



ELSEVIER

Contents lists available at ScienceDirect

## Psychiatry Research

journal homepage: [www.elsevier.com/locate/psychres](http://www.elsevier.com/locate/psychres)

# The prevalence, comorbidity and risks of prolonged grief disorder among bereaved Chinese adults



Li He<sup>a</sup>, Suqin Tang<sup>a</sup>, Wei Yu<sup>a</sup>, Wei Xu<sup>a</sup>, Qiuyuan Xie<sup>a</sup>, Jianping Wang<sup>a,b,\*</sup>

<sup>a</sup> School of Psychology, Beijing Normal University, No. 19 Xijiekouwai Street, Haidian District, Beijing 100875, PR China

<sup>b</sup> Capital Medical University, Beijing 100088, PR China

## ARTICLE INFO

## Article history:

Received 20 November 2013

Received in revised form

6 April 2014

Accepted 6 May 2014

Available online 29 May 2014

## Keywords:

Prolonged grief disorder

Prevalence

Bereavement

Prolonged Grief Questionnaire-13 (PG-13)

China

PTSD

## ABSTRACT

Few epidemiological studies have investigated prolonged grief disorder (PGD) in the general population of Asian countries, including China. The aim of this study was to explore the rates and risks of PGD, and the association between PGD, post-traumatic stress disorder (PTSD), depression and anxiety in bereaved Chinese adults. The PG-13, PTSD Checklist-Civilian Version (PCL-C), Zung Self-Rating Depression Scale (SDS) and Zung Self-Rating Anxiety Scale (SAS) were administered to 445 subjects. Prevalence within the general population of China was 1.8% (i.e., 8/445). Among the eight subjects who met the PGD diagnosis, 75%, 87.5% and 75% scored above the cut-off point on the PCL-C, SDS and SAS, respectively, although a portion remained free from comorbidity. ANOVA, correlation analysis and stepwise multiple regression analysis demonstrated that kinship to deceased, age of the deceased, religion belief and cause of death were predictive of prolonged grief. A small proportion of bereaved persons may exhibit PGD. There is a substantial but far from complete overlap between PGD and the other three diagnoses. Bereaved parents and the widowed have high risk of PGD. These findings highlight the need for prevention, diagnosis and treatment for PGD patients.

© 2014 Elsevier Ireland Ltd. All rights reserved.

## 1. Introduction

The loss of a loved one is one of the most common adverse life events. Although the death of a significant other can be a painful experience, the majority of adults recover over time. However, a portion continue to grieve for an extended period of time and begin to exhibit symptoms of a state known as prolonged grief disorder (PGD) (Prigerson et al., 2009; Morina et al., 2010), which is a disorder defined by Prigerson et al. (2009) who have developed and empirically tested consensus and diagnostic criteria for PGD. These symptoms were also variously labeled pathological grief (Horowitz et al., 1980), traumatic grief (TG) (Prigerson et al., 1999), and complicated grief (CG) (Kersting and Wagner, 2012). PGD results in substantial distress and impairment, worsens one's quality of life, and has been linked to excess medical morbidity and suicide rates (Stroebe et al., 2007). Recently, PGD was proposed as a new category for the International Classification of Diseases-11 (ICD-11) (Maercker et al., 2013).

Most studies on the epidemiology of PGD were conducted in developed countries (e.g., America, Germany and the Netherlands) and among special population groups (e.g., older adults, widows,

orphans, and caregivers of patients in a vegetative state); the prevalence of PGD in these studies ranged from 2.4% to 38.3% (Momartin et al., 2004; Goldsmith et al., 2008; Kersting et al., 2011; Newson et al., 2011; Guarnerio et al., 2012; Schaal et al., 2012). However, little attention has been focused on a general population sample in a non-western culture. To our knowledge, no studies have been conducted in China, which has the largest population in the world and a unique Eastern culture. The study in China would not only permit cross-cultural comparisons but also greatly improve our understanding of PGD.

Whether PGD should be considered a separate diagnostic entity has been the subject of controversy in the last decade (Schaal et al., 2012), as bereaved persons often present with symptoms of depression, posttraumatic stress disorder (PTSD) and anxiety (Newson et al., 2011). Previous studies have documented a substantial association among PGD, PTSD and depression (Boelen and van den Bout, 2005; Morina et al., 2010). For example, moderate to high correlations were found between PGD and depression/PTSD (Boelen and van den Bout, 2005; Boelen and Prigerson, 2007; Schaal et al., 2012), while a low to moderate correlation was found between PGD and anxiety symptoms (Boelen and van den Bout, 2005). Although PGD shares some overlapping symptoms with depression, anxiety and PTSD, it largely exhibits distinct symptoms (Bonanno et al., 2007). Compared to PTSD, depression and anxiety, PGD is characterized by an intense yearning for a deceased individual (Prigerson et al., 2009). A variety of studies have

\* Corresponding author at: School of Psychology, Beijing Normal University, No. 19 Xijiekouwai Street, Haidian District, Beijing 100875, PR China.

Tel.: +86 15010037261. Li He and Suqin Tang contributed equally to this work.

E-mail address: [wjphh@bnu.edu.cn](mailto:wjphh@bnu.edu.cn) (J. Wang).

indicated that yearning loads highly on the grief factor, but not on depression or anxiety factors (Prigerson et al., 2009). The majority of people with PGD did not meet the criteria of major depression, PTSD or anxiety (Schaal et al., 2012). However, little is known about the association and comorbidity among PGD, PTSD and depression in China.

A large number of studies have investigated the influence of various socio-demographic and bereavement-related factors (e.g., gender, income, relationship to the deceased, and cause of death) on prolonged grief symptom severity, but with mixed results (Prigerson et al., 2002; Neria et al., 2007). In terms of demographic variables, the relation between PGD and gender/age has been inconsistently reported. Some studies have found that gender (Neria et al., 2007) and age (Prigerson et al., 2002) are predictors for the development of grief reactions, whereas other authors have documented no associations between grief and gender (Momartin et al., 2004; Boelen and van den Bout, 2005) or age (Momartin et al., 2004). While a considerable number of studies have investigated time since loss as a potential predictor for grief symptom level; however, some studies have found no significant association between time since death and the severity of prolonged grief symptoms (Prigerson et al., 2002; Schaal et al., 2010).

Using Prigerson's criteria defining PGD (Prigerson et al., 2009) in bereaved Chinese adults, the aim of this study was to (1) explore the prevalence rates of PGD; (2) examine PGD and its relationship to symptoms of PTSD, depression and anxiety and report comorbidity among participants who met PGD criteria; and (3) identify the risk factors associated with the development of PGD.

## 2. Method

### 2.1. Procedures

A cross-sectional questionnaire was approved by the Ethics Committee of Beijing Normal University and conducted in China mainland. The participants were recruited through the university, the hospital and the community with the assistance of our collaborators and the website (e.g., forums or microblogs) between March 2012 and September 2013. We identified some target areas (Beijing, the capital city; Shenyang, in northeast China; Shanghai and Jiangsu, in east China; Guangdong, in south China; Sichuan, in southwest China) to obtain a wide geographic distribution for the nationwide sample. The individuals from university were recruited through introductory psychology courses or university counseling centre; the participants from hospitals were invited by the psychologist; the participants from community were recruited via flyers placed in the community service center. A portion of participants were recruited through the poster

published at microblog, forums and other social network sites, and completed the questionnaires online. The participation rate is approximately 50%.

All participants were told to take part in a study of bereavement distress; they were provided a brief description of the purpose of the study before providing written informed consent, which was on the first page of the questionnaire packet. All participants were permitted to ask questions of the study as needed. They were administered a questionnaire packet, which took approximately 30–40 min to complete. Participant anonymity and confidentiality were guaranteed. After the questionnaires were returned, we interpreted the survey results, introduced grief theory and information about grief recovery and recommended some grief-related books, films and websites to them.

### 2.2. Participants

Subjects needed to be at least 16 years of age at the time of the survey and must have experienced the loss of significant other more than six months prior to the onset of the study. The sample consisted of 445 adults: 86 (19.3%) males, 349 (78.4%) females, 10 (2.2%) unspecified;  $M_{age}=27.60 \pm 11.83$  (range between 16 and 79) years; 71.7% were single; and 31.0% had lost their first-degree relative (i.e., parent, child, spouse or sibling). Table 1 provides a detailed description of participants' socio-demographic and bereavement-related information.

### 2.3. Measures

#### 2.3.1. Socio-demographic and bereavement-related information

Socio-demographic information included gender, age, place of residence, religious belief, educational background, marital status and subjective assessment of family economic status ("1": extreme poverty; "2": poor, "3": moderate, "4": wealthy, "5": extremely wealthy). The bereavement-related information consisted of kinship to the deceased, time since loss, age of the deceased and cause of death.

#### 2.3.2. Prolonged Grief Questionnaire-13 (PG-13; Prigerson et al., 2009)

PG-13 is a 13-item, self-report questionnaire for the diagnosis of PGD. The PG-13 is based on 11 questions with a 5-point Likert scale ("1": almost never to "5": always), a duration criterion of 6 months and a dysfunction criterion. To assess the presence of PGD, five criteria (A–E) must be met. These criteria include (A) event criterion: the respondent has experienced loss; (B) separation distress: the respondent must endorse questions No. 1 or 2 at least daily; (C) cognitive, emotional and behavioral symptoms: the respondent must endorse at least 5 symptoms based on the PG-13 question Nos. 3–11 at least "once a day" or "quite often"; (D) duration criterion: the symptoms of separation distress must be elevated at least 6 months after the loss (the response to PG-13 question No. 12 must be "yes"); (E) impairment criterion: the respondent must show significant impairment in social, occupational or other important areas of functioning (the response to PG-13 question No. 13 must be "yes") (Prigerson et al., 2009). The total score of PG symptom was obtained by summing up the scores of items 1–11.

The English version of the PG-13 was translated into Chinese by one of the authors (JPW) and her students and back-translated by a professional bilingual translator. The back-translated English version was reviewed by Prigerson to verify the accuracy of the translation. Final edits were then made to the Chinese version based on feedback. The Chinese version of the PG-13 was found to have satisfactory psychometric properties (He et al., unpublished data).

**Table 1**  
Socio-demographic and bereavement-related data of the participants.

Variables	M (S.D.) or N (%)	Variables	M (S.D.) or N (%)
<b>Age of participants</b>	27.60 (11.83)	<b>Marital status</b>	
<b>Gender</b>		Single	319 (71.7)
Male	86 (19.3)	Married	114 (25.6)
Female	349 (78.4)	Divorced/widowed	11 (2.5)
<b>Place of residence</b>		<b>Family economic status</b>	2.80 (0.62)
Country/village	145 (32.6)	<b>Kinship to deceased</b>	
Town	89 (20.0)	Parents	106 (23.8)
Urban/city	205 (46.1)	Child	8 (1.8)
<b>Religious belief</b>		Spouse	11 (2.5)
No	413 (92.8)	Sibling	13 (2.9)
Buddhism	16 (3.6)	Grandparents	259 (58.2)
Christianity	12 (2.7)	Other	46 (10.3)
Islamism	2 (0.4)	<b>Time since loss (years)</b>	4.65 (3.57)
<b>Educational background</b>		<b>Age of deceased</b>	65.20 (20.23)
Middle school	30 (6.7)	<b>Cause of death</b>	
Undergraduate	325 (73.0)	Traumatic (suicide, accident, etc.)	55 (12.40)
Postgraduate	86 (19.3)	Medical	353 (79.3)

Note: There are 10, 6, 2, 1, 2, and 37 missing (unspecified) data for gender, place of residence, religious belief, marital status, kinship to deceased, and cause of death, respectively.

متن کامل مقاله

دریافت فوری ←

**ISI**Articles

مرجع مقالات تخصصی ایران

- ✓ امکان دانلود نسخه تمام متن مقالات انگلیسی
- ✓ امکان دانلود نسخه ترجمه شده مقالات
- ✓ پذیرش سفارش ترجمه تخصصی
- ✓ امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
- ✓ امکان دانلود رایگان ۲ صفحه اول هر مقاله
- ✓ امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
- ✓ دانلود فوری مقاله پس از پرداخت آنلاین
- ✓ پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات