Cognitive decline in cancer: Investigating a brain training intervention

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Status	RECRUITING
Sponsor	Curtin University
Enrollment	100 participants

Plain Language Summary

Cancer treatment can affect thinking, memory, and concentration in ways that significantly impact daily life — a cluster of symptoms often referred to as "chemo brain." This study is investigating whether a structured cognitive training program (brain training) can help people with cancer who are experiencing these difficulties. It is the second part of a two-part study: participants are first screened for cognitive impairment (in the related cross-sectional study), and those who show measurable impairment are invited to join this intervention trial.

The brain training intervention involves completing puzzles, word games, and memory exercises for a total of 12 hours over six weeks, using a phone, tablet, or computer. Cognitive tests, questionnaires, and blood samples will be collected before the training, one week after it finishes, and again three months later to track whether the training leads to lasting improvements in memory, attention, and quality of life.

You may be eligible if you are 18 or older, have a non-brain cancer and are currently receiving treatment in the Perth/Peel region of Western Australia, have internet access and a smart device, and have been found to have objective cognitive impairment on assessments completed in the cross-sectional phase of the study. You would not be eligible if you have a pre-existing cognitive or developmental condition, a neurodegenerative disease, are pregnant, or have cancer that has spread to the brain.

Key Eligibility Criteria

Inclusion (2)

- Participants invited to take part in the RCT will have cancer, access to and ability to use a phone/tablet/computer with internet for six weeks, and will demonstrate cognitive impairment, operationalised by scores meeting one or more of the following criteria (Vardy et al., 2007; Wefel et al., 2011): scores = 1.0SD below the norm on two or more objective cognitive measures; or score of = 1.5SD below the norm on one or more objective cognitive measures; Global Deficit Score (GDS) = 0.5 points. GDS = mean of deficit scores (which are converted from T scores). A GDS of 0.5 or greater indicates the mean of the objective cognitive measure scores is = 1SD below the norm. Note that “norm” means demographic matched normative scores from neuropsychological compendium.
- If necessitated, subjective impairment will also be considered; evidence thereof will be identified through FACT-Cog Perceived Cognitive Impairment (18-item) subscale scores < 54 (Dyk et al., 2020).

Locations (1 total)

WA, Australia