

An Empirical Examination of the Stage Theory of Grief

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THE NOTION THAT A NATURAL psychological response to loss involves an orderly progression through distinct stages of bereavement has been widely accepted by clinicians and the general public. Bowlby and Parkes¹⁻⁴ were the first to propose a stage theory of grief for adjustment to bereavement that included 4 stages: shock-numbness, yearning-searching, disorganization-despair, and reorganization. Kübler-Ross⁵ adapted Bowlby and Parkes' theory to describe a 5-stage response of terminally ill patients to awareness of their impending death: denial-dissociation-isolation, anger, bargaining, depression, and acceptance. The stage theory of grief became well-known and accepted, and has been generalized to a wide variety of losses, including children's reactions to parental separation,³ adults' reactions to marital separation,⁶ and clinical staffs' reactions to the death of an inpatient.⁷ A 1997 survey conducted by Downe-Wamboldt and Tamlyn⁸ documented the heavy reliance of medical education on the Kübler-Ross model of grief. The National Cancer Institute currently maintains a Web site on loss, grief, and bereavement that describes the phases of grief.⁹ As entrenched as the notion of phases of grief may be, the hypothesized sequence of grief reactions has previously not been investigated empirically.

Several bereavement scholars have investigated particular aspects of, or diagrammed changes in, grief reactions over

Context The stage theory of grief remains a widely accepted model of bereavement adjustment still taught in medical schools, espoused by physicians, and applied in diverse contexts. Nevertheless, the stage theory of grief has previously not been tested empirically.

Objective To examine the relative magnitudes and patterns of change over time post-loss of 5 grief indicators for consistency with the stage theory of grief.

Design, Setting, and Participants Longitudinal cohort study (Yale Bereavement Study) of 233 bereaved individuals living in Connecticut, with data collected between January 2000 and January 2003.

Main Outcome Measures Five rater-administered items assessing disbelief, yearning, anger, depression, and acceptance of the death from 1 to 24 months postloss.

Results Counter to stage theory, disbelief was not the initial, dominant grief indicator. Acceptance was the most frequently endorsed item and yearning was the dominant negative grief indicator from 1 to 24 months postloss. In models that take into account the rise and fall of psychological responses, once rescaled, disbelief decreased from an initial high at 1 month postloss, yearning peaked at 4 months postloss, anger peaked at 5 months postloss, and depression peaked at 6 months postloss. Acceptance increased throughout the study observation period. The 5 grief indicators achieved their respective maximum values in the sequence (disbelief, yearning, anger, depression, and acceptance) predicted by the stage theory of grief.

Conclusions Identification of the normal stages of grief following a death from natural causes enhances understanding of how the average person cognitively and emotionally processes the loss of a family member. Given that the negative grief indicators all peak within approximately 6 months postloss, those who score high on these indicators beyond 6 months postloss might benefit from further evaluation.

JAMA. 2007;297:716-723

www.jama.com

time.¹⁰⁻¹⁴ Bonanno et al¹⁰ found 5 divergent grieving trajectories from preloss to 18 months postloss (common grief, chronic grief, chronic depression, improvement during bereavement, and resilience). Wortman and Silver¹³ examined and disproved the necessity of 1 stage in the grief theory when they found that depression was not an inevitable response to loss. Based on Bowlby and Parkes¹⁻⁴ and Kübler-Ross⁵ theories, Jacobs¹⁴ synthesized and illustrated the hypothesized stage theory of grief, in which the normal response to loss progresses through the following grief stages: numbness-disbelief, separation distress

(yearning-anger-anxiety), depression-mourning, and recovery. To date, no study has explicitly tested whether the normal course of adjustment to a natural death progresses through stages of

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disbelief, yearning, anger, depression, and acceptance.

The identification of the patterns of typical grief symptom trajectories is of clinical interest because it enhances the understanding of how individuals cognitively and emotionally process the death of someone close. Such knowledge aids in the determination of whether a specific pattern of bereavement adjustment is normal or not. Once the normal patterns of grief are known, individuals with abnormal bereavement adjustment can be identified and referred for treatment when indicated.

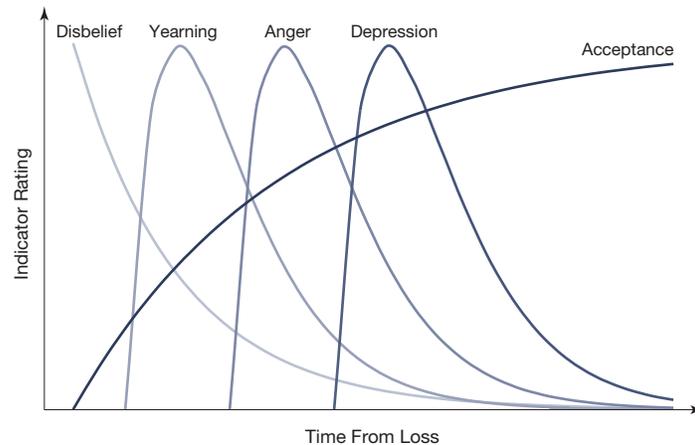
This study used data from a sample of community-based bereaved individuals to examine the course of disbelief, yearning, anger, depression, and acceptance as described by Jacobs¹⁴ from 1 to 24 months postloss. FIGURE 1 illustrates the hypothesized sequence of stages of grief for this analysis. Because approximately 94% of US deaths result from natural causes (eg, vehicle crashes, suicide),¹⁵ deaths from unnatural causes (eg, car crashes, suicide) were excluded thereby enabling the results to be generalized to the most common types of deaths. Individuals who met the criteria for complicated grief disorder^{16,17} also were excluded so that the results would represent normal bereavement reactions. Although the proposed stage theory of grief^{1-5,14} does not specify the precise timing of the stages, Jacobs¹⁴ described the normal grieving process and each of its stages as being completed within 6 months following the loss of a loved one. However, in the absence of an established, empirical foundation for the length of time associated with the normal grieving process, the normal grieving process was not assumed to be limited to 6 months postloss in this study. Instead, the grief indicators were examined as functions of time up to 24 months postloss.

METHODS

Study Sample

The Yale Bereavement Study, a longitudinal examination of grief in a community-based sample of bereaved individu-

Figure 1. Hypothesized Stage Theory of Grief



als, collected data between January 2000 and January 2003, and was funded by the National Institute of Mental Health. For greater Bridgeport/Fairfield, Conn, the names of the newly bereaved (≤ 6 months) were obtained from the division of the American Association of Retired Persons Widowed Persons Service, a community-based outreach program. For the New Haven, Conn, metropolitan and surrounding areas, names were obtained from obituaries listed in the *New Haven Register*, through newspaper advertisements, fliers, personal referrals, and referrals from the chaplain's office of the St Raphael Hospital. A comparison between greater Bridgeport/Fairfield Bureau of Vital Records death certificates and the Widowed Persons Service list during the same 3-month period revealed that the Widowed Persons Service listings captured 95% of all deaths leaving behind a widowed individual, suggesting that the listing provided an unbiased and comprehensive ascertainment of recently widowed individuals in the sampled region. Participants recruited from greater New Haven (37.0%) did not differ significantly from participants recruited from greater Bridgeport/Fairfield (63.0%) with respect to sex, income, education, race/ethnicity, or quality of life. Participants recruited from greater New Haven were significantly younger (mean [SD] age, 59.7 [16.4] years) than par-

ticipants from Bridgeport/Fairfield (mean [SD], 63.2 [11.5] years) ($P = .05$). The institutional review boards of all participating sites approved the research protocol.

Individuals were invited to participate in the study via a letter that described how their names were obtained, identified the investigators, outlined the aims and procedures, and noted that they would be contacted by study staff in the following week unless they informed us of their wish not to be contacted. Of the 575 persons contacted, 317 (55.1%) agreed to participate. Reasons for nonparticipation included reluctance to participate in research ($n = 11$; 4.3%); being too busy ($n = 46$; 17.8%); being too upset ($n = 27$; 10.5%); "doing fine" ($n = 23$; 8.9%); not being interested or having no reason ($n = 145$; 56.2%); and having other reasons ($n = 6$; 2.3%). Compared with participants, nonparticipants were significantly more likely to be male (25.9% vs 37.2%; $P < .001$) and older (mean [SD] age, 61.7 [13.1] years vs 68.8 [13.7] years) ($P < .001$). Non-English-speaking persons and those considered too frail to complete the interview were ineligible. The 317 participants were interviewed at a mean (SD) of 6.3 (7.0) months after the death of a loved one. The first follow-up interview ($n = 296$; 93.4%) was completed at a mean (SD) of 10.9 (6.1) months postloss; second follow-up interview ($n = 263$; 83.0%) at a mean (SD) of 19.7 (5.8) months postloss. Written in-

Table 1. Demographic Variables of the Yale Bereavement Study Sample Compared With 2005 Data From the US Census

	Yale Bereavement Study Sample (N = 233), No. (%)	2005 US Census, %
Age ≥65 y	125 (53.5)	76.1*
Female sex	166 (71.2)	80.7*
White race	226 (97.0)	80.2*
Education beyond high school	145 (62.2)	54.7†
Median household income, \$	52 000	46 242‡

*US widowed population (n = 13.7 million).
†US general population aged 25 years or older (n = 189.0 million).
‡US general household population (N = 111.1 million households).

formed consent was obtained from all individuals enrolled in the study.

Of the 317 individuals identified, 58 were excluded because they met criteria for complicated grief disorder, 19 because they survived traumatic deaths, and 14 because they had missing data on examined measures. The study sample (N=233) consisted of individuals who did not meet criteria for complicated grief disorder^{16,17} during the study; had a family member or loved one who died from natural not traumatic causes; and had at least 1 complete assessment of the 5 grief indicators included in the stage theory of grief within 24 months postloss. The participants were significantly older (mean [SD] age, 62.9 [13.1] years; 53.5% aged ≥65 years) and more likely to be white (97.0%) than the excluded individuals (mean [SD] age, 58.5 [15.0] years; 90.4% white) but did not significantly differ with respect to sex, income, education, and relationship to the deceased. The vast majority of participants were spouses of the deceased (83.8%). The remaining participants (16.2%) were adult children, parents, or siblings of the deceased.

The data from the participants were compared with data from the 2005 US Census (TABLE 1).¹⁸ Compared with the US widowed population, the study participants were younger, more likely to be male, and a higher proportion were white. Compared with the US general population aged 25 years or older, the study participants were better educated and had a higher median household income.

Measures of Grief

The indicators of disbelief, yearning, anger, and acceptance of the death were assessed using single items obtained from the rater-administered version of the Inventory of Complicated Grief-Revised, formerly known as the Traumatic Grief Response to Loss.¹⁹ Although it would have been preferable to use separate scales for the assessment of yearning, disbelief, anger, and acceptance of the death, no such scales exist for each of these grief stages. To maximize consistency across measures, single items were used for all grief phase indicators. Single-item interview screenings have proven remarkably accurate in the prediction of depression.²⁰ The frequency, rather than severity, of each grief indicator was used as the response format in the Inventory of Complicated Grief-Revised because frequency has proven to be a more effective means of evaluating the impact of events.²¹ Grief phase indicators were measured using a 5-point Likert scale in which 1 equaled less than once per month; 2, monthly; 3, weekly; 4, daily; and 5, several times per day. These items showed moderately high correlations with the total Inventory of Complicated Grief-Revised score at baseline interview, which ranged in magnitude from 0.47 to 0.57 (all comparisons yielded $P < .001$). To enhance comparability in the measurement of each indicator, depression was assessed using the single-item depressed mood in the Hamilton Rating Scale for Depression.²² The correlation between depressed mood and the total Hamilton Rating Scale for Depression score

at baseline interview was 0.65 ($P < .001$). To be consistent with the scale levels of other grief indicators, all levels of depressed mood were increased by 1 so that 1 indicated “absence of depressed mood” and 5 indicated “patient reports virtually only these feeling states in his spontaneous verbal and non-verbal communication.”

Individuals self-identified their racial/ethnic status according to the racial/ethnic categories defined in the US Census.¹⁸ They also reported the cause of death for the family member or loved one. For deaths due to a terminal illness, the date of the diagnosis was recorded. Diagnoses of the terminal illness within 6 months (52/199; 26.1%) were compared with those 6 months or longer (147/199; 73.9%) prior to the death. Six months was used as the threshold because terminal diagnoses of less than 6 months resulted in smaller, less reliable groupings and elsewhere^{16,17} it has been determined that 6 months is the time after which normal grief can be distinguished from complicated grief disorder.

Statistical Analyses

Statistical analyses were conducted to test for significant differences in the magnitude of each of the 5 grief indicators within each of the 3 postloss periods (≤6 months [1-6 months category], >6 to ≤12 months [6-12 months category], and >12 to ≤24 months [12-24 months category]); to compare the pattern of changes in the absolute levels of each of the 5 grief indicators over time; and to determine when each of the 5 grief indicators achieved its maximum value.

Specifically, single-sample *t* tests and nonlinear, ordinary least squares regression analyses were used to examine the differences in magnitude between grief indicators at a given time postloss and changes in grief indicators as a function of time postloss. Single-sample *t* tests were used to examine within-person differences in magnitude between the 5 grief indicators postloss at 1 to 6 months, 6 to 12 months, and 12 to 24 months and

Table 2. Grief Indicators Assessed During 3 Postloss Periods

Grief Indicator*	Period of Postloss Assessment, mo					
	1-6		6-12		12-24	
	No. of Participants	Mean (SD)	No. of Participants	Mean (SD)	No. of Participants	Mean (SD)
Disbelief	173	2.27 (1.30)	211	1.80 (1.03)	205	1.61 (0.94)
Yearning	171	3.77 (1.14)	212	3.18 (1.19)	205	2.64 (1.20)
Anger	174	1.87 (1.16)	210	1.80 (1.04)	205	1.55 (0.87)
Depression	174	2.29 (1.25)	213	2.29 (1.21)	205	1.80 (1.07)
Acceptance	143	4.11 (1.21)	209	4.49 (0.93)	205	4.70 (0.68)

*Indicators are measured on a scale of 1 to 5.

within-person temporal changes in magnitude of each grief indicator postloss between 1 to 6 months and 6 to 12 months and between 6 to 12 months and 12 to 24 months.

Nonlinear, ordinary least squares regression analyses were used to model the trajectory of each grief indicator as a function of time postloss. Because the stage theory of grief predicts the sequential rise and fall of each of the grief indicators as a function of time postloss (ie, phase), we chose the following parametric functional form that would capture such phases:

$$Y = [A + B(-t/\tau + 1)] \exp(-1/2 t/\tau) + C$$

where Y represents the value of the grief indicator and the term t/τ represents time postloss with t scaled by the model parameter τ . The expression $[A + B(-t/\tau + 1)] \exp(-1/2 t/\tau)$ represents a linear combination of normalized (weighted) zero-order and first-order Laguarre polynomials, scaled by the model parameters A and B , respectively, included to capture the anticipated rise and fall in the data. Model parameter C represents the asymptotic value that the grief indicator approaches as time postloss increases to infinity. One observation per person ($N=233$), selected randomly among those observations that contained complete data for each of the 5 grief indicators within 24 months postloss, was used to fit these regression models. For each grief indicator, the model parameters τ , A , B , and C were estimated by means of nonlinear, ordinary least squares regression implemented using PROC MODEL in SAS version 9.1 (SAS

Institute Inc, Cary, NC). $P < .05$ was considered significant.

A series of multivariable analyses of variance were conducted to evaluate whether demographic variables and report of diagnosis of terminal illness within 6 months of the death were significantly related to the 5 grief indicators or to the within-person differences between or temporal changes in the 5 grief indicators.

RESULTS

The means and SDs for the 5 grief indicators of disbelief, yearning, anger, depression, and acceptance postloss at 1 to 6 months, 6 to 12 months, and 12 to 24 months appear in TABLE 2. Within each period, acceptance is greater than disbelief, yearning, anger, and depression; yearning is greater than disbelief, anger, and depression; and depression is greater than anger. Between 1 and 6 months postloss and 6 and 12 months postloss, disbelief and yearning decline and acceptance increases. From 6 to 12 months postloss and 12 to 24 months postloss, disbelief, yearning, anger, and depression decline and acceptance increases.

More specifically, acceptance is significantly greater than disbelief (1-6 months postloss: $t_{142}=10.79$, $P < .001$; 6-12 months postloss: $t_{208}=23.16$, $P < .001$; 12-24 months postloss: $t_{204}=31.88$, $P < .001$), yearning (1-6 months postloss: $t_{142}=2.11$, $P = .04$; 6-12 months postloss: $t_{208}=10.80$, $P < .001$; 12-24 months postloss: $t_{204}=19.39$, $P < .001$), anger (1-6 months postloss: $t_{142}=12.66$, $P < .001$; 6-12 months postloss: $t_{208}=23.14$, $P < .001$; 12-24 months

postloss: $t_{204}=35.24$, $P < .001$), and depression (1-6 months postloss: $t_{142}=11.64$, $P < .001$; 6-12 months postloss: $t_{208}=18.84$, $P < .001$; 12-24 months postloss: $t_{204}=29.97$, $P < .001$).

Yearning is significantly greater than disbelief (1-6 months postloss: $t_{169}=13.57$, $P < .001$; 6-12 months postloss: $t_{210}=15.57$, $P < .001$; 12-24 months postloss: $t_{204}=12.49$, $P < .001$), anger (1-6 months postloss: $t_{170}=16.43$, $P < .001$; 6-12 months postloss: $t_{209}=15.10$, $P < .001$; 12-24 months postloss: $t_{204}=12.43$, $P < .001$), and depression (1-6 months postloss: $t_{170}=14.40$, $P < .001$; 6-12 months postloss: $t_{211}=9.75$, $P < .001$; 12-24 months postloss: $t_{204}=9.41$, $P < .001$).

Depression is significantly greater than anger (1-6 months postloss: $t_{173}=3.61$, $P < .001$; 6-12 months postloss: $t_{209}=5.32$, $P < .001$; 12-24 months postloss: $t_{204}=3.16$, $P = .002$).

Disbelief is significantly greater than anger at 1 to 6 months postloss ($t_{172}=3.22$, $P = .002$); depression is significantly greater than disbelief at 6 to 12 months postloss ($t_{210}=5.22$, $P < .001$) and at 12 to 24 months postloss ($t_{204}=2.19$, $P = .03$).

Between 1 and 6 months postloss and 6 and 12 months postloss, disbelief ($t_{157}=4.78$, $P < .001$) and yearning ($t_{156}=7.89$, $P < .001$) decline and acceptance increases ($t_{130}=3.91$, $P < .001$). Between 6 and 12 months postloss and 12 and 24 months postloss, disbelief ($t_{190}=2.84$, $P = .005$), yearning ($t_{191}=5.96$, $P < .001$), anger ($t_{189}=3.91$, $P < .001$), and depression ($t_{192}=5.60$, $P < .001$) decline and acceptance increases ($t_{188}=3.37$, $P < .001$).

FIGURE 2 displays the results of the nonlinear regression analyses. According to the models displayed in the top part of Figure 2, acceptance increases monotonically (uniformly in 1 direction), and is greater than each of the other grief indicators between 1 and 24 months postloss. Yearning increases be-

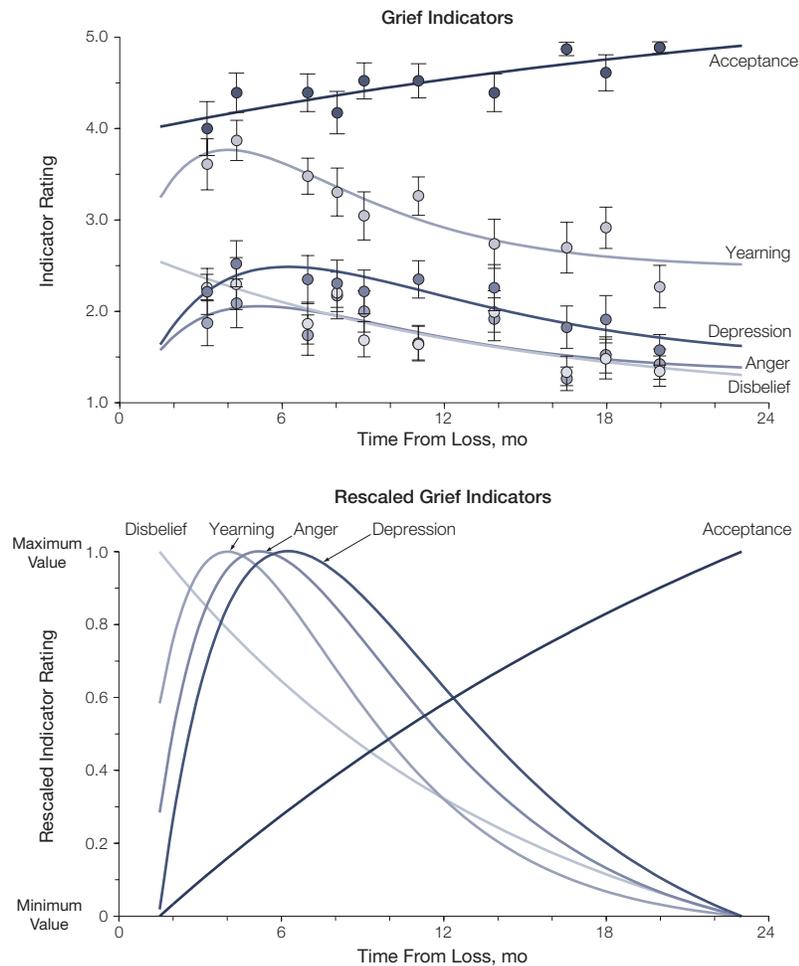
tween 1 and 4 months postloss, decreases between 4 and 24 months postloss, and is greater than disbelief, anger, and depression between 1 and 24 months postloss. Disbelief decreases monotonically between 1 and 24 months, is greater than anger between 1 and 6 months postloss, and is greater

than depression between 1 and 4 months postloss. Depression increases between 1 and 6 months postloss, decreases between 6 and 24 months postloss, is greater than disbelief postloss between 4 and 24 months, and is greater than anger between 1 and 24 months postloss. Anger increases between 1 and 5 months postloss and decreases between 5 and 24 months postloss. The close agreement between the models and the data in the top part of Figure 2 indicates that the phasic functional form specified in the regression models adequately represent the data.

The bottom part of Figure 2 displays the regression models following a rescaling procedure that constrains each grief indicator to fall within the interval of 0 through 1. In the top part of Figure 2, the relative locations in time of the peaks of the grief indicators are obscured because the curves are not side by side, thereby making comparisons difficult. Those comparisons are facilitated in the bottom part of Figure 2 by placing all of the indicators on the same scale. The 5 grief indicators achieved their respective maximum values in the sequence (disbelief, yearning, anger, depression, and acceptance) predicted by the stage theory of grief. Given that there are 120 possible sequences of these 5 indicators, the probability that the observed sequence is exactly the sequence predicted by the stage theory of grief by chance alone is $P = .008$.

Based on the results of the multivariable analyses of variance, the demographic factors of age, sex, race/ethnicity (white/nonwhite), education, and income and a terminal illness diagnosis reported within 6 months of the death were largely unrelated to within-person differences and temporal changes in the grief indicators throughout the study observation period (1-6, 6-12, and 12-24 months postloss). Education beyond high school was significantly associated with grief indicators 12 to 24 months postloss (Wilks $\lambda = 0.94$, $F_{5,199} = 2.52$; $P = .03$), due to its significant associations with lesser disbelief ($P = .05$) and depression ($P = .003$), and with greater acceptance ($P = .02$) dur-

Figure 2. Empirical and Rescaled Models for Grief Indicators as Functions of Time



Top, The curves represent grief indicators as functions of time based on nonlinear regression models estimated from the data (N=233). The data markers along the x-axis are determined by the mean value of time from loss for the individuals included in the 10 groups of observations (n=23 observations per group for 9 groups; n=26 observations for 1 group). The corresponding error bars indicate SDs. These 10 groups of observations were formed by ordering all of the observations used in the regression analyses (N=233) by increasing time postloss (observations that occurred at the same time postloss were randomly assigned a position in the ordered sequence of observations for that time), and then assigning the first 23 observations on this ordered list to the first group, the next 23 observations to the second group, etc. The regression curves are based on the analysis of individual data points (N=233) for which time from loss varies from 1.5 to 23 months. Bottom, The curves represent grief indicators as functions of time based on nonlinear regression models after the following rescaling procedure: $\psi(t) = [Y(t) - Y_{min}] / [Y_{max} - Y_{min}]$, where $Y(t)$ is the model value for the grief indicator at time t , and Y_{min} and Y_{max} are the minimum and maximum model values of the grief indicator, respectively, between 1 and 24 months postloss. The 5 grief indicators achieve their respective maximum values in the exact sequence (disbelief, yearning, anger, depression, and acceptance) predicted by the hypothesized theory of grief presented in Figure 1.

ing that period. Education beyond high school was also significantly associated with within-person differences in grief indicators 6 to 12 months postloss (Wilks $\lambda=0.95$, $F_{4,204}=2.51$; $P=.04$) and 12 to 24 months postloss (Wilks $\lambda=0.94$, $F_{4,200}=3.11$; $P=.02$) due to its significant associations with greater differences between acceptance and each of the other grief indicators during each of those periods. Widowhood (compared with loss of a parent, child, or sibling in this study group) was significantly associated with within-person differences in grief indicators 1 to 6 months postloss (Wilks $\lambda=0.93$, $F_{4,135}=2.51$; $P=.05$), due to its significant associations with a greater difference between yearning and depression ($P=.02$) and a lesser difference between acceptance and yearning ($P=.01$) during that period. Report of a terminal illness diagnosis within 6 months of the death was significantly associated with grief indicators 12 to 24 months postloss (Wilks $\lambda=0.93$, $F_{5,172}=2.62$; $P=.03$), due to its significant association with lower acceptance of the death ($P=.008$) during that period.

COMMENT

Results of this study identify normal patterns of grief processing over time following the natural death of a loved one. Given that the vast majority (94%) of deaths in the United States are the result of natural causes,¹⁵ the findings reflect how the average person psychologically processes a typical death of a close family member. Although the temporal course of the absolute levels of the 5 grief indicators did not follow that proposed by the stage theory of grief,¹⁴ when rescaled and examined for each indicator's peak, the data fit the hypothesized sequence exactly.

In terms of absolute frequency, and counter to the stage theory, disbelief was not the initial, dominant grief indicator. Acceptance was the most often endorsed item. Evidently, a high degree of acceptance, even in the initial month postloss, is the norm in the case of natural deaths. This contrasts with individu-

als who survived a family member's traumatic death and those who met criteria for complicated grief disorder,¹⁶ both groups of whom were found in preliminary analyses to have significantly lower levels of acceptance relative to the study sample. The lower frequency of acceptance of the death among participants who reported that the patient's terminal illness diagnosis was within 6 months compared with 6 months or longer prior to the death suggests that prognostic awareness may promote acceptance of the death. This result is consistent with findings reported elsewhere indicating that preparation for the death is associated with better psychological adjustment to the loss.²³ Future research that examines the effects of prospective rather than retrospective reports of prognostic awareness on the bereaved survivor's acceptance are needed before definitive conclusions can be drawn.

Yearning was the most frequent negative psychological response reported throughout the study observation period (1-6, 6-12, and 12-24 months postloss). Yearning was significantly more common than depressed mood despite the exclusive focus in the *Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition*²⁴ bereavement section on depressive symptomatology: "As part of their reaction to the loss, some grieving individuals present with symptoms characteristic of a Major Depressive Episode (e.g., feelings of sadness . . . The bereaved individual typically regards the depressed mood as 'normal,' . . . The diagnosis of Major Depressive Disorder is generally not given unless the symptoms are still present 2 months after the loss."^{24(p684)} Findings from this report demonstrate that yearning, not depressive mood, is the salient psychological response to natural death. They indicate that depressive mood in normally bereaved individuals tends to peak at approximately 6 months postloss and does not occur prior to 2 months postloss. Findings elsewhere^{25,26} indicate that chronically elevated levels of yearning are a cause for clinical concern. Taken together, these results imply a need for revision of the *Diagnostic and Statisti-*

cal Manual of Mental Disorders, Fourth Edition with respect to bereavement.

Models that tested for phasic episodes of each grief indicator revealed that disbelief about the death is highest initially. As disbelief declined from the first month postloss, yearning rose until 4 months postloss and then declined. Anger over the death was fully expressed at 5 months postloss. After anger declines, severity of depressive mood peaks at approximately 6 months postloss and thereafter diminishes in intensity through 24 months postloss. Acceptance increased steadily through the study observation period ending at 24 months postloss. Because of the minuscule probability that by chance alone these 5 grief indicators would achieve their respective maximum values in the precise hypothesized sequence,¹⁴ these results provide at least partial support for the stage theory of grief.

The results also offer a point of reference for distinguishing between normal and abnormal reactions to loss. Given that the negative grief indicators all peak within 6 months, those individuals who experience any of the indicators beyond 6 months postloss would appear to deviate from the normal response to loss. These findings also support the duration criterion of 6 months postloss for diagnosing complicated grief disorder,^{16,17,19,25} or what is now referred to as prolonged grief disorder.²⁶ Unlike the term *complicated*, which is defined as "difficult to analyze, understand, explain,"²⁷ prolonged grief disorder accurately describes a bereavement-specific mental disorder based on symptoms of grief that persist longer than is normally the case (ie, >6 months postloss based on the results of the present study). Furthermore, prolonged grief disorder permits the recognition of other psychiatric complications of bereavement, such as major depressive disorder and post-traumatic stress disorder. Additional analyses are needed to examine grief trajectories among those meeting criteria for prolonged grief disorder.

The mode of death may be an important factor that influences the course

of bereavement adjustment. In the present study, individuals bereaved by traumatic deaths (eg, vehicle crashes, suicide) were removed. Bereavement adjustment following deaths from traumatic causes may be more difficult to process and demonstrate higher degrees of disbelief and anger and lower levels of acceptance than those reported herein. A recent study found that those bereaved by traumatic vs natural deaths had greater difficulty in making sense of the loss.²⁸ Participants who reported that the family member or loved one's terminal illness was diagnosed within 6 months of the death did not differ significantly from other participants with respect to their level of grief indicators. However, the participants who reported the diagnosis within 6 months of the death did report acceptance of the death significantly less often. Subanalyses revealed that disbelief within 6 months postloss was also significantly higher in those for whom the patient's terminal illness diagnosis was reported to be within 6 months prior to death. Thus, the manner and forewarning of the death appear to affect the processing of grief. Studies are needed to explore the pattern of grief trajectories among the survivors bereaved by traumatic causes of death.

The results should be understood in light of several study limitations. Ideally, all individuals would have been assessed immediately after the loss rather than beginning at month 1 postloss. Due to respect for the initial mourning period and institutional review board concerns about harm to participants, we did not interview individuals within a month of the death. In addition, it would have been better to analyze data that reassessed individuals each month from 0 to 24 months postloss. However, no such data exist nor does the stage theory¹⁻⁵ specify in what month postloss each stage would predominate. And, although we acknowledge that other grief indicators might have been used, the various proxy measures (eg, stunned for disbelief, bitterness for anger, hopelessness for depression, quality of life scores for acceptance/recovery) all revealed re-

markably similar patterns to those presented herein. We chose to present the items that fit most closely with the stage indicators illustrated in the literature.¹⁴

It should be noted that participants were younger and less likely to be male compared with the study nonparticipants, and that the study sample may be more resilient than is typically the case given the low prevalence of depression (8.9% of the individuals had a Hamilton Rating Scale for Depression summary score of ≥ 17) compared with other samples of bereaved individuals.²⁹⁻³¹ Samples with more males or with older and more distressed individuals might reveal a different pattern of grief trajectories than those presented herein. Although the study sample does show some gross similarities with the US widowed population in terms of age, sex, and race/ethnicity, and with other comparable groups in terms of education and median household income, it is not directly representative of either the US widowed or US general population. Nevertheless, age, income, race/ethnicity, and sex were not significantly associated with the magnitude or course of grief and the representativeness of the Yale Bereavement Study would not appear to restrict the generalizability of the results to the US widowed population. Despite these limitations, given that the Yale Bereavement Study provides one of the most comprehensive longitudinal assessments of grief, these data are as adequate as any available for testing the stages of grief over time.

In conclusion, the results of this study provide what appears to be the first empirical examination of the stage theory of grief. They indicate that in the circumstance of natural death, the normal response involves primarily acceptance and yearning for the deceased. Each grief indicator appears to peak in the sequence proposed by the stage theory. Regardless of how the data are analyzed, all of the negative grief indicators are in decline by approximately 6 months postloss. The persistence of these negative emotions beyond 6

months is therefore likely to reflect a more difficult than average adjustment and suggests the need for further evaluation of the bereaved survivor and potential referral for treatment. The results provide an evidence base from which to educate clinicians (eg, primary and palliative care physicians, geriatricians, psychiatrists, oncologists, related hospital and hospice staff, bereavement counselors) and laypersons (eg, patients, family members, friends) about what to expect following the death of a family member or loved one.

Author Contributions: Drs Maciejewski and Prigerson had full access to all of the data in the study and take responsibility for the integrity of the data and the accuracy of the data analysis.

Study concept and design: Maciejewski, Prigerson.

Acquisition of data: Prigerson.

Analysis and interpretation of data: Maciejewski, Zhang, Block, Prigerson.

Drafting of the manuscript: Maciejewski, Zhang, Prigerson.

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Statistical analysis: Maciejewski, Zhang.

Obtained funding: Maciejewski, Prigerson.

Administrative, technical, or material support: Zhang, Prigerson.

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Financial Disclosures: None reported.

Funding/Support: This work was supported by grants MH56529 (awarded to Dr Prigerson) and MH63892 (awarded to Dr Prigerson) from the National Institute of Mental Health and grant CA106370 (awarded to Dr Prigerson) from the National Cancer Institute; and grant NS044316 (awarded to Dr Maciejewski) from the National Institute of Neurological Disorders and Stroke. Funding also was provided by the Center for Psycho-Oncology and Palliative Care Research, Dana-Farber Cancer Institute, and Women's Health Research at Yale University.

Role of the Sponsors: The National Institute of Mental Health, National Cancer Institute, National Institute of Neurological Disorders and Stroke, Center for Psycho-Oncology and Palliative Care Research, Dana-Farber Cancer Institute, and Women's Health Research at Yale University had no direct input into the design or conduct of the study; collection, management, analysis, or interpretation of the data; or preparation, review, or approval of the manuscript.

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I find that a great part of the information I have was acquired by looking up something and finding something else along the way.

—Franklin P. Adams (1881-1960)