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Psychiatry Research



journal homepage: www.elsevier.com/locate/psychres

Short communication

Impact and consequences of COVID-19 pandemic on complicated grief and persistent complex bereavement disorder



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ARTICLE INFO	A B S T R A C T
Keywords: COVID-19 Complicated grief Persistent complex bereavement disorder	Mourning is a coping-with-loss stage that prevents grief from becoming pathologic, i.e., complicated grief (CG) syndrome and persistent complex bereavement disorder (PCBD), recently included in international classification systems. During the COVID-19 pandemic, to contain virus spread, several countries adopted/adopt the prohibition of mourning rituals (funeral ceremonies/visiting to cemeteries), so that people were/are unable to give their hospitalized relatives the latest goodbye. Such measures can lead vulnerable individuals to develop CG and PCBD. We critically discuss literature-based risk factors for and protective resources against the onset of these

1. COVID-19 pandemic: an unprecedented global issue

The novel coronavirus SARS-CoV-2 responsible for COVID-19 disease showed an extreme virulence and quickly became an unprecedented global issue causing not only plenty of fatalities, but also collateral psychological, psychiatric, relational, and economic consequences (Giorli et al., 2020; Marazziti and Stahl, 2020; Pozza et al., 2020). In a short time, the COVID-19 pandemic had a strong impact on normal life, also due to the restrictive measures implemented worldwide to slow down the spread of the infection (e.g., "home isolation", mandatory use of personal protective equipment, social exclusion imposed). Immediately after the declaration of pandemic status, in different countries the physical presence of visitors was prohibited in hospitals and health facilities. In addition, many health professionals decided to practice precautionary self-isolation to prevent infection of beloved ones.

In several, but not all, countries worldwide, people are not allowed to visit their relatives who stay in hospital, are self-isolating or stay in residential/care homes for COVID-19 or other illnesses, although they can communicate with them through tablets or mobile phones (Wallace et al., 2020). The governments of several countries, such as some of the

European and American ones, also imposed prohibitions against mourning rituals, as funeral ceremonies and burials were prohibited and cemeteries closed to the public (Cardoso et al., 2020; Gómez-Salgado et al., 2020; Marazziti et al., 2020b). Therefore, due to the afore-mentioned cautionary measures, people were no longer authorized to meet their relatives who were hospitalized or staying in residential/care homes for COVID-19 or other illnesses, and/or they were unable to give their beloved ones the latest goodbye (Ingravallo, 2020).

conditions since the start of the pandemic and analyze prevention strategies to inform public health programs.

It is evident that at current time of COVID-19 pandemic, everywhere individuals are coping with multiple stressful situations, all of them potentially resulting into psychological traumas: loss of job, loss of economic stability, and reduction and loss of individual freedom (Kartseva and Kuznetsova, 2020). Even if not all the countries used and/or use restrictions to visiting relatives and situations fluctuate within and across countries, concerns about the possibility of losing a loved one also represent additional stressors that could contribute to the development of traumatic experiences (Pfefferbaum and North, 2020). These include a rapid decline in the health status of loved ones, the traumatic separation caused by their distancing, the inability to see or listen to them, the inability to have constant updates on their health, the possibility to go through the mourning process without a body to cry,

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https://doi.org/10.1016/j.psychres.2021.113916 Received 10 January 2021; Accepted 27 March 2021 Available online 31 March 2021 0165-1781/© 2021 Elsevier B.V. All rights reserved. and the inability to receive warmth and affection from others. It is reasonable to expect that a considerable part of these people will be unable to adaptively overcome these traumas and, consequently, they could face the development of psychopathological reactions and pathological pain, including complicated grief (CG) (Horowitz et al., 2003).

2. Complicated grief and persistent complex bereavement disorder in the context of COVID-19

The death of someone loved provokes a psycho-physiological process of grief and bereavement, as normal grief is a deep and intense sorrow caused by the loss of someone loved. Attachment theory driven views consider grief as a normal emotional reaction, defined by feelings of sadness, guilt, anger and distress due to separation from a loved one (Shear and Shair, 2005). Such feelings may sometimes evolve into a state of traumatic loss and symptoms of acute grief that usually resolve following revision of the internalized representation of the deceased. This process aims to incorporate the reality of the death into an effectively functioning secure base schema and/or to effectively re-engage the exploratory system in a world without the deceased (Shear and Shair, 2005). In most cases, people learn to manage this reaction over time so that, albeit being susceptible to complications, normal grief should not be considered a pathological condition.

In particular, the main feature that prevents grief from becoming pathological is the mourning process (Nakajima, 2018). Such a psycho-physiological process requires time, which is a critical and complex variable: clinicians not only assess the mere flow of time, but also the subjective way this experience is lived. Failure to accomplish the integration of the deceased results in the so-called CG syndrome, where avoidance of grief, anger, guilt feelings, reminders of the death and loss have a key role as maintenance factors (Shear et al., 2007). Several variables (i.e., psychiatric comorbidities, nature of the relationship with the deceased, ways of coping with experienced mourning, family support) may affect the mourning process, making it different from one person to another.

As described by Nakajima (2018), CG is a condition in which some people experience a severe and prolonged course of grief. Currently, CG is recognized and considered a psychiatric disorder by the majority of scholars and it is included in the most recent versions of the Diagnostic and Statistical Manual of Mental Disorders (DSM-5, American Psychiatric Association, 2013) and in the International Classification of Diseases (ICD). DSM-5 introduces the diagnosis of 'Persistent Complex Bereavement Disorder' (PCBD), a pathologic state characterized by severe and persistent grief and mourning reactions, which is included within the category "Other Specified Trauma- and Stressor-Related Disorders". The forthcoming 11th edition of the ICD will introduce the diagnosis of Prolonged Grief Disorder (PGD), which is defined as persistent and pervasive longing for the deceased, or a persistent and pervasive preoccupation with the deceased accompanied by intense emotional pain (Killikelly and Maercker, 2017). Recently, using network analysis, some authors found that specific symptoms had a central role in PCBD including feelings characterized by role confusion, meaninglessness, and loneliness (Malgaroli et al., 2018). CG is associated with psychiatric disorders including major depressive disorder. post-traumatic stress disorder (PTSD), substance abuse disorder, and other negative mental health outcomes, such as suicidality, reduced quality of life, and overall functional impairment (He et al., 2014; Simon et al., 2007; Sung et al., 2011). Boelen and colleagues (2019) studied the prognostic validity and the underlying mechanisms of PCBD symptom patterns in bereaved people. The results showed that PCBD diagnosis had prognostic value as indicated by associations with functional impairment assessed 3 years later; in addition, deaths of partners/children, unexpectedness of the loss, and maladaptive cognitions were associated with pervasive symptoms (Boelen et al., 2019).

Several authors argue that coping with loss in the peculiar context of COVID-19 pandemic, particularly in the presence of individual

susceptibility and comorbidities, may affect the bereavement process and increase the likelihood of CG or PCBD (Bertuccio and Runion, 2020; Eisma et al., 2020; Gesi et al., 2020). Restriction measures imposed by some governments to mourning rituals can have a stressful impact on the relatives. For example, evidence from previous experimental studies in other times not related to COVID-19 pandemic, demonstrated that mourning rituals after losses of loved ones usually can mitigate grief and increase feelings of control, not only for individuals who profess a belief in rituals' effectiveness but also for those who do not (Norton and Gino, 2014).

3. Risk factors for CG and PCBD during the pandemic

To be effective, public mental health intervention and prevention strategies during this critical period for our society should focus on the identification of risk factors for and protective factors against the onset of CG and PCBD. Excessive inclination and sensitivity to interpersonal guilt feelings and the presence of post-traumatic symptoms may be considered as key individual vulnerability factors for the development of CG or PCBD (Rubin et al., 2003). People experiencing a close bereavement related to COVID-19 might blame themselves for not having tried harder to see their loved one while in hospital, and/or for not taking care of their relatives' comfort and dignity during the hospitalization (Gesi et al., 2020).

Other vulnerability factors for the onset of CG symptoms include early maladaptive schemas, i.e., memories, emotions, cognitions, and bodily sensations, regarding oneself and one's relationships with others, which develop when psychological needs such as secure attachment and autonomy are not met during childhood (Young et al., 2003). As shown by Thimm and Holland (2017), a greater difficulty in finding adaptive ways of making meaning of the loss were found to be related to more dysfunctional schemas in the rejection and disconnection domain (i.e., expectation that one's need for security, stability and acceptance will not be met in a predictable manner) which turned out to be related to more severe CG symptoms. As hypothesized by some authors (Inchausti et al., 2020), some interpersonal aspects specifically related to the COVID-19 pandemic including social distancing, reduction and loss of individual freedom, restrictions to the possibility of saying goodbye to a dead loved one, might activate early maladaptive schemas such as the above-mentioned schemas in the rejection and disconnection domain, but also schemas in the domain of impaired autonomy and performance (i.e., the belief involving the exaggeration of fear that a medical and/or emotional catastrophe will strike at any time).

Relatives of inpatients with degenerative diseases should be considered a particularly vulnerable group as they experience anticipatory grief, i.e., a specific subset of grief characterized by an unconscious process that happens when stability is threatened, most often by a new and unwelcomed diagnosis (Nielsen et al., 2016). Anticipatory grief includes feelings of anxiety, sadness, loneliness, or anger, and it consists of mourning, worry, coping, and planning of one's life in response to an impending loss as well as future losses. As losses of identity, function, and potentially loss of life accumulate along the illness trajectory, anticipatory grief processes continue to be activated (Coelho and Barbosa, 2017). Therefore, the presence of anticipatory grief should be assessed in the relatives of patients with degenerative diseases during the pandemic period. Indeed, another relevant issue characterizing COVID-19 pandemic and increasing the risk of CG is the poor communication with clinicians (Grote and Izagaren, 2020), due to overprotective behaviours against contagion, or to hospitals' overloading and personnel shortages (Mascha et al., 2020). Studies conducted on doctor-relative communication in intensive care units during other periods than the pandemic one, suggested that the communication between doctors and patients' relatives may be very important as it can facilitate the understanding of the causes of death and enhance the processing of the event in the relatives (Kentish-Barnes et al., 2018).

At these times, due to the unpredictability of the virus, people live in

constant concern of contracting the disease and find it difficult not to feel guilty in the fear of having infected someone else (Marazziti et al., 2020a). Furthermore, in some countries, people are deprived of the chance to pay their respects to their relatives, with the concern of letting them die alone, without receiving human warmth from the people they love (Olufadewa et al., 2020). Almost every sort of social interaction is forbidden, funerals and burials are prohibited, and cemeteries are closed. Moreover, feelings of hopelessness and uncertainty about how the pandemic is progressing and lack of preparation for the death give rise to a shared sensation of perceived purposelessness of life. These conditions are similar to those described by Wallace et al. (2020) in their paper to predict CG, namely severe pre-loss grief symptoms.

As proposed by Horowitz (1990). another key variable is the time for the mourning process. The pandemic period is a long-lasting stressful event which involves constant and prolonged feelings of uncertainty and worry related to the risk of contracting the virus or the risk of the negative economic consequences of the pandemic. This uncertainty situation might not give the person sufficient time for processing mourning.

4. A call for intervention and prevention strategies

Due to the several losses suffered from people throughout the COVID-19 pandemic, the mourning process has become a critical aspect to overcome, and it must be taken into serious consideration for psychological health. For this reason, it is of even greater importance for clinicians to make a prompt assessment of the people who experienced a loss during this historical event.

Among the protective factors, greater levels of social support may be expected to correlate with better grief outcomes (Chen, 2020; Romero et al., 2014). However social distancing may reduce the positive effects of social supports. In addition, greater spirituality, defined as the search for and the construction of an existential meaning according to Bellingham and colleagues (1989), can have a protective role. Perhaps policy and healthcare interventions should aim to foster spirituality and religiousness during the pandemic to help the family accepting death and feel closer to the loved one (Mason et al., 2020). The role of spirituality and religiousness as protective factors against the development of psychological distress in response to stressful situations has been demonstrated by several studies conducted in a variety of populations (e.g., Calicchia and Graham, 2006; Pozza et al., 2019). For example, some authors found that bereaved people with a spiritual life were more likely to process mourning since spirituality gave them an opportunity for making a meaning of the loss, shifts in self-identity and social re-engagement (Damianakis and Marziali, 2012).

Finally, psychological flexibility, i.e., the willingness to remain in contact with unwanted private events (e.g., distressing thoughts, feelings, sensations, and memories) without attempts to change, avoid, or eliminate them, is a construct developed within the theoretical framework of Acceptance & Commitment Therapy (Hayes, 2004). According to this model, the avoidance of unpleasant inner experiences leads to a paradoxical increase in such unwanted private events, which ultimately acts to maintain and exacerbate psychological distress (Kashdan et al., 2006). Therefore, psychological flexibility can be considered another key psychological resource whose presence should be assessed in people experiencing the loss of a loved one, particularly during COVID-19 pandemic that imposes restrictions to the possibility of saying goodbye to a dead loved one. Indeed, psychological flexibility can enhance the spontaneous processing of the loss and protect against the onset of CG symptoms and anticipatory grief (Davis et al., 2017).

Another important aspect that needs a thorough assessment concerns the trajectories of CG and PCBD, since very little is known about the timing of the onset of such conditions, and a clearer theoretical elaboration about their early warning signs may better inform public health screening programs (Bonanno et al., 2008).

In light of these considerations, we can speculate that in the future

weeks and months people will be more likely to develop CG or PCBD due to COVID-19 pandemic. Implications of social distancing not only affected families hit by the novel Sars-CoV-2 coronavirus, but also people whose relatives died from other diseases. In both cases, in some countries, it is no longer possible to assist the loved ones before and after death.

Although medication is often prescribed to bereaved persons, evidence for its effectiveness appears still equivocal (Doering and Eisma, 2016). The effectiveness of some intervention and prevention psychological strategies has been studied in the literature. For example, recent meta-analytical studies suggested that bereavement groups might be only modestly effective for reducing grief symptoms (e.g., Johannsen et al., 2019; Maass et al., 2020). For example, in their meta-analysis of 14 randomized controlled trials (1519 participants overall), Maass and colleagues (2020) reported that bereavement groups were marginally more effective than control groups at post-treatment, as suggested by a small mean effect size (Hedges' g = 0.33) but not at follow-up. As highlighted by the authors (Maass et al. 2020), an explanation for this might be related to the quite large heterogeneity of concepts for intervention and control groups and to the poor methodological quality of some of the studies included.

A recently developed, promising strategy is Accelerated Resolution Therapy (Finnegan et al., 2016), an evidence-based approach for trauma-related conditions, which contains a variety of therapeutic ingredients delivered in a modular fashion (i.e., imagery rescripting, memory reconsolidation, guided visualization with use of eye movements, desensitization and processing of distressing memories, and in-vivo exposure to future feared triggers). The key target of this type of therapy is the present experience and story of the individual rather than the symptoms experienced. According to a recent randomised clinical trial (Buck et al., 2020), it was more effective on reducing CG, post-traumatic and depression symptoms than a control group, probably because this kind of therapy enables the person to get in contact gradually and repeatedly with traumatic memories and to become progressively more capable to create a new story about their trauma.

In line with the principles of Accelerated Resolution Therapy, Eyes Movement Desensitization Reprocessing (EMDR) may be another helpful approach to target both PTSD-related and CG symptoms. This psychotherapeutic approach which was demonstrated to be useful for a variety of trauma-related problems (e.g., Korn, 2009; Mazzoni et al., 2017; Valiente-Gómez et al., 2017), was developed by Shapiro (1991) to facilitate the processing of traumatic memories to bring these to an adaptive resolution, complete information processing, new learning, elimination of emotional distress. Indeed, during EMDR therapy the client attends to emotionally disturbing material in brief sequential doses while simultaneously focusing on an external stimulus such as therapist-directed lateral eye movements (Shapiro, 1991). For example, in a study on people with CG, Meysner and colleagues (2016) reported that participants receiving EMDR therapy improved on measures of grief, trauma symptoms, and distress.

Beyond the use of a specific therapeutic technique or approach, a key factor that should be carefully considered in the psychotherapeutic pathway of people who experience CG is the contribution of a positive therapeutic alliance (Glickman et al., 2018). For example, Bordin (1979) defined therapeutic alliance as the agreement between patient and therapist on therapeutic goals, consensus on treatment tasks, and the relationship bond. In a study on people with CG, Glickman and colleagues (2018) assessed therapeutic alliance through the Working Alliance Inventory (Horvath, 1989) and they found that therapeutic alliance, particularly the agreement on goals and tasks in the early phases of treatment, predicted better outcomes in grief therapy.

In addition, intervention strategies should use a patient-focused approach aimed to preserve the dignity of the caregivers. For example, through a creative approach, professionals might help patients to create a souvenir book to give relatives in order to let them to know that their loved one is supported and accompanied. With this discussion, we would like to highlight the importance of taking care of caregivers' and relatives' mental health of patients who had deceased during COVID-19 pandemic, to prevent the eventual development of psychological or psychiatric diseases.

We suggest implementing the use of cell-phones, tablets, personal computers to make calls or video-calls between hospitalized patients and their relatives, which is a practice that turned out to be beneficial for both the families, by promoting the acceptance of the illness, and the patients themselves (Moolla et al., 2020).

Also, healthcare services including hospitals and community services should create self-help online groups between relatives of deceased patients, to promote reprocessing, acceptance, and overcoming of the mourning. These groups can help people by sharing their feelings, hearing, and reading other's stories, promoting the idea that these people are not alone and giving them affection and closeness. During the last years, increasing evidence showed the feasibility and effectiveness of online self-help groups in the reduction of mourning, post-traumatic symptoms, and self-blame of the relatives of deceased or severely disabled patients such as patients died with degenerative diseases and patients with intellectual disabilities or severe psychiatric disorders (Armstrong and Alliance, 2019; Testoni et al., 2019; Wagner et al., 2020).

If these solutions demonstrated to be unsuccessful, public health services should guarantee free psychological or psychiatric help to these people, or later on we will face a huge development of constantly increasing and severe psychological problems.

Public health prevention strategies represent the future challenge for research and practice on CG and PCBD in people recognized as vulnerable for the development of such symptoms during the pandemic. In order to reduce the at-risk mental state for the onset of CG and PCBD, mental health public prevention programs should include tests directly targeting attachment styles that might predispose to CG and PCBD, i.e., the ways formed at the very beginning of life in which an individual relates to other people in intimate relationships. For example, in public health programs, psychoeducation protocols may be useful to inform vulnerable relatives about the specific features of the different phases of the bereavement process (Corr, 2019), including their cognitive, emotional, physiological, and behavioural signs. Group or Internet-delivered psychoeducation interventions may strengthen the personal resources and coping strategies of at-risk relatives and increase their awareness about their attachment styles and dysfunctional cognitive processes that can predict the onset of CG. As suggested by previous studies conducted in different contexts (Alves-Costa et al., 2018; Nam, 2016), psychoeducation-based preventive public health programs may be easily delivered through digital technologies and can normalize distressing feelings and avoidance behaviours of a normal coping process like bereavement.

5. Conclusions

After the declaration of pandemic status, due to the containment measures imposed by several, but not all governments, people were and are not yet allowed to visit their relatives, so that mourning rituals, such as funerals are prohibited, and cemeteries closed to the public. Therefore, people are no longer authorized to meet their relatives, and unable to give their beloved ones the latest goodbye that would allow them to process the loss. The restrictions used to face the COVID-19 outbreak can predispose vulnerable individuals to develop psychopathological conditions. Therefore, it appears particularly relevant to promptly identify the risk factors for and the protective features against the onset of such psychopathological conditions through screening and prevention programs.

Funding

agencies in the public, commercial, or not-for-profit sectors.

Ethics approval and consent to participate

Not applicable

Declaration of Competing Interest

The authors declare that they have no conflict of interests.

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This research did not receive any specific grant from funding

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