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The prevalence and correlates of psychiatric comorbidity in individuals with complicated grief

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Abstract

Background: Complicated grief (CG), variously called *pathological or traumatic grief*, is a debilitating syndrome that is not currently included in the *Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, (DSM-IV)* nomenclature. One issue that remains under debate is whether this condition can be clearly distinguished from other psychiatric disorders, such as major depression and posttraumatic stress disorder, with which CG frequently coexists.

Methods: Using a structured clinical interview for CG and the Structured Clinical Interview for *DSM-IV*, trained experienced raters conducted careful diagnostic assessments of individuals seeking treatment of bereavement-related distress. All study participants met criteria for a current CG syndrome. Liberal criteria were used to diagnose *DSM-IV* disorders, making no attempt to decide if symptoms could be explained by grief.

Results: Of 206 who met the criteria for CG, 25% had no evidence of a current *DSM-IV* Axis I disorder. When present, psychiatric comorbidity was associated with significantly greater severity of grief; however, even after adjustment for the presence of comorbidity, severity of CG symptoms was associated with greater work and social impairment.

Limitations: It is likely that our study underestimated the rate of CG without comorbidity because fewer *DSM* diagnoses would have been made if a judgment about grief had been taken into consideration.

Conclusions: Our data provide further support for the need to identify CG as a psychiatric disorder.

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1. Introduction

The syndrome of complicated grief (CG), variously called *pathological or traumatic grief*, is chronic and debilitating, results in substantial distress and impairment [1–3], worsens quality of life [4], and has been linked to excess medical morbidity [5,6] and suicidality [5,7–9]. As currently defined, CG consists of symptoms at least 6 months after the loss of a loved one that include a sense of disbelief regarding the death; persistent intense longing, yearning, and preoccupation with the deceased; recurrent intrusive images of the dying person; and avoidance of painful reminders of the death [10–14]. Individuals with the syndrome of CG often report anger and bitterness related to the death, feel estranged from other close friends and relatives, and cannot find satisfaction in ongoing life [1,15,16]. Complicated grief has been distinguished from other co-occurring psychiatric

disorders such as major depressive disorder (MDD) and posttraumatic stress disorder (PTSD) [2,17–20]. For example, CG symptoms have been shown to contribute to impairment beyond that associated with PTSD and major depression [2–4].

Nonetheless, there is still controversy regarding the distinctiveness of the syndrome [21]. There are limited data available examining the co-occurrence of CG disorder and other *Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, (DSM-IV)* conditions in clinical populations with CG. In addition, little has been done to evaluate the impact of psychiatric comorbidity on the course or severity of CG. In our pilot study of psychotherapy for 23 individuals with CG [22], current MDD was present in 52%, PTSD in 30%, panic disorder in 26%; 48% had more than one comorbid psychiatric disorder. Coexisting psychiatric disorders were associated with greater grief severity [17].

The current article reports secondary analyses conducted to examine both the question of coexisting psychiatric disorders and CG symptoms together with the impact of current psychiatric comorbidity in 206 individuals recruited for participation in a randomized controlled treatment study [1]. We hypothesized that (1) a substantial subgroup of individuals with CG would have no *DSM-IV* comorbidity, (2) grief severity would be linked to greater work and social impairment after controlling for the presence of psychiatric comorbidity, (3) individuals with psychiatric comorbidity would have more severe CG symptoms, and (4) comorbid disorders would commonly be preexisting, supporting the possibility that mood and anxiety disorders may elevate risk for CG.

2. Methods

Data reported here were from participants in a randomized controlled treatment trial comparing traumatic grief therapy and interpersonal psychotherapy [1]. Briefly, bereaved individuals recruited through professional referral, self-referral, and media announcements were assessed with the Inventory of Complicated Grief (ICG) [14]. Complicated grief was diagnosed for participants with a score ≥ 30 on the ICG at least 6 months after the death of a loved one and with endorsement of grief as their primary problem. The ICG score is the sum of ratings for 19 questions that assess the frequency (from 0 = “never” to 4 = “always”; total scale range 0–76) of a range of symptoms that may be categorized as separation distress (eg, recurrent painful emotions about the loss, yearning and longing for the deceased, preoccupation with thoughts of the loved one) and traumatic distress (eg, sense of disbelief regarding the death; anger and bitterness; distressing, intrusive thoughts related to the death; and pronounced avoidance of reminders of the painful loss) [1,14]. The *DSM-IV* Axis I diagnoses were determined using the Structured Clinical Interview for *DSM-IV* (SCID IV) [23] administered by master’s- or doctoral-level trained and

certified experienced clinical raters. To fully characterize current symptoms and disorders without risking errors of omission due to opinions about causality, raters followed the convention of assigning symptoms to *DSM-IV* categories, even if it seemed that they could be explained by grief. When comorbidity was present, the patient, clinical evaluators, and treating therapists agreed in all cases that CG symptoms were the primary clinical problem; if another condition was primary, the patient was not included in the study. All participants gave informed consent, and the Institutional Review Board at the University of Pittsburgh Medical Center approved the study.

For the present report, we examined all patients meeting the study criteria for CG who completed baseline assessments. Assessments included diagnostic evaluation with the SCID-IV, ICG, 25-item Hamilton Rating Scale for Depression [24], Hamilton Rating Scale for Anxiety [25], Impact of Events Scale [26], Pittsburgh Sleep Quality Index [27], and Work and Social Adjustment Scale (WSAS) [28]. Age of onset for *DSM-IV* disorders was determined from SCID modules and compared with the self-reported time of the CG-related death to determine order of onset of the earliest comorbid Axis I disorder and the loss.

2.1. Statistical methods

Binary proportions were tested with the Fisher exact test; *t* tests were used for continuous data. Linear regression was used to examine the association of CG severity (ICG score) with work and social impairment (WSAS score) beyond the contribution of psychiatric comorbidity. We used a *P* value $\leq .05$ for statistical significance.

3. Results

3.1. Characteristics of participants

Of 417 patients who received an initial brief prescreening assessment, 217 patients were evaluated; 206 met the study criteria for CG and were included in analyses. The mean (SD) age of the sample was 46.5 (12.4) years, and 81.6% ($n = 168$) were women. They were 70.1% white, 27% African American, and 2.9% other races ($n = 2$ missing). The mean ICG score ($n = 206$) was 47.1 (± 9.6), and the mean time since the CG-related death ($n = 205$) was 5.0 ± 7.5 years (range 0.42–51.7 years, median 2.4 years; 1 patient was included with a duration of only 5 months).

3.2. Presence of psychiatric comorbidity

After assigning symptoms to *DSM-IV* categories with no attempt to decide if these symptoms were better explained by grief, we observed that 51 participants (25%) had no current *DSM-IV* Axis I disorder and 16% had no lifetime disorder (Table 1). With respect to specific comorbid disorders, 45% (of the entire sample) did not meet the criteria for current MDD and 28% were free of lifetime

Table 1
Psychiatric comorbidity in treatment-seeking individuals with CG (n = 206)

Comorbid disorder ^a	Current % (n)	Lifetime % (n)
MDD	55.34 (114)	71.84 (148)
PTSD	48.54 (100)	52.91 (109)
Panic disorder	13.59 (28)	21.84 (45)
Agoraphobia without panic	0.97 (2)	0.97 (2)
GAD	18.45 (38)	N/A
Social anxiety disorder	7.77 (16)	13.11 (27)
Obsessive-compulsive disorder	6.31 (13)	6.80 (14)
Any anxiety disorder ^b	62.62 (129)	69.42 (143)
Any comorbid disorder	75.24 (155)	84.47 (174)
1 comorbid disorder	24.76 (51)	21.36 (44)
2 comorbid disorders	30.58 (63)	33.01 (68)
3 comorbid disorders	13.59 (28)	18.45 (38)
≥ 4 comorbid disorders	6.31 (13)	11.65 (24)
No comorbid disorder	24.76 (51)	15.53 (32)

^a Bipolar disorder was an exclusion criterion for randomization in the treatment study, but was diagnosed in 10 individuals at screening assessment (6 bipolar I, 4 bipolar II).

^b The presence of any anxiety disorder was defined as at least one DSM-IV diagnosis of panic disorder with or without agoraphobia, agoraphobia without panic, obsessive-compulsive disorder, GAD, PTSD, or social anxiety disorder.

MDD. Similarly, 51% failed to meet the criteria for current PTSD and 47% for lifetime PTSD (Fig. 1). Both conditions share symptoms with CG. Other conditions that were diagnosed in our grief sample include generalized anxiety disorder (GAD) and panic with or without agoraphobia (Table 1). Although analyses were limited by the high proportion of women and white participants, there were no sex or race differences in comorbidity rates. Patients with at least one current comorbid disorder were younger (45.1 [11.5] years) compared with those without comorbidity (50.6 [14.1] years: $t(df) = 2.8(204)$, $P < .01$). In addition, those with psychiatric comorbidity tended to present for treatment sooner after the loss at the level of a statistical trend (mean 4.4 [6.2] years vs 6.6 [10.3] years: $t(df) = 1.89(203)$, $P = .06$).

Complicated grief patients with psychiatric comorbidity were more severely ill and more impaired than those without comorbidity (Table 2). This was also the case for those with at least one anxiety disorder compared with those with no anxiety disorder (Table 2). To examine whether the severity of CG contributes to work and social impairment above and beyond the presence of current comorbid anxiety disorders and/or MDD, we examined the prediction of WSAS score by ICG score in a linear regression including covariates for MDD and anxiety disorders. The ICG scores remained significantly associated with greater work and social impairment ($B = 0.43$, $t = 5.57$, $P < .001$) after adjustment for current depression and anxiety comorbidity and also after adjustment for lifetime comorbidity ($B = 0.52$, $t = 6.74$, $P < .001$).

Most individuals with lifetime psychiatric comorbidity (75%, 128 of 175) reported an age of onset for at least one psychiatric disorder *before* the reported CG-associated loss,

with the earliest disorder onset at a mean of 16.7 ± 14.3 (range 0.2–65.6, 95% confidence interval 14.2–19.2) years before the loss. Of note, more than 80% of those with MDD (87%, 127 of 146) and PTSD (82.2%, 88 of 107) reported onset of the *DSM* disorder before bereavement.

4. Discussion

We found that one fourth of help-seeking CG patients had no current *DSM-IV* Axis I comorbidity, despite diagnosing *DSM* conditions without judging if they were better explained by grief. High rates of psychiatric comorbidity are common in treatment-seeking populations, and our comorbidity rates are similar to those for mood and anxiety disorders in the recent replication of the National Comorbidity Study [29,30]. Thus, the 25% of our CG sample without such comorbidity represents psychopathology distinct from other mood and anxiety disorders.

As predicted, study participants with a comorbid mood or anxiety disorder were more severely ill; with greater functional impairment, sleep disturbance, depression, trauma, and general anxiety symptoms; and with higher levels of grief. Nonetheless, CG severity in and of itself was linearly associated with greater work and social impairment after controlling for the presence of psychiatric comorbidity, thus providing additional support for its independent contribution to impairment. Also of interest, age of onset of psychiatric comorbidity occurred before bereavement in most of the patients, suggesting that preexisting psychiatric illness may be a risk factor for CG [30]. This finding is similar to data suggesting that individuals with a history of mood or anxiety disorders are at increased risk for the development of PTSD after a traumatic event [31] and is consistent with the notion of CG as a stress response disorder

Fig. 1. Current PTSD and MDD comorbidity in treatment-seeking individuals with CG disorder (n = 206).

Table 2

Impact of current psychiatric comorbidity on current symptom severity in CG

Current comorbidity	ICG (n = 206)	HAM-D 25 (n = 187)	IES (n = 170)	HAM-A (n = 182)	PSQI (n = 165)	WSAS (n = 164)
MDD (n = 114)	49.5 ± 9.6 (114)***	30.8 ± 8.4 (106)***	44.3 ± 14.9 (98)***	24.3 ± 7.1 (104)***	10.7 ± 4.2 (94)***	26.7 ± 9.3 (95)***
Any anxiety disorder (n = 129)	48.5 ± 9.7 (129)**	27.6 ± 9.9 (122)**	42.4 ± 15.0 (111)	22.6 ± 7.9 (119)***	10.2 ± 4.2 (107)	24.2 ± 10.2 (106) **
Any comorbid disorder (n = 155)	48.1 ± 9.6 (155)**	27.8 ± 9.6 (145)***	42.7 ± 14.9 (131)**	22.5 ± 7.6 (142)***	10.2 ± 4.1 (127)**	24.7 ± 10.0 (126) ***
No comorbid disorder (n = 51)	44.1 ± 8.8 (51)	19.7 ± 8.3 (42)	34.7 ± 14.1 (39)	16.0 ± 7.8 (40)	8.2 ± 3.3 (38)	15.9 ± 9.6 (38)

P values are for *t* tests comparing the particular disorder group to absence of that disorder classification (ie, MDD vs no MDD, at least one anxiety disorder vs no anxiety disorder, at least one comorbid disorder vs no comorbid disorder). Mean values for the absence of any comorbid psychiatric disorder are also included for reference. Sample size given for each measure to account for missing data (full sample *n* = 206).

ICG indicates Inventory of Complicated Grief; HAM-D 25, 25-item Hamilton Depression Scale; IES, Impact of Events Scale; HAM-A, Hamilton Rating Scale for Anxiety; PSQI, Pittsburgh Sleep Quality Index.

P* < .05, *P* < .01, ****P* < .001.

[10,16]. Of note, we have also reported high rates of CG comorbidity in individuals with bipolar disorder: 24% of a group of patients with bipolar disorder with a lifetime loss had CG; and its presence was associated with additional psychiatric comorbidity, greater bipolar disorder severity and functional impairment, and lifetime suicide attempts [30]. It should be noted that another possible explanation for our findings is that CG shares underlying risk factors with mood and anxiety disorders; our current data, however, do not allow examination of this hypothesis.

Among the limitations of our study is that data are derived from treatment-seeking people who probably have greater severity and higher rates of comorbidity than a community-based sample. Furthermore, our cross-sectional data do not allow determination of causality. In addition, we did not assess Axis II disorders and thus cannot comment on the presence or absence of personality disorders in CG. Finally, it is possible that individuals with substance use disorders and CG may differ: because current substance use disorders were exclusionary in the parent study, we could not examine this question. Despite these limitations, our data demonstrate that CG occurs without Axis I psychiatric comorbidity in approximately one fourth of treatment-seeking persons and that CG contributes to impairment even after controlling for the effects of coexisting psychiatric disorders. Targeted treatment of CG symptoms has been associated with reduction in depression and anxiety [1], although prior work has shown that the reverse is not the case [22,32]. Nevertheless, comorbidity is common, frequently begins before the loss, and is associated with greater severity of grief intensity. Our results provide support for the distinctiveness and associated impairment of CG. Our findings also suggest that comorbid disorders may comprise a risk factor for CG symptoms.

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