# **PTSD** Following Bereavement

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Until quite recently, the only stressor considered consistent with the diagnosis of PTSD was a catastrophic, out of the ordinary, trauma that almost anyone could be expected to have a severe reaction to. Thus, PTSD was considered relatively rare among non-military populations. More recently, epidemiologic surveys have suggested that PTSD may be much more prevalent than heretofore recognized, and the DSM-IV has opened the door to a much larger variety of stressors (the "A" criterion). Yet, bereavement is not considered the type of stressor capable of producing PTSD. In this study, 350 newly bereaved widows and widowers were assessed for the prevalence of PTSD, its chronicity, comorbidity, and consequences. The diagnosis of PTSD was made on the basis of questionnaire items approximating the DSM-IV criteria for PTSD. At 2 months after the spouse's death, 10% of those whose spouses died after a chronic illness met criteria for PTSD, 9% of those whose spouses died unexpectedly met criteria, and 36% of those whose spouses died from "unnatural" causes (suicide or accident) had PTSD. Symptoms tended to be chronic in at least 40% of the subjects, almost always were associated with comorbid depression, and created substantial morbidity. The results suggested that PTSD may occur after bereavement, and, by extension, other stressors not recognized by official diagnostic systems. The "A" criterion needs further examination.

KEY WORDS: PTSD; bereavement; stress; grief.

#### INTRODUCTION

How specific is the "A" criterion for PTSD? Can "normal" bereavement count as a PTSD stressor? These questions are the subject of this study.

Pre-DSM-IV, the "A" criterion for PTSD specified horrific life events which were out of the realm of ordinary life experiences and from which almost anybody could be expected to develop mental symptoms (1). Recent epidemiological studies have suggested, however, that the kind of stressors most likely to provoke PTSD are more common than previously appreciated and may in fact be expected to occur in the majority of individuals in their lifetimes (2-4). Further, only a relatively small percentage of individuals exposed to most of these stressful life events go on to develop the full syndrome of PTSD (4). Thus, the DSM-IV has broadened the scope of the "A" criterion and now includes two dimensions: first, that the event be a serious, potentially life-threatening or disfiguring trauma to oneself or a loved one; and, second, that the event (or news of it) be experienced with fear, helplessness, or horror (5). Although this revised concept of the "A" criterion opens the door for bereavement, epidemiologic studies have not considered "normal" bereavement to be the kind of event warranting a diagnosis of PTSD. However, this convention is somewhat arbitrary and may not be consistent with emerging information.

Over recent years, there has been a trend in epidemiologic studies based on community samples to broaden the scope of stressful life events that might "count" for the "A" criterion. Although all published studies thus far have excluded normal bereavement as an etiologic event for PTSD, the most

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recent study included "learning about a sudden, unexpected death of a loved one" as a possible "qualifying" event. Not surprisingly, the sudden unexpected death of a close friend or relative was the most common trauma found, with approximately 60% of men and women having experienced an event of this type at some time in their lives. Further, the risk of PTSD associated with this trauma was 16% in females and 13% in males (4)! Thus, at least one type of death may be associated with PTSD. The question remains open as to whether other forms of death, for example, the death of a loved one who died from a chronic illness or whose death had been anticipated, may also lead to a PTSD-like syndrome and, if so, whether this syndrome is unique from other forms of PTSD. In other words, might PTSD, like depression (6,7) or other anxiety disorders (8,9) be a possible adverse complication of bereavement?

In his landmark study of "normal bereavement," Lindemann outlined a broad spectrum of grief phenomena in survivors and family members of victims of the infamous Coconut Grove Fire (10). Given the horrific nature of the event, it is not surprising that Lindemann's description of "ordinary" grief overlapped considerably with symptoms now considered core components of PTSD. Lindemann described five pathognomonic symptom complexes: 1) somatic distress accompanied by waves of intense discomfort, a sense of unreality, and numbing and avoidance; 2) preoccupation with images of the deceased; 3) guilt about surviving, or about what could or should have been done; 4) hostility; and 5) loss of ordinary patterns of conduct. Lindemann's observations legitimized the biomedical study of grief and bereavement and led to a considerable number of empirical investigations of grief phenomena, course, and complications. Yet, despite Lindemann's emphasis on stress-like experiences among the bereaved, most subsequent studies have emphasized the depressogenic aspects of bereavement (6,7,11,12), while relatively less attention in the psychiatric literature has been devoted to looking at bereavement as a serious stressor, capable of resulting in a "traumatic stress disorder."

Studies that have examined grief as a general stressor (as opposed to a depressor) have explored the characteristics of the loss. For example, Parkes noted the increased life disruption, stress-like phenomena, and chronicity of bereavement when the death is sudden and unanticipated as opposed to insidious or expected (13). In a similar vein, Parkes has

demarcated the "unexpected loss syndrome" as one of the pathologic forms of grief (14). Lundin has described unanticipated loss as associated with increased psychiatric morbidity, anxiety, grief reactions, and functional incapacity compared with grief following expected deaths (15). Describing grief after homicide or suicide, Rynearson emphasizes the traumatic aspects of the loss by describing ongoing themes of violation, victimization, and volition, and underscores the primacy of PTSD phenomena over grief phenomena in nonrecovery (16). One of the few investigators to actually describe the prevalence of PTSD after the death of a loved one, Schut found rates from 20-31% over the first 2-years of spousal bereavement and that 9% met PTSD criteria at every stage throughout the 2 year data collection period (17). Finally, Prigerson et al. have identified a syndrome of "traumatic grief," distinct from either bereavement-related depression or anxiety, that is characterized by intense and prolonged preoccupation with thoughts of the deceased, yearning and searching behaviors, disbelief, and avoidance (18,19). Associated with high rates of physical and psychological morbidity (18), traumatic grief resembles PTSD, but is felt to be related to certain attachment disturbances as much, if not more than, to the traumatic nature of the loss (19).

This study examines the prevalence, course, comorbidity, and consequences of PTSD after spousal bereavement. The sample has previously been described in terms of the course of "ordinary grief" (20), grief-related depression (21–23), substance use (24), and anxiety symptoms (9). In the present investigation, operational criteria were developed *post hoc* to approximate as closely as possible the DSM-IV criteria for PTSD. It was hypothesized that the syndrome of the PTSD would be: 1) more prevalent 2 months rather than 1 or 2 years after the loss; 2) more common after an unexpected loss than after an anticipated death; and associated with substantial 3) comorbidity, and 4) psychological dysfunction.

### METHOD

Sampling and instruments have been described in detail elsewhere (6,9,21–24). In brief, 350 widows and widowers were recruited from death certificate records filed with the San Diego County Department of Health Services. Subjects were interviewed in their own homes 7–8 weeks after their spouse's death. The structured interview covered sociodemographics; pre-

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sent, past, and family histories of depression based on DSM-III-R criteria; and global ratings of physical health, recent work performance, and overall adjustment to widowhood. In addition, each subject completed a questionnaire that contained a number of self-report measures including the Hopkins Symptoms Checklist (HSCL) (25), Zung Self-Rating Depression Scales (ZUNG) (26), and sets of additional questions assessing grief-specific feelings and behavior. Subsequent questionnaires were mailed to each subject at 7, 13, 19, and 25 months postbereavement.

Although the study was not initially designed to vield DSM-IV diagnoses of PTSD, sufficient clinical information and demographic ratings were obtained to arrive at post hoc diagnostic impressions. Specifically, the HSCL was used to collect information about symptoms during the past month for the duration of the study; in addition, specific grief-related items (e.g., "going to the cemetery is too painful") were used to supplement the HSCL as necessary (20). Items were selected resembling as closely as possible the clinical domains of traumatic recollections, numbness and avoidance, and hyperarousal (see Table 1). For "traumatic recollections" to be counted as present, at least 1 of the 3 items representing traumatic recollections had to have been scored a 3 or 4 (this equates to "quite a bit" or "extremely" troubled by the symptoms over the past month on the HSCL, or experiencing the symptoms "a good part of the time" or "most of the time" on the grief-specific items). Similarly, "numbness and avoidance" was considered present when at least 3 of 8 items were scored a 3 or 4. Finally, hyperarousal was identified by scoring 3 or 4 on at least 2 of the 4 items selected to approximate the DSM-IV description of hyperarousal. To meet criteria for PTSD, each of the 3 symptom clusters (traumatic recollections, numbness and avoidance, and hyperarousal) had to present for at least 1 month.

The intensity of depressive symptoms was measured by the SDS index of the ZUNG. In addition, categorical dimensions of depression were assessed on the basis of a SDS of 50-59 = mild to moderate depression, 60-69 = moderate to marked depression, and  $\geq 70 =$  severe depression (26). As described elsewhere, adjustment was measured by 4-point scales on the widowhood questionnaire (1 = poor; 2 = fair; 3 = good; and 4 = excellent) measuring interpersonal and vocational functioning as well as overall adjustment to widowhood (22). 159

The statistical tests used to determine differences between groups with or without PTSD included chi-square analyses for categorical variables and *t*-tests for continuous variables. Statistical tests were considered significant at p < .05 and were twotailed.

#### RESULTS

#### Subjects

Two months after bereavement, 36 of 350 (10%) widows/widowers were classified as having PTSD. The majority of the subjects were widows (70%), elderly, (mean age 61, range 75-85 years), white (95%), and moderately well-educated (mean years of education = 14 years).

There were no statistically significant differences between groups on demographic factors with the exceptions of age and duration of marriage. The group with PTSD was significantly younger than the group without PTSD (widows/widowers with PTSD = 55.4 years, widows/widowers without PTSD = 61.4 years, F = 3.34, df = 348, p < .01) and the group with PTSD was married for fewer years than the group without PTSD (26.4 years vs. 34.2 years, F = 2.4, df= 343, p < .05).

#### **PTSD Status Over Time**

Table 1 describes the symptoms and rate of PTSD from 2 to 25 months after bereavement. As hypothesized, the rates decreased over time. Forty percent of those with PTSD at 2 months still met criteria for PTSD at 13 months. Sixty percent of those meeting PTSD criteria at 13 months continued to meet PTSD criteria at 25 months.

#### Type of Death and PTSD

In 65% of the subjects, the spouse's death was described as the result of chronic illness, while for 35% the death was sudden and unanticipated. There was no significant difference between groups on the nature of death. However, when the sudden and unanticipated group was divided into a subset of the 14 individuals whose spouses died from known suicide (N = 8) or accident (N = 6), this latter group was found to be at an elevated risk for PTSD ( $\chi^2$  =

	Time and total sample				
	$\begin{array}{l} 2 \text{ months} \\ (N = 350) \end{array}$	$\begin{array}{l} 13 \text{ months} \\ (N = 286) \end{array}$	$\frac{25 \text{ months}}{(N = 276)}$		
% Endorsing each item					
Traumatic recollection of symptoms (1 out of 3)					
Spend a lot of time thinking about my spouse	78	60	49		
I see spouse in my dreams	35	39	46		
I feel spouse is with me at times	71	63	60		
Avoidance/numbness symptoms (3 out of 8)					
Numb	12	4	2		
Push feelings away	48	47	37		
Avoid looking at pictures or belongings	16	14	15		
No interest in things	18	15	8		
Lonely even with people	37	23	15		
Never feeling close	11	13	9		
Constrained, shackled	25	26	13		
Visiting cemetery is too painful	17	16	17		
Hyperarousal symptoms (2 out of 4)					
Trouble falling asleep	30	19	15		
Feeling easily annoyed and irritated	19	12	10		
Trouble concentrating	20	13	9		
Tense or keyed up	27	15	13		
% with PTSD $(N)^a$					
	10 (36)	8 (22)	7 (19)		

Table 1. Symptoms and Rate of PTSD over Time

<sup>a</sup>The changes between 2 and 13 months and 2 and 25 months were significant (McNemar change test  $\chi^2 = 15.6$ , p < .01, and  $\chi^2 = 8$ , p < .01). The change between 13 and 25 months was not significant.

**Table 2.** Type of Death and PTSD at2 Months (N = 350)

Type of death (N)	PTSD-N (%)
Prolonged (221)	21 (10%)
Sudden (113)	10 (9%)
Accident (6)	3 (50%)
Suicide (8)	2 (25%)

10.157, df = 2, p < .01) compared to widows/widowers whose spouses died from "natural" causes. Combining deaths resulting from suicide and accident, the rate of PTSD is 36%.

#### **Comorbidity with Depression**

As Table 3 shows, PTSD was strongly associated with depression at each time point. Not only did the groups with PTSD have higher mean total scores on the SDS index than the groups without PTSD, but the percentages of individuals with all categories of depression, from mild to severe, also were significantly greater in the PTSD groups. Indeed, at 25 months, 99% of individuals with PTSD had *at least* mild depression compared to only 29% of the group without PTSD who had mild or greater degrees of depression.

#### **PTSD** and Adjustment

As can be seen in Table 4, self-rated social, interpersonal, work, health, and overall adjustment all were significantly compromised in widows and widowers with PTSD. At all time points, with the exception of socialization at 25 months, those with PTSD socialized less, performed more poorly at work, and were more likely to feel their health was suffering and to rate their overall adjustment to widowhood as only fair to poor than were widows and widowers not suffering from PTSD.

	2 m	onths	13 months		25 months		
SDS Index Depression Category <sup>4</sup>	PTSD <i>N</i> (%)	Non-PTSD N (%)	PTSD N (%)	Non-PTSD N (%)	PTSD N (%)	Non-PTSD N (%)	
No depression (score <50) Mild (score 50-59) Moderate (score 60-69) Severe (score 270)	$ \begin{array}{c} 1 (3) \\ 7 (21) \\ 14 (41) \\ 12 (35) \end{array} $	169 (57) 72 (24) 38 (13) 16 (6)	$ \begin{array}{c} 1 (5) \\ 3 (14) \\ 12 (57) \\ 5 (24) \end{array} $	$ \begin{array}{c} 152 (61) \\ 68 (27) \\ 24 (10) \\ 6 (2) \end{array} $	2 (11) 9 (47) 5 (26) 2 (16)	$ \begin{array}{c} 168 (71) \\ 46 (20) \\ 19 (8) \\ 2 (1) \end{array} $	
$\frac{\text{SOS} \text{ [score}^b - 70)}{\text{SDS} \text{ Index Mean Total Score}^b}$	60	48	65	46	61	43	

Table 3. PTSD and Depression

<sup>a</sup>Comparing no depression/mild depression to moderate/severe depression,  $\chi^2 = 56$ , p < .01 at 2 months;  $\chi^2 = 64$ , p < .001 at 13 months; and  $\chi^2 = 19$ , p < .001 at 25 months. <sup>b</sup>t = 8.9, df = 327, p < .001 at 2 months; t = 7.5, df = 269, p < .001 at 13 months; and t = 7, df = 252, p < .001 at 2 months; t = 7.5, df = 269, p < .001 at 13 months; and t = 7, df = 252, p < .001 at 2 months; t = 7.5, df = 269, p < .001 at 13 months; and t = 7, df = 252, p < .001

 $b^{t} = 8.9, df = 327, p < .001$  at 2 months; t = 7.5, df = 269, p < .001 at 13 months; and t = 7, df = 252, p < .001 at 25 months.

#### DISCUSSION

The important finding in this study is that PTSD may be substantially more common than heretofore recognized. Since the arrival of the DSM-IV, PTSD was considered relatively rare in civilian populations. The first epidemiologic study using DSM-IV criteria for the "allowable" stressor found high rates of PTSD, especially when the sudden and unexpected death of a loved one was counted as a traumatic event (4). This study suggests the rates of PTSD may be even higher. The loss of a loved one is a ubiquitous life event. Indeed, it has been estimated that for everyone who dies (and we all die), an average of five close friends or relatives are left behind (27). By age 65, 50% of all women have been widowed at least once. That 10% of a representative group of widows and widowers suffered from PTSD suggests there may be many men and women suffering from unrecognized PTSD.

It is somewhat surprising that widows and widowers whose spouses died from a chronic illness and relatively expected deaths suffered as much PTSD as those whose spouses died from more acute illnesses and unanticipated deaths. Much previous literature suggests a more tumultuous and chronic course of grief in the latter group (13-17, 28), but thus far, no empirical studies have examined relative rates of PTSD after different types of deaths, with the exception of a small study by Schut et al. who also found the duration of illness unrelated to the risk for PTSD (17). Although greater degrees of trauma are expected to yield higher rates of PTSD than less extreme traumas (29), there is no rule that timeliness or expectedness of the death of a loved one cannot be as traumatic for some individuals as a more unexpected or unnatural death for other bereaved individuals.

The rate of PTSD found in this bereaved sample closely approximates the rate found in the epidemiologic study in Michigan, even though the Michigan study "counted" only individuals who lost someone to a sudden and unexpected death (4). On the other hand, in this study, much higher rates of PTSD were found in the small subset of individuals whose spouses died from "unnatural" causes, consistent with Rynearson's conceptualization of the "traumatic" nature of such deaths (30). Indeed, the rate of PTSD found in this subset, 36%, is at least in the same range or greater than the rates reported after assaultive violence, serious injuries, or experiencing natural disasters (4). The importance of this finding is highlighted by actuarial data showing that the number of such deaths is increasing yearly in most age groups. Accidental deaths represent the leading cause of death among individuals from 1 to 44 years of age and deaths by homicide and suicide represent the second and third leading causes of death following accidents in the 15- to 24-year-old age group. Thus, the potential public health ramifications of these high rates of PTSD following highly prevalent trauma is substantial.

Like other forms of PTSD, the traumatic stress syndrome noted in this study tended to be chronic, often comorbid with depression, and both painful and debilitating. Although 60% of individuals who experience PTSD 2 months after their spouse's death no longer met criteria 1 year later, a chronicity of 40% is similar to reports of chronicity in military (31) and other civilian (3,32) populations. Similarly, the rates of comorbid depression are in line with reports after a wide range of other trauma (33). Indeed, in

Table 4. PTSD and Adjustment

Adjustment outcome	$\begin{array}{l} 2 \text{ months} \\ (N = 350) \end{array}$	13 months $(N = 287)$	$\begin{array}{l} 25 \text{ months} \\ (N = 276) \end{array}$
Number of days of social activity/month Dissatisfied with work performance (%) Feel health suffering (%) Rating overall adjustment to widowhood fair/poor (%)	5 vs. 8 <sup>a</sup> 70 vs. 75 <sup>d</sup> 36 vs. 3 <sup>g</sup> 75 vs. 35 <sup>j</sup>	5 vs. $10^{b}$ 67 vs. $27^{e}$ 22 vs. $9^{h}$ 77 vs. $26^{k}$	7 vs. 10 <sup>c</sup> 81 vs. 27 <sup>f</sup> 37 vs. 9 <sup>i</sup> 79 vs. 18 <sup>l</sup>
$ {}^{a}t = 2.2, df = 343, p < .05. $ $ {}^{b}t = 4.7, df = 33, p < .001. $ $ {}^{c}t = 1.5, df = 273, p = .14. $ $ {}^{d}\chi^{2} = 26, df = 1, p < .001. $ $ {}^{e}\chi^{2} = 27, df = 1, p < .001. $ $ {}^{f}\chi^{2} = 17, df = 1, p < .001. $ $ {}^{g}\chi^{2} = 28, df = 1, p < .001. $ $ {}^{h}\chi^{2} = 5, df = 1, p < .001. $ $ {}^{j}\chi^{2} = 22, df = 1, p < .001. $ $ {}^{j}\chi^{2} = 22, df = 1, p < .001. $ $ {}^{j}\chi^{2} = 26, df = 1, p < .001. $ $ {}^{k}\chi^{2} = 26, df = 1, p < .001. $ $ {}^{k}\chi^{2} = 26, df = 1, p < .001. $ $ {}^{k}\chi^{2} = 26, df = 1, p < .001. $ $ {}^{k}\chi^{2} = 38, df = 1, p < .001. $			

this study, PTSD without comorbid depression was rare. Finally, as reported in other populations (34,35), PTSD was associated with substantial social, interpersonal, occupational, and global dysfunction. Thus, PTSD is not only common after "ordinary" bereavement, but is associated with as much chronicity,

comorbidity, and dysfunction as PTSD following

more traditionally accepted traumatic stressors. Before concluding, a few caveats deserve mentioning. The results of this study should be viewed as preliminary only. First, this study was not designed to diagnose PTSD or quantitate its prevalence. The criterion for PTSD used in this study are approximations only; no psychometrically validated instruments were used. Second, the sample may not be generalizable to other populations: It consists of widows and widowers, not other bereaved individuals; was biased toward elderly, Caucasian, middle-class females; and included only the small percentage of bereaved individuals in San Diego County who were willing to allow university investigators into their homes during a time of great turmoil. Third, a relatively high dropout rate of 26% between months 2 and 25 may have compromised the results. Fourth, the type of death and many of the psychosocial outcome variables used in this study were based on subjective assessments not validated by death records, observations of others, or standardized questionnaires. In addition, the question of whether the results may resemble the aftermath of other losses--e.g., divorce, unemployment, health, to name a few--remains unanswered.

Finally, it is not at all clear whether the most useful way of conceptualizing this data is that bereavement may precipitate PTSD in vulnerable individuals as opposed to Prigerson et al.'s notion that such individuals may be suffering from "traumatic bereavement," a specific subtype of pathological mourning.

Despite these methodological limitations and questions, the results suggest the "A" criterion for PTSD might need to be broadened. At the very least, it needs critical examination with testable hypotheses, prospective designs using standardized diagnostic and psychometric tools, large samples, and adequate follow-up periods. In addition to epidemiologic studies assessing several stressful or traumatic life events, more focused following of specific cohorts is needed. One such cohort can and should be bereaved individuals. That some bereaved persons are vulnerable to the onset, exacerbation or persistence of depressive or anxiety disorders is no longer contested; this study suggests that PTSD should be included as one of the possible complications of bereavement.

#### REFERENCES

- Yehuda R, McFarlane AC: Conflict between current knowledge about posttraumatic stress disorder and its original conceptual basis. Am J Psychiat 1995; 152(12):1705-1713
- Davidson JRT, Hughes D, Blazer DG: Post-traumatic stress disorder in the community: An epidemiological study. Psychol Med 1991; 21:713-721

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- Kessler RC, Sonnega, A, Bromet E, Nelson CB: Posttraumatic stress disorder in the National Comorbidity Survey. Arch Gen Psychiat 1995; 52:1048–1060
- Breslau N, Kessler RC, Chilcoat HD, Schultz LR, Davis GC, Andreski P: Trauma and posttraumatic stress disorder in the community: The 1996 Detroit area survey of trauma. Arch Gen Psychiat 1998; 55:626-632
- American Psychiatric Association: Diagnostic and Statistical Manual of Mental Disorders, 4th Ed. Washington, DC: American Psychiatric Press, 1994
- Zisook, S, Shuchter SR: Major depression associated with widowhood. Am J Geriat Psychiat 1993; 1:316–326
- Clayton PJ: The depression of widowhood. Br J Psychiat 1972; 120:71–78
- Jacobs S, Hansen F, Kasl S, Ostfeld A, Berkman L, Kim K: Anxiety disorders in acute bereavement: Risk and risk factors. J Clin Psychiat 1990; 51:269–274
- Zisook S, Schneider D, Shuchter SR: Anxiety and bereavement 1990; 8:83-96
- Lindemann E: Symptomatology and management of acute grief. Am J Psychiat 1944; 101:141-148
   Gallagher DE, Breckenridge JR, Thompson LW, Peterson
- Gallagher DE, Breckenridge JR, Thompson LW, Peterson JA: Effects of bereavement on indicators of mental health in elderly widows and widowers. J Gerontol 1983; 38:565-571
- Jacobs S, Hansen F, Berkman L, Kasl S, Ostfeld A: Depressions of bereavement. Comprehens Psychiat 1989; (30)3:218–224
- Parkes CM. Risk factors in bereavement: Implications for the prevention and treatment of pathological grief. Psychiat Ann 1990; 20:308-313
- Parkes CM, Weiss RS: Recovery from Bereavement. New York: Basic Books; 1983
- Lundin T: The stress of unexpected bereavement. Stress Med 1987; 3:109–114
- Rynearson EK: Psychological effects of unnatural dying on bereavement. Psychiat Ann 1986; 16(5):272-275
- 17. Schut HA, de Keijser J, Van den Bout J, Dijkhuis JH: Posttraumatic stress symptoms in the first years of conjugal bereavement. Anxiety Res 1991; 4(1):225-234
- Prigerson HG, Bierhals AJ, Kasl SV, et al.: Traumatic grief as a risk factor for mental and physical morbidity. Am J Psychiat 1997; 54(5):617-623
- Prigerson HG, Bierhals AJ, Kasl SV, et al.: Complicated grief as a distinct disorder from bereavement-related depression and anxiety: A replication study. Am J Psychiat 1996; 153:84–86

- Shuchter SR, Zisook S: The course of normal grief. In: Stroebe MS, Stroebe W, Hansson RO, eds. Handbook of Bereavement. New York: Cambridge Press; 1993:23-43
- 21. Zisook S, Shuchter SR: Depression through the first year after the death of a spouse. Am J Psychiat 1991; 148:1346-1352
- Zisook S, Shuchter SR: Uncomplicated bereavement. J Clin Psychiat 1993; 54:365–372
- Zisook S, Paulus M, Shuchter SR, Judd LL: The many faces of depression following spousal bereavement. J Affect Dis 1997; 45:85–95
- 24. Zisook S, Shuchter SR, Mulvihill M: Alcohol, cigarette and medication use during the first year of widowhood. Psychiat Ann 1990; 20:318-326
- Derogatis LR, Lipman RS, Rickels K, Uhlenhuth EH, Covi L: The Hopkins Symptom Checklist (HSCL): A self-report symptom inventory. Behav Sci 1974, 1-15
- Zung WWK: A self-rating scale for depression. Arch Gen Psychiat 1975; 12:63-70
- Cleirin MPHD: Adaptation After Bereavement. Leiden, The Netherlands: DSWO Press; 1991
- Rando TA: On treating those bereaved by sudden, unanticipated death. In Session: Psychother Pract 1996; 2(4):59-71
- Engdahl B, Dikel TN, Eberly R, Blank A Jr.: Posttraumatic stress disorder in a community group of former prisoners of war: A normative response to severe trauma. Am J Psychiat 1997; 154:1576-1581
- Rynearson EK: Suicide internalized: Existential sequestrum. Am J Psychiatry 1981; 138: 84-87
- Kulka RA, Schlenger WE, Fairbank JA, et al.: Trauma and the Vietnam War Generation. New York: Brunner/Mazel; 1990
- Davidson JRT, Hughes D, Blazer DG: Post-traumatic stress disorder in the community: An epidemiological study. Psychol Med 1991; 21:713-721
- Bleich A, Koslowsky M, Dolev A, Lerer B: Post-traumatic stress disorder and depression: An analysis of comorbidity. Br J Psychiat 1997; 170:479–482
- Solomon SD, Davidson JRT: Trauma: Prevalence, impairment, service use, and cost. J Clin Psychiat 1997; 58 (suppl 9):5-11
- 35. Zatwick DF, Marmar CR, Weiss DS, Browner WS, Metzler TJ, Golding JM, Stewart A, Schlenger WE, Wells KB: Posttraumatic stress disorder and functioning and quality of life outcomes in a nationally representative sample of male Vietnam veterans. Am J Psychiat 1997; 154:1690–1695