Identifying Prolonged Grief Reactions in Children: Dimensional and Diagnostic Approaches

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Objective: Children with prolonged grief reactions (PGR) have been found to be at increased risk for depression and functional impairment. Identifying and diagnosing PGR in children is challenging, as there are no available dimensional measures with established thresholds and no diagnostic criteria in the *DSM-IV*. We examine thresholds for the Inventory for Complicated Grief–Revised for Children (ICG-RC) and compare this dimensional approach to the proposed *DSM-5* criteria for Persistent Complex Bereavement–Related Disorder. We also identify a screening tool for PGR. **Method:** Parentally bereaved children and adolescents, 8 through 17 years of age, were assessed at 9, 21, and 33 months after parental death. Receiver operating characteristics were used to establish the "best threshold" that would identify youth with PGR and evaluate the proposed *DSM-5* criteria cross-sectionally and longitudinally. **Results:** A score of 68 or higher on the ICG-RC was found to have high sensitivity (0.942) and specificity (0.965) in differentiating cases of PGR from noncases at 9 months. We also identified a 6-item screening tool that consists of longing and yearning for the deceased, inability to accept the death, shock, disbelief, loneliness, and a changed world view. The proposed *DSM-5* criteria correctly identified only 20% to 41.7% of cases with PGR at different time points. **Conclusions:** For the identification of youth at risk for PGR, the dimensional approach outperformed the proposed categorical diagnostic criteria. We propose a brief screening scale that, if validated, can help clinicians to identify bereaved children and adolescents at risk for PGR, and guide the development of prevention and intervention strategies. J. Am. Acad. Child Adolesc. Psychiatry, 2013;52(6):599–607. **Key Words:** *DSM-5*, grief, Inventory for Complicated Grief–Revised for Children (ICG-RC), screen

There is increased recognition of a syndrome that has alternatively been referred to as complicated grief (CG) or prolonged grief (PG), which occurs in about 10% of bereaved adults.[1-11] This syndrome is associated with functional impairment, increased risk for depression, and physical health morbidity, and it has a differential clinical response to interventions that specifically target this syndrome.[3,4,7,10-13] Similar to adults, we found that 10% of children bereaved by sudden parental death have high and sustained prolonged grief reactions (PGR) nearly 3 years after the death.[14] PGR was associated with threefold increased incidence of depression and worsening in functional impairment at home, school, or with peers over time.[14]

Despite the accumulating evidence, clinicians and researchers face challenges in the identification, diagnosis, and treatment of at-risk bereaved individuals with PGR. The current edition of the *DSM-IV* classifies bereavement under the V code used for "other conditions that may be a focus of clinical attention." In the literature, there are two proposed criteria for PG and CG based on studies of adult bereaved samples.[10,11,15] Current *DSM-5* modifications include a hybrid of these criteria under Persistent Complex Bereavement–Related Disorder (PCBRD) in Section III, requiring further research, and include specifications for children, which have not been previously validated.[16] Thus, it is not clear whether the proposed *DSM-5* criteria are readily applicable to children.

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In this article, we examine dimensional approaches to help clinicians and researchers to identify bereaved children at risk for PGR. We use the Inventory for Complicated Grief–Revised for Children (ICG-RC) and longitudinal data from the impact of parental death on children and families, to establish cut-offs that can differentiate cases with PGR from noncases early after bereavement. We also identify key symptoms that, together, provide a screening tool for PGR. Finally, we evaluate diagnostic approaches and the performance of the proposed *DSM-5* criteria in identifying PGR in bereaved children and adolescents.

METHOD

Sample

We have previously reported on our sample of 182 bereaved children and adolescents, < 18 years of age, who lost a parent to suicide, accident, or sudden natural death.[14] In this paper, we address our aims cross-sectionally and longitudinally in 154 of the 182 (84.6%) who had complete data on the ICG-RC at baseline or 9 months (SD = 3.8; range 1–19) after the death. Of these, 129 (83.8%) were followed up at 21 months (SD = 4.1, range 13–31) and 102 (66.2%) at 33 months (SD = 4.5, range 24–43) after parental death. The subjects included (n = 154) were less likely to have had a confiding or a supportive conversation with their parent before the death, as compared to those with incomplete data on the ICG-RC (n = 28) (59% vs. 96%, $\chi^2_1 = 12$, $p = .001$). The sample was 55.2% male with a mean age of 12.4 years (SD = 2.9). The majority of children (93.5%) were biological offspring of the deceased parent (i.e., the proband).

Recruitment

Details on the recruitment and representativeness of the sample were published previously.[14,17-20] Briefly, deceased parents, or probands, were between the ages of 30 and 60 years, had children 8 to 17 years old, and died within 24 hours from suicide (n = 39), accident (n = 23), or sudden natural death (n = 45). Bereaved families were recruited via coroners' reports (37.1%) and newspaper advertisement (62.9%).

The eligibility rate was similar across types of death, with 71% of eligible subjects participating. Probands recruited through the coroner's office and those recruited by advertisement were found to be similar except for higher rates of alcohol/substance abuse disorders (80% vs. 50.8%, $\chi^2_1 = 8.0$, $p = .005$; number of variables tested = 10, Bonferroni corrected $\alpha = 0.005$) in coroners' probands. Finally, the demographic characteristics of the suicides and accidents were similar to those in Allegheny County (metropolitan Pittsburgh).[21]

Constructing Diagnostic Criteria

Table 1 presents the proposed *DSM-5* criteria for PCBRD and the assessment items that we used to derive the criteria, which were obtained from three sources: ICG-RC; Circumstances of Exposure to Death (CED); and Grief Interview.

Our modified version of the adult Inventory of Complicated Grief,[22] the ICG-RC, was used to assess grief in children under 18 years of age.[17] The ICG-RC was administered as a structured interview in this population. The adult ICG-R was used on follow-up as children/adolescents turned 18 years or older. The adult ICG-R consisted of 33 items, of which 28 items were retained after establishing their psychometric properties in children.[17,22] Each of the 28 items is scored on a 5-point Likert scale (1 = almost never [less than once a month], 2 = rarely [monthly], 3 = sometimes [weekly], 4 = often [daily], and 5 = always [several times a day]), with an overall score that could range from 28 to 140.

The CED was used to assess the children's/adolescents' experience surrounding and following the death of their parent.[23] The grief interview included questions that were not assessed in the ICG-RC, such as the desire to die to be with the deceased. Functional status was determined using the Children's Global Assessment Scale (CGAS)[24] or the Global Assessment Scale (GAS) at follow-up.[25]

Criterion A of the proposed *DSM-5* criteria requires children to have experienced the death of a close relative or friend at least 6 months earlier. Our sample consists of parentally bereaved children/adolescents; however, they were first assessed at an average of 9 months (range = 1–19 months) after the death, with 73.4% of the sample assessed 6 months or later after the death, and thus meeting criterion A. We also assess the performance of the proposed criteria at 21 months (range = 13–31 months) and 33 months (range = 24–43) after the death when all subjects met criterion A.

Criteria B and C require at least 1 and 6 symptoms, respectively, to be endorsed on more days than not and to a clinically significant degree. We use a cut-off of ≥ 4 on the individual items, which correspond to experiencing the symptom often or always. Some of the symptoms within criteria B and C are captured by more than one item. For these symptoms, we consider a positive response whenever one of the items meets the threshold.

As for criterion D or the impairment criterion, we use a cut-off of $\leq$70 on the CGAS or GAS, where lower scores correspond to worse functioning. A score of $\leq$70 corresponds to difficulty in a single area of functioning or more.

Statistical Analyses

We use univariate statistics (χ^2, t-tests, and analysis of variance [ANOVA]) with Bonferroni correction for multiple comparisons. We examined cut-offs on the continuous ICG-RC score using receiver operating