

# Meaning and Dignity Therapies for Psychoneurology in Neuropalliative Care: A Vision for the Future

Leonard L. Sokol, MD,<sup>1,2</sup> Hillary D. Lum, MD, PhD,<sup>3,4</sup> Claire J. Creutzfeldt, MD,<sup>5</sup>  
David Cella, PhD,<sup>1,6</sup> Jodi Forlizzi, PhD,<sup>7</sup> Moran Cerf, PhD,<sup>8</sup>  
Joshua M. Hauser, MD, FAAHPM,<sup>9-11</sup> and Benzi M. Kluger, MD, MS, FAAN<sup>12</sup>

## Dear Editor:

In the early 2000s, universities staged a lecture series entitled, “The Last Lecture.” Professors were invited to reflect on facets of their lives, which often included childhood dreams, photographs, stories, and how they provided a persistent sense of meaning to their vitae.<sup>1</sup> The notion of such “Last Lecture” was popularized in 2007 when Carnegie Mellon Professor Randy Pausch delivered his address but stated that his presentation was directed neither to his students nor his colleagues, but rather to his young children, to whom he wanted to impart life lessons that they would be able to review in the years after his death.<sup>1</sup>

## Psycho-Oncology and Palliative Medicine

Storytelling, as was used by Professor Pausch, is a natural way of communicating; it plays a role in everything from legal testimony to psychotherapy. Elements of storytelling share roots with psychotherapeutic frameworks employed in the field of psycho-oncology.<sup>2</sup> Meaning-centered psychotherapy (MCPT) and dignity therapy (DT) have been shown to help reduce complex psychological symptoms.<sup>3</sup> Although there are abundant data on the role of these interventions for individuals with cancer, there are minimal data on their role for individuals with neurological conditions and their loved ones.

## Psychoneurology and Neuropalliative Care

The nascent field, which we term “psychoneurology” or “psychosocial neurology,” seeks to identify and address psychosocial responses and existential distress of individuals with neurological conditions and their loved ones, which

reflects the priorities highlighted at a pivotal neuropalliative meeting.<sup>4</sup> In the decades to come, the exploration of what psycho-oncological interventions (e.g., MCPT, DT) may be adapted for psychoneurology merits further evaluation. Nevertheless, the structure, timing, and needs of psychoneurological interventions are likely distinct from psycho-oncological interventions. As neurological conditions often affect the cognitive, language, and emotional resources essential to coping, modifications to methods may be required. Similarly, the impact of brain disease on an individual’s volition, self-perception, memory, and identity merits consideration regarding the content and target of interventions. For example, for those affected by progressive dementing conditions, the intended beneficiaries of artifacts may extend beyond their family to also include their future self.

## Vision for the Future

After the adaptation of therapies, secondary issues will be *who* will derive benefit and *how* to disseminate these approaches. As for the *who*, a personalized approach—rather than a best practice—will be necessary to know for whom such intervention will likely be efficacious. For the *how*, we anticipate modifications to the psycho-oncological tools. Looking to the future and dissemination, the construction of Internet-based technologies that apply these interventions to the neurological population may be crucial and requires evidence that they are as useful as in-person (Fig. 1).

Psychoneurological interventions could aid an individual in exploring two essential ideas. The first is a forward-looking approach (e.g., MCPT) and asks, “What can help me discover

<sup>1</sup>The Ken and Ruth Davee Department of Neurology, Northwestern University Feinberg School of Medicine, Chicago, Illinois, USA.

<sup>2</sup>McGaw Bioethics Scholars Program, Center for Bioethics and Humanities, Northwestern University Feinberg School of Medicine, Chicago, Illinois, USA.

<sup>3</sup>Division of Geriatric Medicine, University of Colorado School of Medicine, Aurora, Colorado, USA.

<sup>4</sup>Eastern Colorado VA Geriatric Research Education and Clinical Center, Rocky Mountain Regional VA Medical Center, Aurora, Colorado, USA.

<sup>5</sup>Department of Neurology, University of Washington, Seattle, Washington, USA.

<sup>6</sup>Department of Medical Social Sciences, Northwestern University Feinberg School of Medicine, Chicago, Illinois, USA.

<sup>7</sup>Human-Computer Interaction Institute, School of Computer Science, Carnegie Mellon University, Pittsburgh, Pennsylvania, USA.

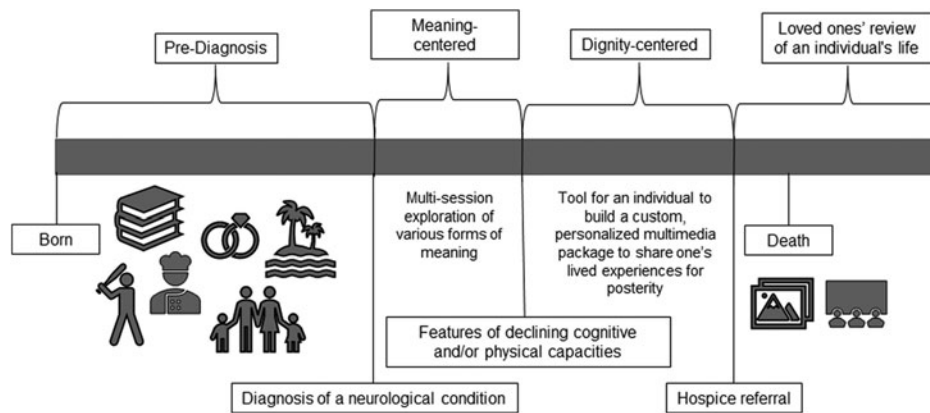
<sup>8</sup>Kellogg School of Management, Northwestern University, Evanston, Illinois, USA.

<sup>9</sup>Center for Bioethics and Medical Humanities, Institute for Public Health and Medicine, Northwestern University Feinberg School of Medicine, Chicago, Illinois, USA.

<sup>10</sup>Section of Palliative Medicine, Department of Medicine, Northwestern University Feinberg School of Medicine, Chicago, Illinois, USA.

<sup>11</sup>Palliative Care Service, Jesse Brown VA Medical Center, Chicago, Illinois, USA.

<sup>12</sup>Departments of Neurology and Medicine, University of Rochester Medical Center, Rochester, New York, USA.



**FIG. 1.** An example timeline of when to institute psychoneurological interventions for an individual's life given a generic neurological condition's trajectory.

what remains meaningful and may become meaningful as my condition progresses?" The second reflects a backward-looking approach (e.g., DT) and may arise as one approaches diminished cognitive or physical capacities. This asks, "How can I develop a shared legacy and record of what I have found meaningful in life, and how can I create a unique presentation that can be distributed to my loved ones?" Personalized templates may aid with this backward-looking approach, and artificial neural networks could help mine electronic data (e.g., pictures) to assist with the curation of a legacy.

Advancing the state of the science of psychoneurology will require a commitment to stakeholder engagement, usability testing, and continuous refinement, alongside pilot and randomized controlled studies that leverage qualitative and quantitative research methods—all with an inherently interdisciplinary team-based science approach.

#### Authors' Contributions

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Address correspondence to:

Leonard L. Sokol, MD  
The Ken and Ruth Davee Department of Neurology  
Feinberg School of Medicine  
Northwestern University  
710 N. Lake Shore Drive  
Chicago, IL 60611  
USA

E-mail: leonard.sokol@northwestern.edu