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Discussion

Affective science and avoidant end-of-life communication: Can the science of emotion help physicians talk with their patients about the end of life?

Jesse A. Soodalter[a,b,*], Greg J. Siegle[c], Michele Klein-Fedyshin[d], Robert Arnold[a,b], Yael Schenker[a,b]

[a] Section of Palliative Care and Medical Ethics University of Pittsburgh Pittsburgh, USA
[b] Palliative and Supportive Institute UPMC Health System Pittsburgh, USA
[c] Department of Psychiatry University of Pittsburgh Pittsburgh, USA
[d] Health Sciences Library System University of Pittsburgh Pittsburgh, USA

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ABSTRACT

Despite believing end-of-life (EOL) discussions with patients are important, doctors often do not have them. Multiple factors contribute to this shortfall, which interventions including reimbursement changes and communication skills training have not significantly improved to date. One commonly cited but under-researched reason for physician avoidance of EOL discussion is emotional difficulty. High occupational demand for frequent difficult discussions may overload physicians' normal emotional functioning, leading to avoidance or failure. We propose that cognitive, behavioral, and neuroscience evidence from affective science may offer helpful insights into this problem. Data from other populations show that strong emotion impairs cognitive performance and multiple demands can overload cognitive resources. We discuss several affective processes that may apply to physicians attempting EOL discussions. We then discuss selected interventions that have been shown to modify some of these processes and associated behavioral outcomes. Evidence for change in behavioral outcomes of interest includes performance and mood enhancement in healthy populations. We suggest that such mechanistically-targeted interventions may be hypothesized to help decrease physician avoidance of EOL discussion. Physicians may be motivated to adopt such interventions in order to enhance normal emotional functioning to meet supra-normal occupational demand. We propose this as a promising area of future study.

1. Introduction

Dr. M went in to see her patient Mrs. S, intending to discuss the patient's progressing metastatic colon cancer, prognosis, and goals of care. But as soon as she disclosed the scan results, Mrs. S began to cry and her husband became angry and confrontational. Back-pedaling, Dr. M suggested another line of chemotherapy, although inwardly she had little expectation of benefit. This made Mrs. S feel better, and in the moment Dr. M did too. But as she left the exam room, her gut told her she'd let Mrs. S down. Why couldn't she stay the course for that realistic conversation? And why was she dreading revisiting it the next time?

Most doctors believe discussing end of life (EOL)-related issues with their seriously ill patients is important [1]. Evidence shows patients and their families benefit from such discussions in significant ways, including mood, satisfaction with care, EOL preparedness, and quality of death [2–6]. Nonetheless, physicians often fail to have these discussions [1,7–10].

There are multiple potential reasons for this shortfall, including systems issues like time constraints; patient- and family-related factors such as refusal or inability to engage in EOL discussion, fear of destroying hope, and linguistic or cultural barriers; and physician factors, including feeling inadequately skilled [11–13].

* Corresponding author at: Section of Palliative Care and Medical Ethics, Division of General Internal Medicine, UPMC Montefiore 933W, 200 Lothrop Street, Pittsburgh, PA 15213 USA.
E-mail address: jas572@pitt.edu (J.A. Soodalter).

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Although recent American reimbursement changes attempt to incentivize such discussions, they do little to address the difficult structural problem of time pressure. Although many physicians are now receiving communication skills training, the frequency of EOL conversations remains low [14].

A possible explanation for interventions' low efficacy may lie in another, less-investigated reason: EOL topics arouse strong, often negative emotions, in patients, family members, and clinicians [15–17]. Strong emotion is well known to interfere with cognitive function and to influence performance and behavior [18–20]. Although doctors become desensitized to many aversive stimuli through repeated exposure, this does not seem true of EOL discussions: later-career physicians report finding them as stressful as trainees and admit to even more pronounced behavioral avoidance [21].

Affective science integrates behavioral, cognitive, and neuroscience perspectives to describe how emotions arise and are maintained and regulated. There are several reasons to consider affective-science processes in relation to the problem of physician avoidance of EOL discussion. Cognition is thought to function as a system with finite capacity, vulnerable to overload [22]. Emotionally intensive discussions impose excessive load, diverting resources from other cognitive functions. We suggest that for many types of physicians, frequent need to discuss the EOL may overload their (normal) emotional functioning with supranormal occupational demands. Affective science research may offer the promise of enhancing function through mechanistic interventions, resulting in improved cognitive control over emotion, and thereby more and better EOL discussions.

We propose that affective science offers compelling insights into possible emotion-driven mechanisms of avoidant EOL communication. (We use 'avoidance' here to refer to any behaviors that result in physicians, intentionally or unintentionally, not achieving EOL conversations with patients.) We describe mechanisms implicated in avoidance from the affective-science literature, illustrating the roles they might play in the hypothetical case described above (see Supplement, Table 1, for selected mechanisms and associated neural circuits and structures). We then identify interventions that have been shown to modify these mechanisms and may be of potential utility in reducing physician avoidance.

2. Mechanisms of emotion-related avoidance

2.1. Before the discussion

> *Dr. M went in to see her patient Mrs. S, intending to discuss the patient's progressing metastatic colon cancer, prognosis, and goals of care.*

Before the encounter begins, several processes are already active in Dr. M's brain, shaping her motivation to either proceed with or avoid the discussion (see Fig. 1). Some are more implicit, i.e., occurring rapidly and automatically, rather than through effort. Others tend to be more explicit, manifesting within the individual's awareness and variably subject to effortful control.

2.1.1. Anticipation of negative feelings

Negative past experiences with EOL discussions may have conditioned Dr. M to anticipate that a recurrence will cause negative feelings. This expectation may result in behavioral avoidance, i.e., not actually doing the thing anticipated to be unpleasant. It may also lead to worrying, sometimes conceived of as a form of cognitive avoidance, in which the worrier attempts to avoid the anticipated distress of a future event by thinking of ways to prevent its occurrence, by expecting the event and therefore forestalling unpleasant surprise, and/or by preparing to suppress their emotional reactivity to it [23–25].

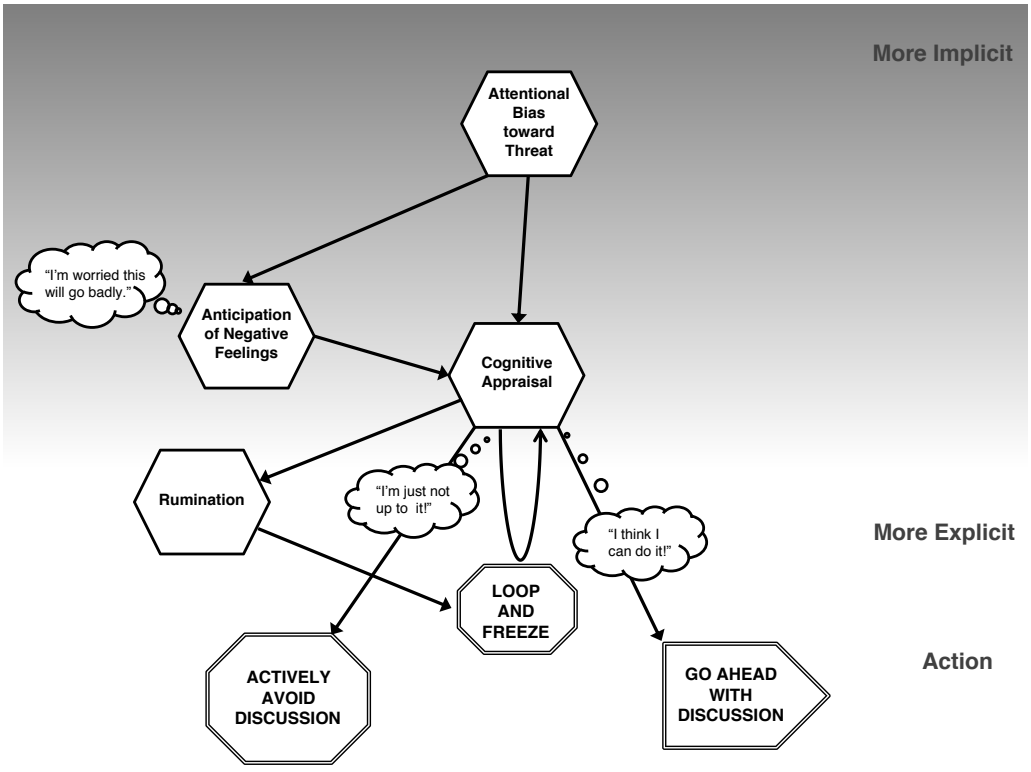

Fig. 1. Before the Discussion.

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