**CONDUCTING COMMUNICATIVELY ACCESSIBLE HEARING SCREENINGS FOR PEOPLE WITH APHASIA:**

**A Pilot Project**

**BACKGROUND**

In Ontario, Canada, 35% of stroke survivors have aphasia (Dickey et al., 2010). Aphasia is an acquired language disorder that impacts expressive and receptive language (Patt, Byng, & Glitn, 1997). People with aphasia (PWA) already experience difficulty communicating and therefore it is critical to determine if they also have hearing loss. Untreated hearing loss may exacerbate existing communication issues and impact audiological services and quality of life (Silkes, 2012). Hearing screening protocols for adults frequently pair an air conduction pure tone screening with a questionnaire. The presence of hearing loss may exacerbate existing communication issues and impact audiological services and quality of life (Silkes, 2012).

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- **Mod-Severe 9**
- **Mild 9**
- **Mild-Mod 10**
- **Moderate 12**
- **Mod-Severe 9**
- **Severe 7**

**METHODOLOGY**

**PARTICIPANTS**

Inclusion criteria: 1. Person with aphasia. 2. No previous diagnosis of hearing loss (see figure 1). All demographic information and type and severity of aphasia were identified through chart review (see figure 2).

**COMMUNICATIVELY ACCESSIBLE RESOURCES AND SCA™**

A speech-language pathologist (S-LP) developed all communicatively accessible resources prior to the hearing screening (i.e., consent form, hearing screening instructions, communicatively accessible hearing handicap questionnaire (CAHHQ), results and follow-up information). SCA™ and resources were paired throughout the pilot project (see figure 3).

**STUDENT TRAINING**

Eight graduate students in speech-language pathology, who had completed a course in Applied Audiology, were provided with basic SCA™ training and oriented to the equipment. An audiologist and S-LP provided training and students were supervised throughout the pilot project.

**HEARING SCREENING**

The students conducted hearing screenings at 1000, 2000 and 4000 Hz at 25 dB HL. Participants received either a “pass” or a “refer” result (see figure 4).

**HEARING HANDICAP QUESTIONNAIRE**

A CAHHQ was constructed using the format of the Hearing Handicap Index for the Elderly, short version (Ventry & Weinstein, 1983). The students administered the questionnaires to participants in an interview format (see figure 5).

**RESULTS AND DISCUSSION**

100% of participants were able to complete the hearing screening and CAHHQ. The results were statistically significant ($p = .01$), indicating that the participants perceiving themselves to be more impacted by hearing loss on the CAHHQ were the same participants that received a “refer” result on the hearing screening. 70% of the participants received a “refer” result. Of significance is the fact that receiving a “refer” was related to their age ($p = .008$) as well as their overall hearing handicap score and not related to the severity of the aphasia. The one question that achieved significance on its own was “Does it sound like people mumble?” ($p = .04$). Consequently, this question might be the most important of the questions used in determining whether PWA feel their hearing related issues impact their ability to function.

**CONCLUSION**

This pilot study successfully implemented a communicatively accessible hearing screening protocol with PWA. Use of communicatively accessible resources for audiological services is consistent with Silkes (2012), Rankin, Newton, Parker, and Bruce (2014) as well as the Canadian Best Practice Guidelines for Stroke Care (Lindsay, Gubitz, Bayley, & Phillips, 2013). Hearing screenings and hearing handicap questionnaires can be successfully administered to PWA when used with SCA™ and when communicatively accessible.