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Complicated grief among individuals with major depression: Prevalence, comorbidity, and associated features

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Abstract

Background—Growing data suggest that complicated grief (CG) may be common in clinical care settings, but there are few prior reports about CG in outpatients presenting with primary mood disorders.

Methods—The present study examined rates of bereavement and threshold CG symptoms (defined as a score ≥ 25 on the Inventory of Complicated Grief scale) in 111 outpatients with major depressive disorder (MDD) and 142 healthy controls participating in a study of stress and depression. Clinical and demographic characteristics were also compared for bereaved individuals with CG (MDD + CG) to those without (MDD – CG). Participants completed structured diagnostic interviews as well as measures of CG, depression, anxiety, exposure to traumatic events, and perceived social support.

Results—Lifetime history of a significant loss did not differ for the MDD and control groups (79.3% vs. 76.1%), but bereaved participants with MDD had higher rates of threshold CG (25.0% vs. 2.8%). Amongst those with MDD, CG was associated with a higher prevalence of lifetime alcohol dependence, greater exposure to traumatic events, and lower perceived social support. Depressed women, but not men, with CG also had higher rates of panic disorder, social anxiety disorder, and posttraumatic stress disorder.

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Contributions

Dr. Simon designed the study and wrote the protocol in collaboration with Dr. Fava. Ms. Dryman, Ms. Marks, and Ms. Ghesquiere conducted literature searches, managed study databases, and computed preliminary analyses. Dr. Sung undertook the statistical analysis and wrote the first draft of the manuscript. Drs. Simon, Shear, and Fava contributed editorial suggestions and manuscript revisions. All authors have reviewed and approved the final manuscript.

Limitations—Our findings are limited by the lack of a clinician confirmatory assessment of CG diagnosis, absence of complete information about the nature and timing of the loss, and relatively narrow generalizability.

Conclusions—We found high rates of CG in a group of psychiatric outpatients with chronic MDD, suggesting that patients with depression should be routinely screened for CG.

Keywords

complicated grief; bereavement; traumatic grief; prolonged grief; major depression

Introduction

Complicated Grief (CG) is a form of prolonged, unrelenting grief that occurs in approximately 10–20% of bereaved individuals ([1]; [2]). Symptoms include intense yearning and longing for the deceased, difficulty accepting the death, frequent intrusive thoughts of the loved one, anger and/or bitterness regarding the death, recurring pangs of painful emotions, and avoidance related to reminders of the loss ([3]; [4]; [5]). CG has been described as an inordinate prolongation of acute grief due to complicating cognitive, behavioral, and social/environmental factors ([6]; [7]). The syndrome results in significant impairment in quality of life ([8]; [9]; [10]) and can be distinguished from other stress-related conditions such as major depression and posttraumatic stress disorder ([11]; [12]; [13]; [8]; [9]). Individuals with CG may be at increased risk for chronic medical conditions, substance abuse, and suicidality ([14]; [15]; [16]; [17]).

Although not yet included in the diagnostic nomenclature, criteria sets have been proposed for DSM5 (e.g., [18]) and data suggest that CG symptoms can be reliably assessed using self-report and clinician-administered measures. The most widely used instrument, the Inventory of Complicated Grief (ICG; [19]), is a 19-item self-report questionnaire assessing severity of putative CG symptoms. An early validation study found that a score of greater than 25 (defined by the top quartile of scores) was associated with significant functional impairment among 97 conjugally bereaved older adults. Treatment studies have used a more conservative cut score (≥ 30) to ensure caseness ([20]; [21]; [22]).

A growing body of evidence suggests that CG is common in samples of treatment seeking psychiatric outpatients. Studies in clinical settings in three different countries revealed about a third of psychiatric outpatients may have CG (33%, n=729 psychiatric outpatients in Vancouver, [23] 32%, n=149 individuals seeking crisis counseling subsequent to the September 11, 2001 attacks in New York City [8], and 34%, n=151 psychiatric outpatients in Pakistan [24]). Extant data suggests that CG frequently co-occurs with other internalizing disorders ([10]; [25]), but less is known regarding the prevalence and correlates of CG in patients presenting with primary mood disorders.

Two studies have used the ICG to examine the prevalence of CG in patients with mood disorders. A U.S. study of 120 treatment-seeking outpatients with Bipolar Disorder found that one-fourth screened positive for CG (ICG ≥ 25) and this was associated with higher rates of alcohol abuse, suicidality, and panic disorder ([10]). A German study of 73 inpatients with unipolar depression found an 18% rate of CG using a lower cut score (ICG ≥ 18) [26]. Those who met this criterion had greater severity of posttraumatic stress and depressive symptoms. The present study examines rates of CG as measured by a score of 25 or greater on the ICG in outpatients with MDD relative to healthy controls, and compares clinical and demographic characteristics of individuals with primary MDD comorbid with CG to those presenting with MDD without CG. It improves upon prior studies by including a non-mood disordered comparison group.

Methods

Participants and Procedures

Questionnaire and structured interview data were collected as part of a larger study on chronic depression and stress. Depressed patients (n=111) and non-depressed controls (n=142) were recruited through professional referral, self-referral, or local media advertising. Inclusion criteria for both groups included men and women 18–70 years of age, and the absence of psychiatric medication and serious medical conditions. All participants in the depression group met criteria for a current primary DSM-IV diagnosis of unipolar MDD, with the onset of the first depressive episode at least 5 years prior. Exclusions included lifetime history of schizophrenia, mental retardation, organic medical disorders, bipolar disorder, current eating disorders, and substance use disorders within the past 12 months. Control participants could have no current or lifetime DSM-IV Axis 1 disorders, with the exception of specific phobia and a past history of alcohol or substance use disorders in remission for at least 12 months. The Institutional Review Board approved these procedures and all participants provided written informed consent.

Measures

Psychiatric diagnoses were determined by clinical interviewers certified in administering the Structured Clinical Interview for DSM-IV ([27]). The Loss History Form ([20]) was used to determine the presence of lifetime bereavement of significant others. For those who reported a significant loss, CG symptom severity was assessed using the 19-item Inventory of Complicated Grief (ICG; [19]), a well validated measure ($\alpha = 0.92 – 0.94$; test-retest reliability = 0.80; [19]). Threshold level of CG symptoms was defined as a score ≥ 25 ([16]; [25]).

Severity of current depressive and anxiety symptoms were rated by clinicians with the Montgomery Asberg Depression Rating Scale (MADRS; [28]) and the Hamilton Anxiety Rating Scale (HAM-A; [29]). The Traumatic Events Questionnaire (TEQ; [30]) assessed exposure to traumatic life events, and the Multidimensional Scale of Perceived Social Support (MPSS; [31]) assessed self-perceptions regarding availability and quality of emotional support. Participants also completed a self-report demographics questionnaire.

Statistical Analyses

Group differences on categorical variables were compared using chi-square tests. Independent samples two-sided *t*-tests compared means for continuous variables. Statistical significance was set at $p < 0.05$. All analyses were computed using SPSS for Windows version 19.0 ([32]).

Results

MDD versus Control Comparisons

Examination of the entire sample (n = 253) indicated that rates of reported lifetime history of a significant loss were high and did not differ for the control (76.1 %) and MDD (79.3%) groups ($\chi^2 = 1.40$, $p = 0.236$). Table 1 presents demographic characteristics time-since-loss, and comorbidity data for bereaved participants in the MDD and control groups. Amongst bereaved participants (n = 196), those with MDD had substantially higher rates of threshold CG symptoms compared to controls (25.0% vs. 2.8%). Mean number of years since the death (available for a subset of 26 patients and 43 controls) was more than a decade and did not differ between the two groups (16.0 years vs. 13.6 years). Demographic comparisons yielded no significant differences for age, gender, race, or ethnicity. However, control participants were more likely to be married or living with a partner and to have completed at

least partial college. Bereaved individuals in the MDD group were more likely to meet criteria for at least one current or lifetime psychiatric disorder. Specifically, MDD participants had significantly higher rates of current and lifetime Specific Phobia, as well as higher rates of lifetime Alcohol Abuse, Alcohol Dependence, and Substance Dependence. These last findings were as expected since control participants were selected based on the absence of most DSM-IV Axis 1 co-morbid conditions.

MDD + CG versus MDD - CG Comparisons

Table 2 presents demographic characteristics, time-since loss, comorbidity, symptom severity, trauma exposure, and perceived social support data for bereaved MDD participants with and without threshold CG symptoms on the ICG. No differences emerged for age, race, ethnicity, marital status, or educational background. However, those in the MDD + CG group were more likely to be male compared to the MDD – CG group. History of lifetime Alcohol Dependence was considerably higher in the MDD + CG group compared to the MDD – CG group), but there were no statistically significant differences in rates of other Axis 1 disorders (see Table 2). The MDD + CG group had higher ICG scores, greater exposure to traumatic life events (TEQ total score) and lower levels of social support (MPSS total score).

Comparisons by Gender

To further explore the gender differences that emerged in our initial analyses, we examined differences in comorbidity and symptom scales separately for bereaved men and women with MDD with or without CG (n=88). Amongst bereaved men with MDD (n=38), 36.8% met threshold criteria for CG (n=14) and those with CG had higher rates of lifetime Alcohol Dependence compared to men with MDD alone (42.9% vs 12.5%, $\chi^2 = 4.51$, $p = 0.034$). No significant differences were found for bereaved men with and without CG on continuous measures of symptom severity, trauma exposure, or perceived social support. For bereaved women with MDD (n=50), 16.0% met threshold criteria for CG (n=8). Women with CG + MDD had higher rates of current Panic Disorder (25.0% vs. 2.4%, $\chi^2 = 6.10$, $p = 0.014$), current (50.0% vs. 16.7%, $\chi^2 = 4.35$, $p = 0.037$) and lifetime Social Anxiety Disorder (50.0% vs 16.7%, $\chi^2 = 4.35$, $p = 0.037$), current (37.5% vs. 7.1%, $\chi^2 = 5.86$, $p = 0.015$) and lifetime Posttraumatic Stress Disorder (50.0% vs. 14.3%, $\chi^2 = 5.36$, $p = 0.021$), and lifetime Alcohol Dependence (37.5% vs. 4.8%, $\chi^2 = 8.00$, $p = 0.005$) compared to women with MDD alone. Women in the MDD + CG group also scored significantly higher on exposure to traumatic events (TEQ total score M(SD) = 5.63(2.67) vs. 2.61(2.31); t(df) = 2.20(30), p = 0.002). No significant differences were found for continuous measures of symptom severity or perceived social support.

Discussion

This study examined rates of bereavement and threshold CG symptoms in a group of patients with chronic MDD and healthy controls who participated in a larger study on stress and depression. Although rates of bereavement were similar for these two groups, rates of CG were nearly ten-fold higher among individuals with current MDD. Further, depressed patients with CG had significantly higher rates of lifetime Alcohol Dependence, greater exposure to traumatic life events, and lower levels of perceived social support, relative to depressed patients without CG.

Of note, we found a higher rate of CG among depressed men than depressed women whereas most prior studies of CG have found much higher rates in women ([33]; [10]; [25]; [6]). Analyses by gender indicated that depressed women who met threshold criteria for CG had higher rates of panic disorder, social anxiety disorder, and posttraumatic stress disorder,

as well as alcohol dependence, compared to those without CG, whereas depressed men who met threshold criteria for CG only had higher rates of alcohol dependence. Studies showing increased rates of anxiety and traumatic stress disorders in CG patients have reported on samples that were predominantly women ([10]; [25]) and few have examined gender differences. Studies of panic disorder suggest that a significant loss may trigger its onset ([34]; [35]; [36]). It is unclear whether co-occurring disorders are a cause or consequence of CG. Additional research examining the role of gender in CG treatment seeking and primary symptom presentation is needed to better understand these relationships.

Our study is limited by the lack of a clinician's formal diagnostic assessment for CG; thus, amongst our sample that presented with depression, we could not determine whether CG, if properly identified, would have been considered the primary clinical problem. A further limitation is the absence of complete information about the nature and timing of the loss for the entire sample. Mean time since loss for the subset was similar to that found in two other reports of outpatients with CG ([10]; [23]), but considerably longer than in most CG treatment studies ([10]; [22]; [25]; [37]). This difference may account for the marked reversal in gender distribution in our study. It is notable, though that our results indicate that CG may persist for decades if not adequately treated. Finally, we analyzed data from a relatively specific subgroup of depressed individuals (i.e., not taking psychiatric medication, no serious medical conditions, episode onset ≥ 5 years prior). These results may not generalize to other samples of depressed individuals.

Overall, our findings confirm prior reports that CG occurs at elevated rates among people with MDD ([26]) and are in line with other studies showing that individuals with CG have low levels of perceived social support ([38]), are at increased risk for problems with alcohol ([15]), and report high rates of depressed mood, anxiety, and traumatic stress ([26]; [10]). The presence of previously undetected CG in this group is potentially clinically significant since CG symptoms may not respond fully to interventions for depression ([37]; [39]; [40]; [22]). Individuals with CG do, however, respond well to interventions specifically targeting prolonged grief symptoms ([22]), and early data suggest that combining SSRI's with psychotherapy ([41]) may be helpful in increasing adherence to psychotherapeutic interventions. Without routine screening for loss and the presence of CG among depressed patients, those with CG may be inadequately treated and subsequently classified as having treatment resistant depression. Consistent with a recommendation we have made previously ([5]), our results suggest that routine screening for CG by health care professionals could improve proper identification and treatment outcomes in depressed individuals.

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Conflict of Interest

Dr. Simon has research grants from the American Foundation for Suicide Prevention, Astra Zeneca, Cephalon, Forest Laboratories, NARSAD, NIMH, Glaxo SmithKline, Janssen, Lilly, Pfizer, Sepracor, and UCB-Pharma. Dr. Simon has had speaking, CME, and consulting engagements with the American Foundation for Suicide Prevention, Anxiety

Disorders Association of America, Astra Zeneca, Department of Defense, MGH Psychiatry Academy, and Pfizer. Dr. Fava's disclosures are listed below. All other authors declare that they have no conflicts of interest.

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Table 1

Characteristics of bereaved MDD and control participants (n=196)

	Group		Analyses		
	Control (n=108)	**MDD (n=88)**	**Test Statistic**	***df***	***p***
Demographics					
Age (years), mean (SD)	44.06 (13.13)	44.73 (12.00)	$t = 0.37$	194	0.716
Gender, % female (n)	48.1 (52)	56.8 (50)	$\chi^2 = 1.46$	1	0.227
Race, % Caucasian (n)	70.4(76)	77.9 (67)	$\chi^2 = 7.42$	1	0.115
Ethnicity, % Hispanic/Latino (n)	9.3 (10)	3.5 (3)	$\chi^2 = 2.55$	1	0.110
Marital Status, % Married/Living with partner (n)	37.0 (40)	17.0 (15)	$\chi^2 = 9.60$	1	**0.002**
Education, % Partial college or above (n)	92.6 (100)	78.4 (69)	$\chi^2 = 8.21$	1	**0.004**
Time since loss (years), mean (SD)	13.58 (11.89)	15.96 (13.25)	$t = -0.77$	67	0.187
Comorbidity, % (n)					
Current Complicated Grief (ICG ≥ 25)	2.8 (3)	25.0 (22)	$\chi^2 = 21.98$	1	**<0.001**
At least 1 comorbid disorder					
Current	1.9 (2)	55.2 (48)	$\chi^2 = 71.85$	1	**<0.001**
Lifetime	9.3 (10)	56.3 (49)	$\chi^2 = 50.76$	1	**<0.001**
Dysthymic Disorder					
Current	N/A	5.8 (5)	--	--	--
Panic Disorder					
Current	N/A	12.6 (11)	--	--	--
Lifetime	N/A	14.9 (13)	--	--	--
Agoraphobia					
Current	N/A	9.3 (8)	--	--	--
Lifetime	N/A	10.5 (9)	--	--	--
Social Anxiety Disorder					
Current	N/A	27.6 (24)	--	--	--
Lifetime	N/A	28.7 (25)	--	--	--
Specific Phobia					

	Group		Analyses		
	Control (n=108)	**MDD (n=88)**	**Test Statistic**	***df***	***p***
Current	1.9 (2)	8.0 (7)	$\chi^2 = 4.20$	1	**0.040**
Lifetime	1.9 (2)	8.0 (7)	$\chi^2 = 4.20$	1	**0.040**
Obsessive Compulsive Disorder					
Current	N/A	4.6 (4)	--	--	--
Lifetime	N/A	5.7 (6)	--	--	--
Posttraumatic Stress Disorder					
Current	N/A	11.6 (10)	--	--	--
Lifetime	N/A	19.8 (17)	--	--	--
Generalized Anxiety Disorder					
Current	N/A	21.8 (19)	--	--	--
Alcohol Abuse					
Lifetime	5.6 (6)	14.8 (13)	$\chi^2 = 4.61$	1	**0.032**
Alcohol Dependence					
Lifetime	2.8 (3)	15.9 (14)	$\chi^2 = 10.55$	1	**0.001**
Substance Abuse					
Lifetime	2.8 (3)	9.1 (8)	$\chi^2 = 3.59$	1	0.058
Substance Dependence					
Lifetime	1.9 (2)	12.5 (11)	$\chi^2 = 8.88$	1	**0.003**

Note: Time since loss was available for a subset of total sample (n = 69); Current, but not lifetime, diagnoses were assessed for Generalized Anxiety Disorder and Dysthymic Disorder; N/A = Exclusionary; Disorders that were study exclusions for both groups are not listed.

Table 2

Characteristics of bereaved MDD participants (n = 88) with CG and without CG

	Group		Analyses		
	MDD + CG (ICG Score≥25) (n=22)	**MDD – CG (ICG Score<25) (n=66)**	**Test Statistic**	***df***	***p***
Demographics					
Age (years), mean (SD)	47.72 (11.70)	43.73 (12.03)	$t = 1.36$	89	0.177
Gender, % female (n)	36.4 (8)	63.6 (42)	$\chi^2 = 5.00$	1	**0.025**
Race, % Caucasian (n)	71.4 (15)	78.8 (52)	$\chi^2 = 0.68$	1	0.410
Ethnicity, % Hispanic/Latino (n)	4.5 (1)	3.1 (2)	$\chi^2 = 0.10$	1	0.754
Marital Status, % Married/Living with partner (n)	18.2 (4)	16.7 (11)	$\chi^2 = 2.16$	1	0.870
Education, % Partial college or above (n)	72.7 (16)	80.3 (53)	$\chi^2 = 0.56$	1	0.455
Time since loss (years), mean (SD)	13.85 (16.01)	16.45 (12.92)	$t = 0.46$	24	0.653
Comorbidity, % (n)					
At least 1 comorbid disorder					
Current	66.7 (14)	51.5 (34)	$\chi^2 = 1.48$	1	0.224
Lifetime	76.2 (16)	54.5 (36)	$\chi^2 = 2.57$	1	0.109
Dysthymic Disorder					
Current	4.8 (1)	6.2 (4)	$\chi^2 = 0.06$	1	0.813
Panic Disorder					
Current	19.0 (4)	10.6 (7)	$\chi^2 = 1.03$	1	0.311
Lifetime	19.0 (4)	13.6 (9)	$\chi^2 = 0.37$	1	0.545
Agoraphobia					
Current	19.0 (4)	6.2 (4)	$\chi^2 = 3.12$	1	0.077
Lifetime	19.0 (4)	7.7 (5)	$\chi^2 = 2.18$	1	0.139
Social Anxiety Disorder					
Current	38.1 (8)	24.2 (16)	$\chi^2 = 1.53$	1	0.216
Lifetime	38.1 (8)	25.8 (17)	$\chi^2 = 1.18$	1	0.277
Specific Phobia					

	Group		Analyses		
	MDD + CG (ICG Score≥25) (n=22)	**MDD – CG (ICG Score<25) (n=66)**	**Test Statistic**	***df***	***p***
Current	9.5 (2)	7.6 (5)	$\chi^2 = 0.08$	1	0.775
Lifetime	9.5 (2)	7.6 (5)	$\chi^2 = 0.08$	1	0.775
Obsessive Compulsive Disorder					
Current	9.5 (2)	3.0 (2)	$\chi^2 = 1.53$	1	0.216
Lifetime	9.5 (2)	4.5 (3)	$\chi^2 = 0.73$	1	0.393
Posttraumatic Stress Disorder					
Current	14.3 (3)	10.8 (7)	$\chi^2 = 0.19$	1	0.662
Lifetime	28.6 (6)	16.9 (11)	$\chi^2 = 1.36$	1	0.244
Generalized Anxiety Disorder					
Current	23.8 (5)	21.2 (14)	$\chi^2 = 0.06$	1	0.802
Alcohol Abuse					
Lifetime	31.8 (7)	13.6 (9)	$\chi^2 = 3.64$	1	0.056
Alcohol Dependence					
Lifetime	40.9 (9)	7.6 (5)	$\chi^2 = 13.70$	1	**>0.001**
Substance Abuse					
Lifetime	9.1 (2)	9.1 (6)	$\chi^2 = 0.00$	1	1.000
Substance Dependence					
Lifetime	18.2 (4)	10.6 (7)	$\chi^2 = 0.87$	1	0.352
Symptom Severity, Social Support, and Life Events					
ICG, mean (SD)	38.09 (9.02)	11.92 (7.54)	$t = 1.36$	86	**>0.001**
MADRS, mean (SD)	29.67 (5.69)	28.74 (6.41)	$t = 0.59$	85	0.556
HAM-A, mean (SD)	16.81 (5.46)	16.03 (6.50)	$t = 0.50$	85	0.621
TEQ, mean (SD)	4.40 (2.62)	2.94 (2.49)	$t = 2.20$	30	**0.026**
MPSS, mean (SD)	41.64 (19.38)	51.23 (18.75)	$t = -2.06$	85	**0.043**

Note: Time since loss was available for a subset of the MDD sample (n = 26); Current, but not lifetime, diagnoses were assessed for Generalized Anxiety Disorder and Dysthymic Disorder; Disorders that were study exclusions are not listed.

Abbreviations: ICG = Inventory of Complicated Grief; MADRS = Montgomery Asberg Depression Rating Scale; HAM-A = Hamilton Anxiety Rating Scale; TEQ = Traumatic Events Questionnaire; MPSS = Multidimensional Scale of Perceived Social Support