

Life After Stroke: A Sensory Health Initiative

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Introduction

Strokes affect over 795,000 Americans annually and 80% of those affected survive. It is necessary to develop interventions that aid the recovery of stroke survivors to regain their function and improve their quality of life. This project's long-term goals are to create interventions and resources that support the sensory health and participation in meaningful activities of adult stroke survivors. To achieve this long-term goal, we engaged in collaborative participatory methods with stakeholders to achieve the following objectives and aims:

- 1. Identify the sensory health needs of stroke survivors including specific knowledge gaps in the literature
 - a. Umbrella review of literature
- 2. Develop research questions and study protocols that look into the impact of sensory health needs on recovery and participation in daily activities
 - a. Focus groups to gain insight into the sensory health of adults post stroke.

Team 1: Umbrella Review

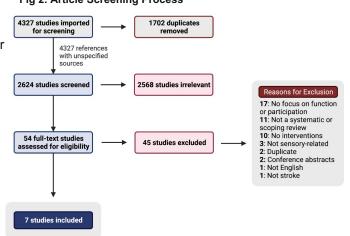
Methods

- Inclusion Criteria: "Stroke",
 "adults", "sensory", "systemic or
 scoping review", "focus or function or
 participation."
- Exclusion Criteria: "animals", "minors", not a systematic/ scoping review, not focused on sensory health & function.
- Databases Searched: Medline, Embase. CINAHL.
- Search Terms: Visual, tactile, olfactory, vestibular, proprioceptive, gustatory, participation
- Analysis: Covidence was used to review articles and for data extraction.
- Two reviewers independently screened each article and completed data extraction.
- Data extraction completed in Excel



Fig 1. Timeline of Umbrella Review

Fig 2. Article Screening Process



Preliminary Results and Conclusions:

- 7 articles summarized: 4 somatosensory dysfunction, 2 visual impairment, 1 multisensory (e.g., tactile, olfactory, auditory).
- Vision and somatosensory impairments were prevalent post-stroke; impacting functional performance, participation in valued activities and motor ability.
- More research is needed about the sensory health of adults post-stroke

Team 2: Focus Groups with Stakeholders

Methods

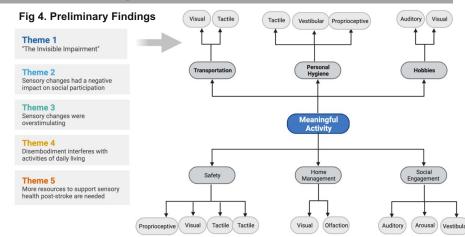


- **Inclusion Criteria:** Able to participate in a virtual focus group, no severe aphasia, experience with stroke as survivor, therapist or caregiver.
- Method: Four 90-minute focus groups on zoom
- Analysis: Focused coding using N-Vivo software
- Four independent coders completed 6 hours of transcription. Iterative discussions for consensus

Preliminary Results:

Sensory changes were common for adults post stroke

- Sensory changes were not sufficiently addressed in the clinic or in therapy.
- Adults post stroke became aware of many sensory health issues post-discharge while engaged in activities of daily living
- Clinicians do not have adequate tools or knowledge to address sensory health.



Implications:

- Clinicians should screen for sensory health in adults post-stroke
- Research is needed to develop protocols for assessment and intervention to address the sensory health in stroke