Assessment and associated features of prolonged grief disorder among Chinese bereaved individuals

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Abstract

Background: Most research on the assessment and characteristics of prolonged grief disorder (PGD) has been conducted in Western bereaved samples. Limited information about PGD in Chinese samples exists. This study aims to validate the Chinese version of the Inventory of Complicated grief (ICG), examine the distinctiveness of PGD symptoms from symptoms of bereavement-related depression and anxiety, and explore the prevalence of PGD in a Chinese sample.
Methods: Responses from 1358 bereaved Chinese adults were collected through an on-line survey. They completed the Chinese version of ICG and a questionnaire measuring depression and anxiety symptoms.
Results: The findings indicate that Chinese ICG has sound validity and high internal consistency. The ICG cut-off score for PGD "caseness"in this large Chinese sample was 48. The distinctiveness of PGD symptoms from those of depression and anxiety was supported by the results of the confirmatory factor analysis and the fact that PGD occurred in isolation in the studied sample. The prevalence of PGD was13.9%.
Conclusion: ICG is a valid instrument for use in the Chinese context. Several key characteristics of PGD in Chinese, either different from or comparable to findings in Western samples, may stimulate further research and clinical interest in the concept by providing empirical evidence from an large and influential Eastern country.

1. Introduction

Losing a loved one is a painful and stressful experience. Although most people will eventually adjust to the loss with time, a minority of bereaved persons suffer an intense and prolonged grief which does not abate [1]. The extreme or pathological form of grief has been variously called as traumatic grief [2], complicated grief [3–5], or prolonged grief disorder (PGD) [6,7]. In this paper, we use the term PGD — the term the ICD-11 uses to refer to this new mental disorder [8].

PGD is characterized by symptoms of separation-related distress such as intensive yearning, traumatic distress reactions such as bitterness and anger over the loss, and significant impairment in the person's daily functioning [9]. Several studies have demonstrated that PGD is a distinct cluster of symptoms and is associated with significant functional impairments in various aspects [10]. However, further studies are required for its precise diagnosis, named Persistent Complex Bereavement Related Disorder, in DSM-5 [11].

Currently, knowledge on PGD (its assessment, symptom profiles, distinctiveness from other mental disorders and prevalence) is mainly from Western countries [9,12–14]. The lack of empirical findings in non-Western countries prevents a thorough and comprehensive understanding of PGD. In China, which has a distinct Eastern culture and tradition from Western countries, approximately 9 million people die each year [15], resulting in a large number (i.e., 18–27 million) of new bereaved survivors at risk per year. Findings about PGD among Chinese are necessary and important to enrich the understanding of this disorder.

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In the assessment of PG, the Inventory of Complicated Grief (ICG) is the most commonly used instrument [16]. It was first developed and validated among a group of elderly white widowed persons and was proved to have good psychometric properties and to identify clinically significant conditions [3]. It has proven to be a reliable self-report scale and has generated refinements [2,9]. The ICG has been widely used in studies among English speaking populations and has been translated into various languages, including Dutch [17], Japanese [18], Norwegian [19] and Iranian [20]. Its Italian version has been validated recently [21]. Similarly, validating the Chinese version of ICG is the first step to explore PGD in the Chinese population, and it can facilitate international comparisons between findings from China and other countries.

Previous validation studies have generally suggested the unitary dimension of ICG [2,16,21,22]. However, studies have suggested that various symptom clusters may exist in various bereaved subgroups [22,23]. Therefore, symptoms of PGD, assessed using the ICG, may display a different structure in a Chinese sample. Additionally, the cut-off score of ICG is crucial in using the scale to detect threshold PGD. It is arbitrary to simply adopt the original cut-off score which was established in a different culture. Additionally, ambiguities exist in the diagnostic threshold of the scale score; some studies adopted the original suggestion of authors who developed ICG, in which scores higher than 25 define significant symptoms [16,18,20,24]. Others use a score of at least 30 to identify the presence of PGD [21,25,26].

PGD has been shown to be distinct from Major Depressive Disorder and Generalized Anxiety Disorder [27]. Findings from several Exploratory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA) have demonstrated that symptoms from PGD and other mental disorders load on various factors [14,24,27,28]. However, EFA has the limitation of not being able to compare competing models, whereas previous CFA studies did not include all items but a selection of core items from each scale to perform the analysis due to sample size limit to fulfill the statistical requirement [14,24]. Currently, only one study has suggested the distinctiveness of PGD in Chinese by demonstrating that PGD is associated with but does not overlap fully with other mental disorders [29]. The present study will extend previous studies to test the conceptual distinction between PGD, depression and anxiety symptoms in a Chinese sample, using CFA and a complete set of the scale items.

The information about the prevalence of PGD is important to establish knowledge on a new mental disorder. Several studies have estimated the prevalence of PGD among representative population-based sample, and the findings range from 2.4% to 25.4% [13,30–32]. The prevalence appears to vary by characteristics of the sample (e.g., gender, age, cause of and years since the death, kinship to the deceased, and nationalities of participants). Therefore, findings from various populations, especially from a different culture, are needed. The only study in a Chinese sample used PG-13 to assess PGD on 445 bereaved adults and reported the prevalence as low as 1.8% [29]. The present study will further explore the prevalence of PGD among Chinese using ICG in a larger bereaved general sample.

In sum, this study aims to 1) validate the Chinese version of ICG and explore its symptoms structure and cut-off score; 2) examine the distinctiveness of PGD symptoms from depression and anxiety symptoms; and 3) determine the prevalence of PGD in a general Chinese bereaved sample.

2. Methods

2.1. Participants and procedure

The data are part of a research program on grief adaptations among bereaved Chinese adults. Participants were recruited from two Chinese memorial web-sites. An announcement was posted on the main page of the websites to solicit eligible bereaved people to join an on-line survey. Inclusion criteria were Chinese adults, at least 18 years old who lost first degree relatives (spouses, parents, children, or siblings). Persons who fit the criteria and who were interested in study participation could click the link to enter the research page, which included an introduction of the study and participants' rights and obligations. Participants clicked corresponding buttons on the page to give their consent and started completing the questionnaires on line. The data collection was approved by the Institutional Review Board of the study affiliated university.

Valid data on ICG were available for 1358 participants. Their mean age was 41.85 (SD = 11.16, range = 18–80). Approximately one-half were male (n = 665; 49%). Most participants reported no religious affiliation (n = 1029; 75.8%); 18.2% reported that they were Buddhist (n = 247); and 6% (n = 82) were affiliated with other religious faiths. Their education was primary or middle school (n = 304; 22.4%), adjunct college (n = 517; 38.1%), and university level (n = 537; 39.5%). The kinship relationship to the deceased was father for 40.1% (n = 544), mother for 32.0% (n = 434), a child for 6% (n = 82), spouse for 11.3% (n = 154), and sibling for10.6% (n = 144). The loss occurred on average 25.96 months ago (SD = 25.17, range = 1–117). Death was caused by illness (n = 1003; 73.9%), accidents (n = 173; 12.7%), suicide (n = 26; 1.9%),old age (n = 90; 6.6%), and other unspecified or unknown reasons (n = 66; 4.8%).

2.2. Measures

PGD symptoms were assessed using the 19-item ICG. It indicated the frequency of a cluster of grief experiences on a 5-point Likert scale (0 = *never*, 5 = *always*) [16]. The Chinese version of ICG was translated and back-translated by two bi-lingual researchers. Discrepancies from the