheses, we formed an overall analytic sample consisting of 4 subsamples: uncomplicated bereavement triggered ( $n=56$ ; 6.5% of the analytic sample); complicated bereavement triggered ( $n=101$ ; 11.6%); uncomplicated other loss triggered ( $n=174$ ; 20.1%); and complicated other loss triggered ( $n=536$ ; 61.8%). These groups are derived from the NCS sample



**Figure.** Flowchart of sample selection process. See “Analytic Sample” and “Uncomplicated vs Complicated Responses” subsections in the “Methods” section for explanation of flowchart decision rules. MDD indicates major depressive disorder; NCS, National Comorbidity Survey.

in several steps; they exclude a considerable number of cases in which the NCS data set does not contain the necessary information. The **Figure** shows the sequence of steps by which the analytic sample and its subgroups were identified. (The precise algorithms are available from the authors on request.)

To persons meeting lifetime NCS criteria for MDD, we added those who meet other MDD criteria but are eliminated from MDD by the bereavement exclusion ( $n=65$ ), yielding the MDD pool ( $n=1308$ ). All subsequent analyses use this expanded MDD pool to enable comparisons of uncomplicated and complicated bereavement.

We next identified 2 MDD pool subsamples who reported that either grief or other triggering events caused their episodes (typical NCS questions were as follows: “Did that period of feeling sad/blue occur just after someone close to you died?” “Was there anything else going on in your life at that time which caused you to feel sad/blue?”). For analytic purposes, it is essential to identify the trigger of the index episode because that is the only episode for which the NCS reports detailed symptom information. (The index episode for single-episode cases is the individual’s only episode; for multiple-episode cases, it is the individual’s worst episode in terms of number of symptoms, or, if no episode is worse than others, the most recent episode.) To identify bereavement-triggered cases ( $n=157$ ), we used the NCS algorithm for bereavement to identify individuals whose index episode of MDD was bereavement-triggered. The NCS instrument is such that only by identifying those multiple-episode cases with all grief episodes could we identify cases in which the index episode was bereavement triggered; thus, even for multiple-episode cases, this is a pure bereavement sample. Analogously, other loss-triggered cases ( $n=710$ ) included those in which the index episode was triggered by other loss, and multiple-episode cases included those in which no other episodes were bereavement triggered. This algorithm allows nonindex other loss-triggered episodes to be untriggered, but the NCS data do not permit us to determine exactly how often this occurred. However, the overall rate of untriggered episodes in the sample was so low (5% of single-episode cases and 4% of index episodes in multiple-episode cases) that this approximation to a purely other loss-triggered group seems warranted.

Of single-episode MDD pool cases ( $n=410$ ), 93% were either bereavement triggered ( $n=108$ ) or other loss triggered ( $n=276$ ) and are included in the analysis. We excluded 5% ( $n=20$ ) because they were untriggered and 1% ( $n=6$ ) because of missing data. Among multiple-episode MDD pool cases ( $n=898$ ), 54% ( $n=483$ ) had index episode triggers identifiable as grief or other loss and were included in the analysis. We excluded cases with missing data (1%;  $n=6$ ), those with untriggered index episodes (4%;  $n=34$ ), and those in which the type of index episode trigger (bereavement vs other type of loss) could not be inferred from the data (42%;  $n=375$ ). The type of index episode trigger sometimes cannot be inferred because if an individual reports experiencing both types of triggers at various times, there is no way within the NCS data of establishing which type specifically applies to the index episode.

Our resulting analytic sample ( $n=867$ ; 44% single-episode cases and 56% multiple-episode cases) consists of the 66% of the MDD pool that can be established to be either bereavement-triggered ( $n=157$ ) or other loss-triggered ( $n=710$ ) cases. Mean (SD) demographic data for the analytic sample were as follows: age, 33.8 (9.8) years; sex, 60.9% (2.7) female; educational achievement, 13.0 (0.1) years; and race/ethnicity, 80% (3.2) white. These data did not differ significantly from those for the excluded 34% of the MDD pool. **Table 1** indicates that these demographic characteristics are not significantly different between the bereavement- and other loss-triggered categories.

## UNCOMPLICATED VS COMPLICATED RESPONSES

To divide trigger groups into uncomplicated and complicated categories, we strictly extended the NCS algorithm for differentiating uncomplicated vs complicated bereavement-triggered episodes to nonbereavement, other loss-triggered episodes. The NCS algorithm for complicated bereavement is derived from *DSM-III-R* criteria. The *DSM-III-R* exclusion clause, which differs slightly from the *DSM-IV* clause, states that “Morbid preoccupation with worthlessness, suicidal ideation, marked functional impairment or psychomotor retardation, or prolonged duration suggest bereavement complicated by major de-

**Table 1. Demographic Variables for Bereavement- and Other Loss-Triggered Subsamples\***

Variable	Bereavement-Triggered Group (n = 157)	Other Loss-Triggered Group (n = 710)
Age, mean, y	34.3 (1.0)	33.7 (0.7)
Female sex, %	60.0 (4.6)	61.1 (3.1)
Educational achievement, y	13.0 (0.3)	13.0 (0.1)
White race, %	78.1 (4.0)	80.5 (3.3)

\*Data in parentheses indicate standard error. Data are weighted and corrected for sampling design. No significant differences were found on mean differences using 2-tailed *t* tests; *P* < .05.

pression.”<sup>30(p223)</sup> The NCS interprets the term “suggest” to mean that no one symptom is sufficient by itself to imply MDD. Therefore, the NCS requires 2 symptoms or more for complicated bereavement, unlike the later 1-symptom *DSM-IV* approach. The NCS adds a sixth symptom, suicide attempt, to the *DSM-III-R* list; it operationalizes prolonged duration as longer than 12 weeks, and operationalizes marked impairment by agreement with the item, “Kept you from working or from seeing friends or relatives.” Bereavement and other loss-triggered episodes are considered uncomplicated unless they are classifiable as complicated based on having 2 or more of the 6 NCS duration, impairment, and other symptom features.

We could not evaluate each episode in multiple-episode cases for complicatedness because the data only contain index episode symptoms. We followed the NCS algorithm in classifying multiple-episode bereavement cases as uncomplicated or complicated based on which category applied to the index episode. The rationale was that the index episode was the individual’s worst episode and complicated symptoms indicate severity; thus, an uncomplicated index episode likely implies all uncomplicated episodes. We applied this same procedure in other loss-triggered cases to identify uncomplicated vs complicated multiple-episode cases. There were no significant demographic differences among the 4 uncomplicated and complicated bereavement- and other loss-triggered groups for age, sex, educational achievement, or race/ethnicity (**Table 2**).

## DISORDER INDICATORS

To evaluate whether the 4 groups (uncomplicated vs complicated bereavement-triggered and uncomplicated vs complicated other loss-triggered episodes) differ in disorder vs non-disorder status, we compared the groups on descriptive variables that have face validity and are commonly used to indicate disorder. Three indicators concern index episode features: severity (mean number of the 9 MDD symptoms); melancholic depression (percentage of patients satisfying *DSM-IV*-type criteria for melancholic depression); and suicide attempt. Although the suicide attempt indicator is contaminated because it is also an NCS complicatedness symptom, we included it because we think it is pragmatically important to establish whether cases involving suicide attempts would be classified as disorders.

Six other disorder indicators concern lifetime history; thus, for multiple-episode cases, these indicators do not necessarily apply specifically to the index episode but set an upper boundary for that episode. These 6 indicators are as follows: duration (mean duration of the longest episode); interference with life (whether episode or episodes interfered with life or activities “a lot”); ever saw a mental health professional because of depression; ever took medication for depression; was ever hos-

pitalized because of depression; and recurrence (mean number of episodes). Note that duration is contaminated to some extent because duration longer than 12 weeks is a symptom of complicatedness. To reduce the effect of outliers on recurrence and duration means, we coded respondents reporting more than 20 depressive episodes as having 20 episodes, and respondents reporting their longest episode as lasting more than 104 weeks as having a longest episode of 104 weeks.

Interference with life and service use indicators follow the clinical significance disorder indicators of Narrow et al.<sup>31</sup> Service use indicators are based on disorder-specific questions (eg, seeing a professional because of depression) to minimize confounding by service use for comorbid conditions.<sup>32</sup> A long tradition considers melancholic depression as indicating disorder.<sup>7</sup> We constructed criteria that approximate *DSM-IV* melancholic depression criteria, requiring inability to enjoy usual activities plus 3 or more of the following: retardation observed by others, or agitation; feel bad in the morning; early awakening (at least 2 hours early); lost weight; and excessive feelings of guilt.

## STATISTICAL ANALYSES

### Tests of Significance

All data used in the analyses were weighted and corrected for sampling design. Statistical analyses were performed using the survey estimation procedures in STATA software, version 9 (Stata-Corp, College Station, Tex), which calculate weighted coefficients and use Taylor series linearization to calculate SE. Analysis of variance with planned comparisons were used to determine the mean differences between groups. When doing the planned comparisons, the nature of our 2 hypotheses dictated different statistical procedures. We used 2-tailed tests to evaluate the hypothesis that uncomplicated bereavement-triggered vs other loss-triggered episodes are not different on disorder indicators. Because we predicted that uncomplicated categories would be lower than complicated categories on disorder indicators, we used 1-tailed tests of our second hypothesis.

### Statistical Power

Because our hypotheses propose no significant differences in mean values of indicator variables between 2 groups (uncomplicated bereavement-triggered vs uncomplicated other loss-triggered episodes), statistical power is an important concern. According to Cohen,<sup>33</sup> small, medium, and large effect sizes would correspond to mean differences of 0.2, 0.5, and 0.8 SD, respectively, which would require roughly 400, 60, and 25 cases, respectively, to achieve good statistical power (power = .80) for the 2-tailed tests and roughly 300, 50, and 20 cases, respectively, for the 1-tailed tests. An example of a small mean difference would be 10 weeks’ duration, 0.3 in interference score, and 6% for proportion of cases seeing a mental health provider. Medium effect size for the same analyses would be 26 weeks’ duration, 0.75 in interference score, and 15% for proportion of cases seeing a mental health provider. Most of the analyses in this study contained sufficient numbers of cases to find small or medium and larger effect sizes in the mean differences.

## RESULTS

Data in **Table 3** confirm 8 of 9 predictions stemming from our first hypothesis that uncomplicated bereavement-triggered and other loss-triggered cases do not differ on indicators of disorder. The sole exception is that

**Table 2. Depressive Episode Trigger Types\***

Variable	Bereavement-Triggered Group		Other Loss-Triggered Group		$F_{(3,40)}$
	Uncomplicated (n = 56)	Complicated (n = 101)	Uncomplicated (n = 174)	Complicated (n = 536)	
Age, mean, y	32.5 (1.5)	35.4 (1.4)	33.8 (0.9)	33.6 (0.7)	0.59
Female sex, %	53.4 (7.4)	64.1 (6.2)	56.9 (5.3)	62.6 (3.1)	0.97
Educational achievement, mean, y	13.1 (0.4)	13.0 (0.3)	13.2 (0.3)	12.9 (0.1)	0.39
White race, %	77.2 (8.2)	78.6 (4.6)	84.7 (4.8)	78.9 (3.6)	0.61

\*Data in parentheses indicate standard error. Data are weighted and corrected for sampling design. No significant differences were found on mean differences using analysis of variance;  $P < .05$ .

**Table 3. Indicators for Bereavement- and Other Loss-Triggered Episodes of Major Depressive Disorder With and Without Complicated Symptoms\***

Disorder Indicators	Bereavement-Triggered Group		Other Loss-Triggered Group		$F_{(3,40)}\dagger$
	Uncomplicated (n = 56)	Complicated (n = 101)	Uncomplicated (n = 174)	Complicated (n = 536)	
No. of depressive symptom groups, index episode, mean	5.7 <sup>a,b</sup> (0.1)	6.9 <sup>a,c</sup> (0.2)	5.8 <sup>c,d</sup> (0.1)	6.7 <sup>b,d</sup> (0.1)	23.14
Melancholic features, index episode, %	5.1 <sup>a,b</sup> (3.2)	26.9 <sup>a,c</sup> (5.4)	7.3 <sup>c,d</sup> (4.1)	17.1 <sup>b,d</sup> (2.6)	4.64
Attempted suicide, index episode, %	0.0 <sup>a,b</sup> (0.0)	10.9 <sup>a,c</sup> (3.2)	0.7 <sup>c,d</sup> (0.7)	13.6 <sup>b,d</sup> (2.2)	15.71
Duration, of longest episode, mean, wk	15.7 <sup>a,b</sup> (2.9)	59.3 <sup>a,c,1</sup> (4.6)	19.4 <sup>c,d</sup> (3.3)	39.3 <sup>b,d,1</sup> (2.2)	35.47
Episodes interfere with life "a lot," %	4.6 <sup>a,b,1</sup> (2.8)	46.2 <sup>a,c</sup> (5.1)	12.4 <sup>c,d,1</sup> (3.3)	47.3 <sup>b,d</sup> (3.4)	37.25
Ever saw a mental health professional because of depression, %	15.8 <sup>a,b</sup> (4.9)	41.6 <sup>a,c</sup> (6.5)	17.6 <sup>c,d</sup> (4.3)	33.5 <sup>b,d</sup> (3.0)	6.96
Ever went to a hospital because of depression, %	5.0 <sup>a</sup> (4.0)	17.0 <sup>a,b</sup> (5.9)	0.4 <sup>b,c</sup> (0.3)	8.9 <sup>c</sup> (1.8)	11.13
Ever took medications to treat depression, %	10.7 <sup>a,b</sup> (4.8)	30.0 <sup>a,c</sup> (6.2)	4.9 <sup>c,d</sup> (1.2)	22.3 <sup>b,d</sup> (2.2)	29.62
No. of recurrent episodes, mean	2.4 <sup>a</sup> (0.3)	2.1 <sup>1</sup> (0.4)	2.8 <sup>b</sup> (0.3)	4.1 <sup>a,b,1</sup> (0.4)	4.71

\*Data in parentheses indicate standard error. Data are weighted and corrected for sampling design. Common superscript numbers within a row indicate significant mean differences using a 2-tailed test:  $t > 1.96$ ;  $P < .05$ . Common superscript letters within a row indicate significant mean differences using a 1-tailed test:  $t > 1.646$ ;  $P < .05$ . Uncomplicated bereavement-triggered and uncomplicated other loss-triggered cases were compared using a 2-tailed test, based on the hypothesis that the 2 uncomplicated categories are not different; uncomplicated bereavement-trigger and other loss-triggered cases were compared with complicated bereavement-triggered and other loss-triggered cases using a 1-tailed test, based on the hypothesis that uncomplicated categories are lower on disorder indicators than are complicated categories. Although no predictions were made, for informational purposes complicated bereavement-triggered and complicated other loss-triggered cases were compared using 2-tailed tests.

†For all,  $P < .05$ ;  $F_{3,40}$ .

more individuals in the other loss-triggered group than the bereavement-triggered group (12.4% vs 4.6%) reported that their condition interferes with life "a lot."

We also compared uncomplicated bereavement-triggered cases with uncomplicated other loss-triggered cases on MDE symptom groups because substantial differences might suggest a difference in disorder status. (Symptom differences between uncomplicated and complicated cases are assured by definition.) No significant differences were found for 8 of 9 symptom groups (see **Table 4**). The only significant difference is that the uncomplicated bereavement-triggered group endorsed the suicide and death thought symptom group more frequently (80.6%) than the uncomplicated other loss-triggered group (42.9%). This difference is entirely attributable to a significant difference between the 2 groups in "thought about death" (78.6% vs 33.3%;  $t = 6.3$ ), which is understandable because the bereaved have recently been exposed to the death of a loved one.

Table 3 also gives the results of tests of our second hypothesis, that uncomplicated bereavement- and other loss-triggered cases are lower on disorder indicators than complicated bereavement- and other loss-triggered cases.

Seven indicators fully confirm this hypothesis: severity, melancholic depression, suicide attempt, duration, interference, saw a professional, and took medication. The remaining 2 indicators partially confirm the hypothesis. Results for hospitalization support 3 of 4 subhypotheses, but, contrary to our prediction, individuals in the uncomplicated bereavement group are not less likely to be hospitalized than are those in the complicated other loss group. Results for recurrence confirm 2 of 4 subhypotheses but do not indicate that either uncomplicated bereavement- or uncomplicated other loss-triggered cases are significantly less likely than complicated bereavement cases to recur. Examination of significant differences between complicated and uncomplicated cases indicate that the effect sizes are medium to large.

#### COMMENT

The DSM bereavement exclusion acknowledges that some intense episodes of sadness that satisfy symptomatic criteria for MDD are not disorders; however, the exclusion includes only bereavement and not responses to other

**Table 4. Uncomplicated Bereavement- vs Uncomplicated Other Loss-Triggered Cases With Each of 9 Major Depressive Disorder Symptom Groups in the Index Episode\***

Symptom Group	Uncomplicated Bereavement-Triggered Group (n = 56)	Uncomplicated Other Loss-Triggered Group (n = 174)
Appetite and weight problems	59.4 (9.5)	75.0 (4.0)
Sleep problems	84.5 (5.9)	88.3 (3.5)
Lack of energy	60.4 (6.8)	74.8 (3.6)
Move slowly, agitated	32.0 (8.3)	27.9 (4.3)
Feelings of worthlessness, guilt	21.8 (5.9)	32.8 (4.9)
Lack of concentration, indecisive	75.4 (7.6)	78.9 (4.6)
Thoughts of death, suicidal	80.6 <sup>a</sup> (6.1)	42.9 <sup>a</sup> (4.6)
Lost interest	61.4 (9.0)	74.7 (4.5)
Sad or blue	90.3 (5.2)	88.0 (3.6)

\*Data are given as percentage (SE). Data are weighted and corrected for sampling design. Common superscript letters within a row indicate a significant mean difference;  $t > 1.96$ ;  $P < .05$  (2-tailed test).

losses. Based on traditional distinctions between depressive disorder and normal intense sadness and on an evolutionary view of sadness and disorder, we hypothesized that the bereavement exclusion represents a valid attempt to avert false-positive diagnoses that applies equally to other losses. Using NCS data, we tested our hypothesis that bereavement and other losses are symmetric against the contention, implied by the DSM MDD criteria, that bereavement is categorically different from other stressors on the dimensions assessed in this study.

The results overwhelmingly support our hypotheses. They confirm 8 of 9 predicted relationships of no difference between uncomplicated categories, regardless of the type of trigger, and 33 of 36 predicted directional differences between uncomplicated and complicated categories.

The results have substantial implications for MDD diagnosis, especially inasmuch as bereavement or some other loss reportedly precedes more than 90% of index episodes in MDD cases in the NCS. The results do not support the current categorical distinction between uncomplicated bereavement-triggered and uncomplicated other loss-triggered episodes. Rather, they imply that if the current criteria correctly label uncomplicated depressive episodes after death of a loved one as nondisorders, then uncomplicated episodes that occur after other losses are also plausibly nondisordered. Moreover, the differences between uncomplicated and complicated cases suggest that the bereavement exclusion reflects a valid distinction. Overall, our results suggest a potentially serious problem with MDD in the diagnosis of responses to major non-bereavement losses.

These results also have implications for MDD prevalence. The NCS reports a lifetime prevalence of 14.9% for MDD, a figure that has caused much skepticism.<sup>2</sup> Extending the bereavement exclusion to our other loss-triggered group, of which 24.5% of cases (2.2% of the total NCS sample) were uncomplicated, reduces NCS MDD prevalence to 12.7%. However, our analysis excludes many triggered cases because the trigger was unidentifiable. Ex-

cluding from diagnosis all NCS MDD cases with a trigger that were uncomplicated decreases MDD prevalence to 11.3%, an overall reduction of almost one fourth (24.2%). The 1-year NCS MDD rate of 8.6% would be similarly reduced about one fourth, to 6.5%.

Despite overall strong support for our hypotheses, there are several exceptions. Contrary to our first hypothesis, significantly fewer uncomplicated bereavement- than uncomplicated other loss-triggered cases report that depressive episodes interfered with life a lot (4.6% vs 12.4%;  $t = 2.62$ ). This finding is not repeated with other clinical-significance measures, and both uncomplicated categories are substantially lower on interference than either complicated bereavement-triggered or complicated other loss-triggered categories (grief, 4.6% vs 46.2%; other loss, 12.4% vs 47.3%). One possible explanation for this finding is that bereavement is a socially acknowledged and frequently ritualized experience that often legitimates excuses from normal responsibilities. In contrast, social norms are less likely to allow withdrawal from normal role functioning in other loss-triggered cases; thus, greater interference with expectable levels of social engagement and responsibility might be experienced.

Contrary to our second hypothesis, the 5% of hospitalized patients with uncomplicated bereavement-triggered sadness is not significantly lower than the 8.9% of hospitalized patients with complicated other loss-triggered sadness ( $t = 0.87$ ). We speculate that if bereavement is more likely than other triggers to be considered a health risk, providers may occasionally hospitalize patients with uncomplicated sadness as a preventive measure. This is an area worthy of further investigation.

Also contrary to our second hypothesis, neither uncomplicated bereavement-triggered episodes nor uncomplicated other loss-triggered episodes are significantly lower than complicated bereavement in mean recurrence. However, these findings have a simple explanation; bereavement episodes, by definition, occur only after the death of a loved one and, thus, are severely constrained insofar as recurrence. Thus, the failure of this prediction seems less a disconfirmation than an anomalous situation.

This study has several limitations. The age range of the NCS sample (15-54 years) means that the sample does not include the elderly, a major group affected by bereavement and other losses, and a target of much recent depression research; it remains for future research to demonstrate whether the present results can be generalized to this important group. Another limitation is that we eliminated from analysis a substantial number of NCS multiple-episode MDD cases in which it was reported that the index episode was triggered, because the nature of the NCS data does not allow us to identify the type of trigger (bereavement vs other loss). In addition, we conservatively accepted the NCS algorithm for identifying uncomplicated vs complicated episodes and did not empirically examine alternative formulations. Furthermore, the accuracy of the NCS respondents' self-reports of triggering events is unknown; respondents may misremember whether there was an event or whether the timing of an event was before an episode or may misattribute the cause of an episode to an event when they were

coincidental. However, depressive symptoms can be misattributed to death of a loved one and to other losses, and the crucial complicated vs uncomplicated distinction we used is based on symptom reports and not on causal self-attributions alone.

Another limitation is that we were unable to examine the qualitative nature of nonbereavement triggers; such qualitative data were collected but are not publicly available because of institutional review board restrictions. Consequently, we were unable to examine distinctions among nongrief stressors or to make finer discriminations of proportionality between stressor and symptoms, for example, to judge when a reported trigger is not major and perhaps is so mild as to potentially suggest disorder even in uncomplicated episodes. Future studies should be designed to identify and evaluate the stressors directly. Uncomplicated bereavement-triggered and uncomplicated other loss-triggered groups might differ in ways we did not detect; we can only say that at the level of detection these data make possible, there is no reason to consider other loss-triggered conditions as substantially different from bereavement conditions on disorder indicators and, thus, no support for the current DSM asymmetry in applying the complicated vs uncomplicated distinction to bereavement but not to other stressors.

## CONCLUSIONS

These results, even if replicated, cannot by themselves fully resolve the issue of when to consider uncomplicated depressive episodes as nondisordered. While there are clear cases of complicated conditions that are disorders and uncomplicated conditions that are nondisorders, there is also growing awareness that depressive symptoms occur on a continuum; thus, many clinical patients might not fall clearly to one side or the other of the disorder-nondisorder divide. Moreover, it might be argued that our results for the disorder indicators are consistent with the position that uncomplicated episodes in response to both bereavement and other stressors are merely mild disorders. For example, Zisook et al,<sup>34</sup> also noting the asymmetry between bereavement and other losses in DSM MDD criteria, claim that the bereavement exclusion should be eliminated: "No other life event (or precipitant) negates the diagnosis of depression when the full syndrome occurs. It is not clear why death of a loved one should cancel out the diagnosis of major depressive disorder, either."<sup>34(p229)</sup>

Our findings, therefore, directly challenge only the current asymmetry between bereavement and other loss situations in the MDD bereavement exclusion. Given the absence of an objective gold standard for differentiating clinical depression from normal sadness, further empirical research should explore the prognostic, treatment, and policy implications of different classifications of uncomplicated nonbereavement episodes, as well as the conceptual underpinnings of MDD.

Traditionally, diagnosis of depressive disorder reflected the notion that sadness in response to loss is natural and normal and that the indication of disorder lies in the sadness being without sufficient cause in given en-

vironmental contexts or being disproportional to actual loss.<sup>7</sup> The DSM MDD complicated bereavement exclusion can be interpreted to mean that clinical depression should be diagnosed if the response is symptomatically out of proportion even to loss of a loved one. In attempting to extend the bereavement exclusion to reactions other than grief, further research is required to determine whether DSM-type symptom severity criteria should also be adopted for other stressors or, as much research suggests,<sup>12,35,36</sup> some more complex measure of proportionality that considers the typical or individual meaning of the stressor is necessary and clinically feasible. In addition, some other losses (eg, financial reversal or marital alienation) may be less clear-cut than death of a loved one and it may be harder to judge the severity of these losses, leading to challenges to reliable measurement. The importance of reliability, however, does not obviate the need to address substantial failures of validity. Although death is clear-cut, the bereavement exclusion itself depends on the complicated-uncomplicated distinction, which is not clear-cut.

In extending our results to clinical practice, we do not intend to suggest that treatment after major stressors is appropriate only for individuals experiencing complicated episodes. So-called uncomplicated episodes can involve substantial suffering and, in vulnerable individuals, may evolve into complicated episodes. Treatment, including psychotherapy or medication,<sup>33</sup> may sometimes be appropriate for intense normal sadness. Nevertheless, the current DSM distinction between complicated vs uncomplicated bereavement-triggered depression has implications for treatment planning, prognosis, and stigmatization. Our results suggest that the same reasons dictate recognition of intense normal sadness responses to stressors other than bereavement. If further research confirms these findings, the DSM MDD bereavement exclusion likely should be reconsidered in DSM-V, with equal attention to bereavement and nonbereavement triggers of intense sadness.

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