Emerging From the Haze™: Pilot Feasibility Study Comparing Two Virtual Formats of a Cognitive Rehabilitation Intervention

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OBJECTIVES: To gather feasibility and preliminary data comparing two virtual delivery methods for providing Emerging From the Haze™ (Haze) to cancer survivors compared to waitlist control (WLC).

SAMPLE & SETTING: Eligible participants (N = 93) reported cancer-related cognitive impairment following chemotherapy for stage I–III solid tumors, Hodgkin lymphoma, or non-Hodgkin lymphoma.

METHODS & VARIABLES: A three-arm randomized design was used to compare virtual live group presentation of Haze sessions, virtual prerecorded Haze group sessions, and WLC. Data were collected at baseline, week 10, and week 14.

RESULTS: Feasibility was demonstrated. Significant cognitive function improvement at week 10 versus WLC was reported for the live group, and clinical improvement was reported for the prerecorded group. The prerecorded group reported significant improvement at week 14 versus WLC in physical activity, sleep, and health-related quality of life.

IMPLICATIONS FOR NURSING: Additional pilot and feasibility evidence for cognitive rehabilitation interventions was demonstrated. Prerecorded Haze delivery shows potential for clinical effectiveness and scalability. Future multisite research is warranted.

KEYWORDS cognition; cognitive rehabilitation; telemedicine; cancer survivors

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The cognitive sequelae of cancer and cancer-related treatment for non–central nervous system malignancies, referred to as cancer-related cognitive impairment (CRCI), occur in as many as 75% of patients with cancer during treatment and continue for years post-treatment in about 35% of these patients (Ahles & Root, 2018; Ahles & Saykin, 2007; Henneghan et al., 2021, 2023; Janelsins et al., 2014; Koppelmans et al., 2014; Wefel et al., 2004). CRCI can be extremely distressing and may profoundly affect health-related quality of life (HRQOL), occupational achievement, social reintegration, and identity (Ahles et al., 2012; Boykoff et al., 2009; Crouch et al., 2022; Henderson et al., 2019; Myers, 2012; Von Ah et al., 2012). Research designed to mitigate the cognitive effects of cancer and cancer therapy is a key component of the Oncology Nursing Society Research Agenda's priority area of palliative care and psychosocial oncology, particularly regarding the need to "determine the most effective interventions to improve patient and caregiver HRQOL" (Von Ah et al., 2019, p. 660)

Effective, evidence-based options for managing or treating CRCI that can be widely disseminated are extremely limited and urgently needed. Research to address this knowledge gap is crucial to promote HRQOL for cancer survivors. The efficacy of pharmacologic treatments has been inconclusive in this population, and these treatments are unlikely to address the wide-ranging and multifaceted concerns related to CRCI (Allen et al., 2018; Asher & Myers, 2015). Cognitive rehabilitation is an umbrella term that encompasses cognitive training, strategy training, and cognitive behavioral therapy (Dos Santos et al., 2020; Fernandes et al., 2019; Lange et al., 2019). Research indicates that cognitive rehabilitation and