The Worm at the Core: On the Role of Death in Life

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Back of everything is the great specter of universal death, the all-encompassing blackness . . . We need a life not correlated with death . . . a good that will not perish, a good in fact that flies beyond the Goods of nature. . . . And so with most of us: . . . a little irritable weakness will bring the worm at the core of all our usual springs of delight into full view, and turn us into melancholy metaphysicians.

William James, The Varieties of Religious Experience

Terror management theory

Terror management theory posits that the juxtaposition of an inclination toward self-preservation with the highly developed intellectual abilities that make humans aware of their vulnerabilities and inevitable death creates the potential for paralyzing terror. One of the most important functions of cultural worldviews is to manage the terror associated with this awareness of death. This is accomplished primarily through the cultural mechanism of self-esteem, which consists of the belief that one is a valuable contributor to a meaningful universe. There are thus two basic components of what we refer to as the cultural anxiety-buffer, both of which are necessary for effective terror management: (a) faith in a meaningful conception of reality (the cultural worldview); and, (b) belief that one is meeting the standards of value prescribed by that worldview (self-esteem). Because of the protection from the potential for terror that these psychological structures provide, people are motivated to maintain faith in their cultural worldviews and satisfy the standards of value associated with their worldviews.

Empirical Assessments of Terror Management Theory

Self-esteem as anxiety buffer: If self-esteem functions to buffer anxiety, then raising self-esteem (or dispositionally high self-esteem) should reduce anxiety in response to subsequent threats.

Mortality salience and worldview defense: If cultural worldviews serve to provide beliefs about the nature of reality that assuage our anxiety associated with the awareness of death, then asking people to ponder their own mortality (mortality salience; MS) should increase the need for the protection provided by such beliefs, and result in vigorous agreement with and affection for those who share our beliefs (or are similar to us) and equally vigorous hostility and disdain for those who do not share our beliefs (i.e., are different from us). Worldview defense is our term for exaggerated evaluations of similar and different others following mortality salience.
Mortality salience: typical manipulation = two open ended questions: "Please briefly describe the emotions that the thought of your own death arouse in you."; and, Jot down, as specifically as you can, what you think will happen to you as you physically die." Other MS manipulations: death anxiety scales, exposure to gory videos, being interviewed in front of a funeral parlor, subliminal exposure to the word "dead" or "death"

Death thought accessibility: If self-esteem and cultural worldviews mitigate existential terror, then threats to self-esteem and/or threats to cherished cultural beliefs (i.e. meaning) should increase the accessibility of implicit death thoughts.

Psychopathology as terror mis-management

All individuals are confronted with death anxiety; most develop adaptive coping modes—modes that consist of denial-based strategies such as suppression, repression, displacement, belief in personal omnipotence, acceptance of socially sanctioned religious beliefs that “detoxify” death, or personal efforts to overcome death through a wide variety of strategies that aim at achieving symbolic immortality. Either because of extraordinary stress or because of an inadequacy of available defensive strategies, the individual who enters the realm called “patiethood” has found insufficient the universal modes of dealing with death fear and has been driven to extreme modes of defense. These defensive maneuvers, often clumsy modes of dealing with terror, constitute the presenting clinical picture.

Irvin Yalom, Existential Psychotherapy

- The effects of mortality salience on spider-phobia
- Out damn spot! The effects of mortality salience on obsessive-compulsive behavior
- Hell is other people. The effects of mortality salience on social anxiety
- Why Bother? Death, Failure, and Fatalistic Withdrawal From Life
- Fatal distraction: The effects of mortality salience on psychological dissociation

...dissociation lies at the heart of the traumatic stress disorders. Studies of survivors of disasters, terrorist attacks, and combat have demonstrated that people who enter a dissociative state at the time of the traumatic event are among those most likely to develop long-lasting PTSD. Previously, many clinicians...viewed the capacity to disconnect mind from body as a merciful protection, even as a creative and adaptive psychological defense against overwhelming terror. It appears now that this rather benign view of dissociation must be reconsidered. Though dissociation offers a means of mental escape at the moment when no other escape is possible, it may be that this respite from terror is purchased at far too high a price.

Judith Herman, Trauma and Recovery

Terror management and medical practice
The psychosocial effect of thoughts of personal mortality on cardiac risk assessment.

Background. Prejudice by medical providers has been found to contribute to differential cardiac risk estimates. As such, empirical examinations of psychological factors associated with such biases are warranted. Considerable psychological research implicates concerns with personal mortality in motivating prejudicial biases. The authors sought to examine whether provoking thoughts of mortality among medical students would engender more cautious cardiac risk assessments for a hypothetical Christian than for a Muslim patient.

Methods. During the spring of 2007, university medical students (N=47) were randomly assigned to conditions in a 2 (mortality salience)×2 (patient religion) full factorial experimental design. In an online survey, participants answered questions about their mortality or about future uncertainty, inspected emergency room admittance forms for a Muslim or Christian patient complaining of chest pain, and subsequently estimated risk for coronary artery disease, myocardial infarction, and the combined risk of either of the two. A composite risk index was formed based on the responses (on a scale of 0–100) to each of the 3 cardiac risk questions.

Results. Reminders of mortality interacted with patient religion to influence risk assessments, F1,41 =11:57, P=0:002, Z2 =:22. After being reminded of mortality, participants rendered more serious cardiac risk estimates for a Christian patient (F1,41 =8:66, P=0:01) and less serious estimates for a Muslim patient (F1,41 =4:08, P=0:05).

Conclusion. Reminders of personal mortality can lead to biased patient risk assessment as medical providers use their cultural identification to psychologically manage their awareness of death.

The Effects of Mortality Salience and Neuroticism on Treatment Preferences
Please read the following case and then respond to the questions below:

You are a family practitioner who is taking care of a 65-year old man who has severe lung disease. You have known him for about 15 years. His lung disease has gotten progressively worse. Over the last 18 months he has been hospitalized three times. Each time he is hospitalized he has required mechanical respiratory support (a respirator). Each time he improves enough to go home. At home, however, he must be on 24 hours a day oxygen therapy. He can't leave the house without his oxygen; he can do nothing without his oxygen. He has made it clear to you (with an Advanced Directive) that he doesn't want any aggressive therapy that would not result in curing him or reversing all the things he doesn't like about the way his life currently is. He deteriorated further. His family panicked and concerned, take him to the emergency room. You meet him and the family at the emergency room. You are now confronted with the concerns of the family, the wishes of the patient and the resources of the emergency department. The patient appears to you to be coherent and understands the situation. He reiterates his treatment philosophy.

Medical & Psycho-Social Interventions

*Happy the hare at morning, for she cannot read
   The hunter’s waking thoughts, lucky the leaf
   Unable to predict the fall, lucky indeed
   The rampant suffering suffocating jelly
   Burgeoning in pools, lapping the grits of the desert.
   But what shall man do, who can whistle tunes by heart,
   Knows to the bar when death shall cut him short like the cry of the shearwater,
   What can he do but defend himself from his knowledge?*

W.H. Auden, *The Cultural Presupposition*

People die and murder, nurture and protect, go to any extreme, in behalf of their conception of the real. More to the point, perhaps, they live out the details of their daily lives in terms of what they conceive to be real: not just rocks and mountains and storms at sea, but friendship, love, respect are known as false or real...This is the domain of meaning making, without which human beings in every culture fall into terror. The product of meaning making is Reality. So how human beings construct their meanings needs necessarily to be at the center of the study of the human condition.

Jerome Bruner, introduction to Bradd Shore's *Culture in Mind: Cognition, Culture, and the Problem of Meaning*

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**Early Palliative Care for Patients with Metastatic Non–Small-Cell Lung Cancer**

**Background:** Patients with metastatic non–small-cell lung cancer have a substantial symptom burden and may receive aggressive care at the end of life. We examined the effect of introducing palliative care early after diagnosis on patient-reported outcomes and end-of-life care among ambulatory patients with newly diagnosed disease.

**Methods:** We randomly assigned patients with newly diagnosed metastatic non–small-cell lung cancer to receive either early palliative care integrated with standard oncologic care or standard oncologic care alone. Quality of life and mood were assessed at baseline and at 12 weeks with the use of the Functional Assessment of Cancer Therapy–Lung (FACT-L) scale and the Hospital Anxiety and Depression Scale, respectively. The primary outcome was the change in the quality of life at 12 weeks. Data on end-of-life care were collected from electronic medical records.

**Results:** Of the 151 patients who underwent randomization, 27 died by 12 weeks and 107 (86% of the remaining patients) completed assessments. Patients assigned to early palliative care had a better quality of life than did patients assigned to standard care (mean score on the FACT-L scale [in which scores range from 0 to 136, with higher scores indicating better quality of life], 98.0 vs. 91.5; P = 0.03). In addition, fewer patients in the palliative care group than in the standard care group had depressive symptoms (16% vs. 38%, P = 0.01). Despite the fact that fewer patients in the early palliative care group than in the standard care group received aggressive end-of-life care (33% vs. 54%, P = 0.05), median survival was longer among patients receiving early palliative care (11.6 months vs. 8.9 months, P = 0.02).

**Conclusions:** Among patients with metastatic non–small-cell lung cancer, early palliative care led to significant improvements in both quality of life and mood. As compared with patients receiving standard care, patients receiving early palliative care had less aggressive care at the end of life but longer survival.

**Pilot randomized controlled trial of individual meaning-centered psychotherapy for patients with advanced cancer.**


**Abstract—PURPOSE:** Spiritual well-being and sense of meaning are important concerns for clinicians who care for patients with cancer. We developed Individual Meaning-Centered Psychotherapy (IMCP) to address the need for brief interventions targeting spiritual well-being and meaning for patients with advanced cancer.

**PATIENTS AND METHODS:** Patients with stage III or IV cancer (N = 120) were randomly assigned to seven sessions of either IMCP or therapeutic massage (TM). Patients were assessed before and after completing the intervention and 2 months
postintervention. Primary outcome measures assessed spiritual well-being and quality of life; secondary outcomes included anxiety, depression, hopelessness, symptom burden, and symptom-related distress.

RESULTS: Of the 120 participants randomly assigned, 78 (65%) completed the post-treatment assessment and 67 (56%) completed the 2-month follow-up. At the post-treatment assessment, IMCP participants demonstrated significantly greater improvement than the control condition for the primary outcomes of spiritual well-being (b = 0.39; P < .001, including both components of spiritual well-being (sense of meaning: b = 0.34; P = .003 and faith: b = 0.42; P = .03), and quality of life (b = 0.76; P = .013). Significantly greater improvements for IMCP patients were also observed for the secondary outcomes of symptom burden (b = -6.56; P < .001) and symptom-related distress (b = -0.47; P < .001) but not for anxiety, depression, or hopelessness. At the 2-month follow-up assessment, the improvements observed for the IMCP group were no longer significantly greater than those observed for the TM group.

CONCLUSION: IMCP has clear short-term benefits for spiritual suffering and quality of life in patients with advanced cancer. Clinicians working with patients who have advanced cancer should consider IMCP as an approach to enhance quality of life and spiritual well-being.

Dreaming of Immortality in a Thatched Cottage (T'ang Yin, 1470-1523)

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