Urgent Attention Needed for Mental Health Challenges Arising from Prolonged Grief During and in the Aftermath of COVID-19

Atenção Urgente Deve Ser Direcionada para os Desafios de Saúde Mental Emergentes do Luto Prolongado Durante e Após a COVID-19

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Palavras-chave: Atitude Perante a Morte; COVID-19; Luto; Saúde Mental; Portugal

To the Editor,

The enduring impact of the COVID-19 pandemic on our society is notably reflected in the realms of grief and mental health. The repercussions of sudden deaths, decreased social support, job losses, and social isolation have given rise to prolonged grief disorder (PGD), which may significantly affect daily functioning for over six months after a loss.[1-3] This disorder was defined by Prigerson in 2009 as a continuous desire, concern with the departed, and deep emotional pain that produces significant functional impairment and lasts longer than six months following the loss.[3] Intense grief correlates with higher risks of chronic diseases, cancer, depression, anxiety, and suicidal thoughts,[4,5] along with poorer quality of life. Anxiety is a typical aspect of grieving,[6] and depression is linked to complicated grief.[7] Evidence indicates a prevalence rate of 66.5% of PGD in COVID-19 deaths,[8] highlighting the urgent need to address mental health challenges arising from the pandemic's impact on grief.

To delve into the specific impact of COVID-19 on individual grief experiences, we carried out a study focused on PGD among residents in Portugal and its correlation with anxiety and depression symptoms.

Employing a snowball sampling method and an online approach, data was collected between November 10, 2020, and February 10, 2021. From the total sample collected (n = 929), 166 reported that they had lost someone since the onset of the pandemic, thus representing our final sample. More information on the study methodology can be found elsewhere.[9] We used the Portuguese validated version of the PG-13 Prolonged Grief Disorder scale as an instrument to collect data on the experience of loss during the pandemic period[10] and for anxiety and depression symptoms we used the HADS scale.[11] PG-13 scores in this study were obtained by summing symptom items, excluding duration and functional impairment. Total scores ranged from 11 to 55, with a suggested clinical cutoff of ≥ 30.[3]

The study received approval from the Ethics Committee of Institute of Public Health of the University of Porto (CE20166). Participants were required to grant informed consent by accessing the questionnaire via the provided link. Given the online nature of the survey, participants were given the choice to either agree to take part in the study or decline (at the beginning of the questionnaire).

Most participants were female (66.9%), aged between 18 - 39 (59.6%), and had a higher education degree (70.5%). The types of losses varied: 30.7% losing a grandparent, 22.3% a friend, and 9.0% a parent. Participants described the emotional difficulty of their loss on a Likert scale, with 10.2% rating it as emotionally bearable, 12.7% as emotionally unbearable, and 24.7% as occasionally bearable.

The analysis of the PG-13 scale for 164 participants with complete data indicated a mean PGD symptom score of 20.89 (SD: 8.83). Of concern, 16.8% scored ≥ 30 (clinical cutoff for PGD), and from these, 15 (53.6%) fell into the definition of Prigerson *et al* (2009).[3] This means that 9.1% of the total potentially presented PGD symptoms.

Those who experienced loss, compared to those who did not, had a higher proportion of depression symptoms (10.2% *vs* 6.4%; $p = 0.030$) (Table 1). Notably, 8.4% of participants exhibited symptoms of both anxiety and depression. Among the 28 participants with a mean score ≥ 30 for PG symptoms, 21 had anxiety symptoms, and eight also exhibited depression symptoms.

Table 2 illustrates the link between demographic variables and anxiety and depression symptoms, and prevalence of PGD. Although not statistically significant, a lower education level was correlated with a higher level of PGD. Anxiety and moderate depression symptoms were significantly associated with PGD ($p < 0.001$). Moreover, those who reported "Emotionally unbearable" in relation with the loss also presented higher levels of PGD ($p < 0.001$), which

Table 1 – Prevalence of anxiety and depressive symptoms in participants that lost someone compared to the overall sample

Variable n (%)	Non-anxiety	Moderate anxiety	Anxiety symptoms	*p*-value	Effect size‡
Have lost someone					
No	384 (84.0)	171 (80.3)	195 (79.3)	0.233	0.056
Yes	73 (16.0)	42 (19.7)	51 (20.7)		
	Non-depression	**Moderate depression**	**Depression symptoms**		
Have lost someone					
No	541 (83.6)	121 (76.6)	48 (73.8)	**0.030**	0.090
Yes	106 (16.4)	37 (23.4)	17 (26.2)		

‡: effect size cut offs based on Rea *et al*[12] (0.00 and under 0.10 – negligible association; 0.10 and under 0.20 – weak association; 0.20 and under 0.40 – moderate association; 0.40 and under 0.60 – relatively strong association; 0.60 and under 0.80 – strong association and; 0.80 and under 1.00 – very strong association).
Bold values represent $p < 0.05$.

Table 2 – Relation between socio characteristics and anxiety and depressive symptoms in participants that present prolonged grief disorder (n = 164)

Variable n (%)	Non-prolonged grief disorder (n = 149)	Prolonged grief disorder (n = 15)	*p*-value	Effect size‡
Sex (n = 163)				
Male	50 (33.8)	4 (26.7)	0.577	0.044
Female	98 (66.2)	11 (73.3)		
Age group (n = 157)				
18 - 39 years	89 (62.7)	8 (53.3)	0.479	0.057
≥ 40 years	53 (37.3)	7 (46.7)		
Education level (n = 161)				
≤ 12 years	38 (26.0)	7 (46.7)	0.263*	0.136
Bachelor degree	48 (32.9)	3 (20.0)		
Master degree or superior	60 (41.1)	5 (33.3)		
Anxiety symptoms (n = 164)				
Non anxiety	71 (47.7)	1 (6.7)	***p* < 0.001***	0.381
Moderate anxiety	40 (26.8)	1 (6.7)		
Anxiety symptoms	38 (25.5)	13 (86.7)		
Depression symptoms (n = 158)				
Non depression	102 (70.3)	3 (23.1)	***p* < 0.001***	0.324
Moderate depression	32 (22.1)	5 (38.5)		
Depression symptoms	11 (7.6)	5 (38.5)		
How emotionally difficult was this loss for you? (n = 163)				
Emotionally bearable	16 (10.8)	0 (0)	***p* < 0.001***	0.579
Frequently bearable	19 (12.8)	0 (0)		
Sometimes bearable	36 (24.3)	1 (6.7)		
Occasionally bearable	40 (27.0)	1 (6.7)		
Rarely bearable	27 (18.2)	2 (13.3)		
Emotionally unbearable	10 (6.8)	11 (73.3)		

Note: From the total of 166 participants who had lost someone, 164 had complete information on the PG-13 scale and were considered for this analysis.
‡: Effect size measure cut offs (Cramer's V) based on Rea *et al*[12]
*: Fisher exact test
Bold values represent $p < 0.001$.

highlights the scale's sensitivity, particularly for those finding the loss emotionally unbearable.

In our study, 30.7% of bereaved participants reported anxiety symptoms and 10.2% reported depressive symptoms. Portugal, with the highest prevalence rate of psychiatric diseases in Europe (22.9%), underscores the urgency of our findings.[13] The prevalence rate of PGD, anxiety, and depression symptoms among bereaved individuals requires targeted interventions and support. In this study, 9.1% of bereaved participants could potentially be diagnosed with PGD based on the scale, surpassing rates in a recent meta-analysis (3.2%).[14] This aligns with studies suggesting traumatic loss tends to trigger PGD.[15,16] Our prevalence rate is lower than in Dutch patient samples (17.7% and 12.5%)[17,18] but higher than in Dutch citizens bereaved due to a plane crash (6.6%).[17] Moreover, pandemic research revealed higher prevalence (3.3% based on DSM-5-TR criteria) compared to the pre-pandemic period,[19] regardless of the diagnostic approach. Caution is needed in comparing results across studies due to variations in PGD assessment scales.

A key study limitation is the absence of clinical diagnoses for PGD, anxiety, or depression symptoms; the results stem solely from screening measures. Because of the cross-sectional design and lack of cause-of-death information, inferring COVID-19 causation was not possible. The predominantly female and relatively young age of participants may limit generalizability. The PG-13 scale underwent revision during our data collection period. Therefore, the updated criteria, published in February 2021 could not be considered in this analysis.

Post-pandemic, prioritizing mental health and bereavement support is crucial. Public health initiatives must ensure accessible services, acknowledging heightened risk among the bereaved. Transparent communication between families and caregivers is vital. Our study highlights a high prevalence rate of PGD, anxiety, and depression, urging immediate action to address the pandemic's mental health impact.

AUTHOR CONTRIBUTIONS

All authors contributed equally to this manuscript.

PROTECTION OF HUMANS AND ANIMALS

The authors declare that the procedures were followed according to the regulations established by the Clinical Research and Ethics Committee and to the Helsinki Declaration of the World Medical Association updated in 2013.

DATA CONFIDENTIALITY

The authors declare having followed the protocols in use at their working center regarding patients' data publication.

COMPETING INTERESTS

All other authors have declared that no competing interests exist.

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