

How Grief Lives In The Body

Grief can have profound physical symptoms, and ancient traditions are insightful about the mind-body connection at the root of these symptoms. Modern science also points to the impact of brain functioning, particularly the links of grief to the limbic system and stress hormones. It's good to remain abreast of the many different physical effects of grief because that allows us to better understand our experiences, and perhaps mitigate their effects.

In a sense, we have an intuitive intelligence about grief's emotionality. Americans may expect it to resolve quickly, but we do expect a level of sadness and yearning in grief. When it takes the shape of physical/biological symptoms, however, grief can be quite surprising. "Physical responses [to grief] are an unanticipated and unwanted bonus," writes Litsa Williams, LCSW, co-founder at What's Your Grief, a grief education website (What's Your Grief).

These physical symptoms take on a range of qualities, among them bodily distress/aches and pains nearing the quality of flu symptoms (What's Your Grief). Many experience sleep disturbances too.

Meghan O' Rourke, a contemporary chronicler of grief in American culture (see her work in the episode 1 prep doc) remembers her experience after her mother's death: "The nights were long and hallucinatory; death seemed present in the room with me an enemy to have it out with then and there," she writes (Referenced in The Anatomy of Grief). People may also experience appetite disruptions, find themselves frequently distracted and forgetful, and have frequent headaches.

The physicality of grief illuminates the richness of the mind-body connection, the subject matter at the heart of the field of psychosomatic medicine. (Case in point, the American Psychosomatic Society is focused on promoting and advancing "the scientific understanding and multidisciplinary integration of biological, psychological, behavioral and social factors in human health and disease" (Psychosomatic Medicine)). Indeed, some of the early studies of grief's physiology in modern medicine were conducted in psychosomatic medicine (Research paper). But the ancient wisdom of Traditional Chinese Medicine (TCM) has long held sophisticated insights about the mind-body relationship. According to TCM, health and healing function in a loop: emotions impact the health of the body, and the health of the body impacts emotions (Very Well Mind).

TCM's insights place emotions in different parts of the body: anger in the liver, fear in the kidney, joy in the heart, worry in the spleen, and grief in the lung. These insights inform the work of acupuncture which targets parts of the body associated with each organ/emotion combination. For treating grief, acupuncture focuses on the inner arm. A key idea in TCM is also qi, a term that can be translated to life force. The lungs are responsible for distributing qi throughout the body (Encircle Acupuncture), and when they are weighed down by grief their functioning is impaired leading to shortness of breath, fatigue and cardiovascular disturbances.

This is consistent with the findings of modern medicine which note that people in grief may experience takotsubo cardiomyopathy, sometimes called broken heart syndrome. The condition is defined by a weakening of the left ventricle, the heart's main pumping chamber, and manifests in heart attack-like symptoms, including chest pain and shortness of breath (<u>Harvard Health Publishing</u>).

Broken heart syndrome is one of a group of more complex systemic health issues that can attend grief. Research has found that bereaved spouses are also at a higher risk for infection, cancer, and chronic



diseases like diabetes, in addition to cardiovascular disturbances. In addition, bereaved parents and spouses are nearly two times more likely to die than people who are not bereaved, and after a year, they are 10 percent more likely to die (The New York Times).

Many of these systemic issues associated with grief appear to come from the release of stress hormones that impact immunity. Summarizing a group of studies on the biology of grief, Dr. Chris Fagundes, a psychologist at Rice University, says "everything starts with the brain." It sets off the release of stress hormones that spread throughout the body (New York Times). Indeed, somatic medicine has identified the limbic system as the center of grief's biology. "Deeply related with stress, the limbic system...produces neuropeptides – molecules that carry messages between the brain and every cell, the endocrine system and the immune system" (Transforming Somatic Grief). The limbic system impacts levels of stress hormones, including cortisol and epinephrine (Wikipedia) which are connected to the occurrence of chronic illnesses like diabetes and heart disease.

In addition to the impacts of grief on the limbic system, the emotional intensity of grief can impact other neural pathways. "The stress of grieving activates a remodeling of neural pathways, known as neuroplasticity," says professor of neurology at University of Maryland and author of *Before and After Loss: A Neurologist's Perspective on Loss, Grief, and Our Brain* Lisa Shulman (<u>Brain & Life</u>). Shulman reports that fMRI scans of the brain indicate that grief impacts the cerebellum, which is associated with coordination, balance, emotions, and cognition. Coordination issues are consistent with self-reported grief experiences: "I trip. I bump into walls. I'm an old athlete and pride myself in my physique and coordination. Suddenly I feel like a clumsy oaf," says Barbara, who lost her adult son to suicide (<u>The Grief Toolkit</u>).

Even tears, the more familiar manifestations of grief's emotionality, offer interesting insights into the biological processes at work in grief. Research has identified three types of tears: basal tears, which are the kind that lubricate the eye, reactive or reflex tears which respond to environmental factors like dust and pollen, and emotional tears, which are expressions of feeling. Emotional tears are distinct in that they contain protein-based stress hormones: adrenocorticotropin, prolactin, and leucine-enkephalin. Leucine-enkephalin, has some pain-reducing qualities, is related to endorphins, and is part of why we experience relief when we cry emotional tears. Dorothy Holinger, author of *The Anatomy of Grief* writes: "The salutary effect on the body of emotional tears—their bio-chemical composition, and the way that crying emotional tears reduces stress—has been a focus of study for over thirty years. To cry after a loved one's death is generally healthy and beneficial" (The Anatomy of Grief).

Because the physical symptoms of grief are among the more surprising aspects of grief, people in grief may experience them with confusion and heightened distress, further worsening the experience of these symptoms (What's Your Grief). As a result, greater public awareness/education on these physical risks associated with grief appears to be a valuable step in mitigating grief's physical effects.

Dupe Oyebolu for The Mash-Up Americans