## Early loss of a parent may impact our immune systems



A recent paper has shed light on the long-term impact of parental loss or separation on <u>immune function in late life</u>. The study revealed that if a child under the age of 16 experienced the death of a parent or caregiver, or a separation lasting longer than six months, their immune function was adversely affected later in life.

To assess immune health, the researchers focused on cytomegalovirus (CMV), a virus belonging to the herpesvirus family. CMV affects a significant portion of the population, with higher prevalence in Asia and Africa. Interestingly, CMV provides insights into the functioning of the immune system. Unlike other viruses that are cleared by the body, CMV remains latent and can be reactivated during periods of stress, malnutrition, or trauma.

Across all racial and ethnic subgroups, the researchers found consistent associations between parental or caregiver loss and separation and poor immune function. However, racialized minority groups experienced even greater disparities compared to white individuals. Notably, non-Hispanic Black individuals who experienced parental loss before the age of 16 exhibited a 26% increase in CMV IgG antibodies in late life, while non-Hispanic white individuals had a 3% increase. This study highlights the inequitable distribution of parental loss, separation, and subsequent immune function. Losing a parent or experiencing separation can have farreaching consequences beyond immune health, impacting educational outcomes, <u>adult wealth</u>, health behaviours like smoking, and the prevalence of <u>chronic conditions</u>.

Journal article: Noppert, G.A. et al., <u>Biological expressions</u> of early life trauma in the immune system of older adults, *PLOS ONE*.

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