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Loss and grief amidst COVID-19: A path to adaptation and resilience



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The COVID-19 pandemic has posed an extreme threat to global health and become a leading cause of death worldwide. Loss, as a more encompassing theme, interweaves many aspects of people's life in this challenging time. Failure to address the pressing needs of those experiencing loss and grief may result in poor mental and physical health. Recognizing the uniqueness of each individual and their loss and grief will provide opportunities to develop tailored strategies that facilitate functional adaptation to loss and promote mental health and wellbeing in this crisis.

The COVID-19 pandemic poses an extreme threat to global health and is now a leading cause of death worldwide. As of 20 April 2020, the global death toll has surpassed 170,000 and continues increasing. Numerous families are undergoing significant losses in this pandemic. Meanwhile, frontline healthcare workers are experiencing psychological and physical symptoms of grief in response to patient suffering and death (Li et al., 2020). Loss is a more encompassing theme in our life, however. Losses not only involve separations from those we love, but also interweave many other aspects of our life in this crisis. Failure to address the pressing needs of individuals experiencing loss and grief may cause poor mental and physical health (Kang et al., 2020). Thus, discerning different types of loss and grief will inform the development of intervention strategies to facilitate functional adaptation to loss and promote wellbeing during the crisis.

Loss amidst COVID-19

Primary losses are associated with significant events such as death and major life changes. Secondary losses, as the consequences of primary losses, are often overlooked because they seem covert early on but will emerge as significant issues subsequently. Individuals who lost loved ones may face secondary losses such as losses of companionship, sexual intimacy, and family role. Those recovered from severe pneumonia caused by SARS-CoV-2 may be at higher risk of chronic cardiovascular damage (Zheng et al., 2020) which, as the primary loss, brings secondary losses such as losses of abilities and identity. Further, many cities are on lockdown. The loss of freedom can lead to secondary losses such as losses of relationship, recreation, and social support. Social distancing minimizes emotional and physical intimacy, which results in dissolution of intimate relationships involving partners, family, and friends. Moreover, over 16 million U.S. population filed for unemployment within three weeks in March 2020 during the pandemic (DOL, 2020). Job loss, as a primary loss, brings losses of financial security, independence, healthcare, and sense of future.

Multiple losses, as several primary losses occurring in this pandemic, are detrimental to mental and physical health, which puts civilians and first responders in peril of bereavement overload. Civilians experience losses of relationship, freedom, and employment within a constricted time period. First responders experience a surge in deaths caused by

COVID-19, and bereavement overload will impair their health (Allie et al., 2018). Additionally, more individuals experience ambiguous loss amid the pandemic. For example, first responders and patients under quarantine may experience physical separation with family, although they stay emotionally and psychologically connected. Furthermore, some individuals with COVID-19 experience stigmatized loss as they are blamed for contraction and transmission of SARS-CoV-2. Consequently, stigmatized loss leads to alienation, which impairs grievers' support network.

Grief amidst COVID-19

Grief is inevitable and multidimensional for individuals with losses. Grieving process reflects a unique convergence of responses (affective, cognitive, behavioural, physical, spiritual adjustments). Individuals having patients or family with severe complications of COVID-19 may experience anticipatory grief. For frontline healthcare workers, the huge surge in deaths is distressing. They experience anticipatory grief and perceive discontinuation of mechanical ventilation as emotionally onerous and psychologically difficult, but having little time for mourning due to the intensifying situation. Many families experience anticipatory grief because knowing their loved ones suffering and missing out on the final moment are poignant. Moreover, the absence of ritual, such as funeral, often results in disenfranchised grief, and lacking social or cultural recognition impairs support resources that assist the grieving process. As a result of unusual prolonged and disabling grief, more individuals are at greater risk of prolonged grief disorder (PGD) in this pandemic. PGD will imperil mental and physical wellbeing consequently because of the disturbance causing significant impairment in essential areas of functioning.

Recommendations

Increasing knowledge of the idiosyncratic nature of loss and grief is essential to inform the development of tailored strategies to help grievers adapt to loss in this challenging time. First, loss adaptation should be preferred over loss coping. Adaptation allows grievers to continually adjust to ongoing changes posed by the crisis. Contrastingly, coping implies a time-limited response to an event with specific skills (Corr and

Doka, 2001). Second, mental health professionals should encourage the exploration and employment of adaptive strategies (affective, cognitive, behavioural, physical, spiritual) consistent with grievers' personality and varying situations. Third, meaning reconstruction promotes functional adaptation to loss. Significant losses cause the disruptions of beliefs and expectations constituting one's meaning structures, which yields cognitive dissonance that results in substantial distress, hampering functional loss adaptation. By helping grievers understand and rebuild disrupted beliefs and expectations, mental health professionals can facilitate grievers' functional integration of loss and help them reconnect to self and the world. Lastly, identifying and developing resilience traits, such as self-efficacy and social support, will empower grievers to adapt to disturbances in the grieving process (Vegsund et al., 2019). It is therefore crucial to help grievers recognize strengths and abilities to amplify individual resilience.

Conclusion

The coronavirus pandemic will continue affecting many of us profoundly. Loss and grief emerge as familiar themes in the lives of many individuals, families, and communities in different contexts. Recognizing the uniqueness of each individual's loss and grief will provide opportunities to develop tailored strategies that facilitate functional adaptation to loss, and promote mental health and wellbeing in this crisis.

Declaration of interest

We declare no competing interests.

CRediT authorship contribution statement

Yusen Zhai: Conceptualization, Writing - original draft, Writing -

review & editing. Xue Du: Writing - review & editing.

References

- Allie, Z., Le Roux, E., Mahlatsi, K., Mofokeng, B., Ramoo, Z.A., Sibiya, K., Joubert, G., Van Rooyen, J.P., Brits, H., 2018. Bereavement overload and its effects on, and related coping mechanisms of health care providers and ward administrators at National District Hospital in Bloemfontein, Free State. Afr. J. Primary Health Care Family Med. 10, 1–7.
- Corr, C.A., Doka, K.J., 2001. Master concepts in the field of death, dying, and bereavement: coping versus adaptive strategies. OMEGA-J. Death Dying 43, 183–199.
- Kang, L., Ma, S., Chen, M., Yang, J., Wang, Y., Li, R., Yao, L., Bai, H., Cai, Z., Yang, B.X., Hu, S., 2020. Impact on mental health and perceptions of psychological care among medical and nursing staff in Wuhan during the 2019 novel coronavirus disease outbreak: a cross-sectional study. Brain Behav. Immun (in press).
- Li, Z., Ge, J., Yang, M., Feng, J., Qiao, M., Jiang, R., Bi, J., Zhan, G., Xu, X., Wang, L., Zhou, Q., 2020. Vicarious traumatization in the general public, members, and nonmembers of medical teams aiding in COVID-19 control. Brain Behav. Immun (in press)
- U.S. Department of Labor (DOL). Employment and Training Administration. Weeks Claimed in All Programs. 2020. https://oui.doleta.gov/press/2020/040920.pdf (accessed April 15, 2020).
- Vegsund, H.K., Reinfjell, T., Moksnes, U.K., Wallin, A.E., Hjemdal, O., Eilertsen, M.E., 2019. Resilience as a predictive factor towards a healthy adjustment to grief after the loss of a child to cancer. PLoS ONE 14, e0214138.
- Zheng, Y.Y., Ma, Y.T., Zhang, J.Y., Xie, X., 2020. COVID-19 and the cardiovascular system. Nat. Rev. Cardiol. 17, 259–260.

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