Communication Bridge: A person-centered Internet-based intervention for individuals with primary progressive aphasia

Northwestern University, Dr. Emily Rogalski, PI Dr. Melanie Fried-Oken, OHSU site PI NIH/National Institute on Aging R01AG055425

Language impairment (aphasia) is the defining feature of the clinical dementia syndrome primary progressive aphasia (PPA) and significantly compromises the diagnosed individual's independence and activities of daily living. There are currently no treatments to reverse the degenerative process responsible for PPA, which is caused by Alzheimer's disease or a form of frontotemporal lobar degeneration. Nonpharmacological interventions including speech-language treatment may offer significant benefit to the diagnosed individual's quality of life, but there are few efficacy studies and no guidelines to direct best clinical care practices. There are also several barriers to accessing care. Individuals with PPA are under-referred for nonpharmacological services, making it challenging for families to find care unless the individual with PPA lives near an informed specialist. Evidence-based research outcomes from speech-language therapy studies are promising but have been limited to case reports or small groups of local patients and often lack a control group. This project will circumvent both geographic limitations and poor access to care by using a previously validated telepractice model to deliver speech-language treatments to adults with PPA. The proposed study will use a randomized controlled trial design (RCT) to evaluate whether a person-centered treatment (Experimental) for adults with mild PPA maximizes functional communication participation as compared to a dose-matched impairment-only treatment (Control). Ninety individuals with a diagnosis of PPA and their actively-engaged care partners will be enrolled into the study. Both the Experimental and Control arms of the study will receive treatment and evaluations over the course of 12 months. The trial will be supported by a custom web-application, which has an aphasia-friendly design and provides a place for participants to connect to evaluation and treatment sessions. Participants will also use the web-application to receive weekly To-Do lists of home exercises, which are provided to reinforce evidencebased strategies learned during treatment sessions and to facilitate implementation into the context of daily life. Aim 1 will determine the within-group response of the Experimental and Control treatments for individuals with PPA. Aim 2 will determine between group differences in treatment outcomes. In the absence of a cure for dementia, it is important to identify and evaluate strategies that help individuals maximize their quality of life, and this study will help fulfill this need.