**CLINICAL BOTTOM LINE:**
Promising preliminary results for volunteer training and conversational based input with nursing home residents with aphasia. A larger sample size with more homogeneity is required.

**IS CHANGE REQUIRED TO CURRENT CLINICAL PRACTICE?**  
☐ Yes  ☐ No  ☑ Undecided, more evidence needed

**Clinical Question** [patient/problem, intervention, (comparison), outcome]:
Is it feasible to implement a volunteer communication partner scheme in Newcastle and what results could we expect?

**Citation:** Hickey, E., Bourgeois, M., & Olswang, L. (2004). Effects of training volunteers to converse with nursing home residents with aphasia. *Aphasiology*. 18. 625-637.

**Method: Design and Procedure** (e.g., note type of research design, comment on randomization, summarize treatment intensity as appropriate, such as dose (trials) per session, session length, frequency, total treatment duration, summarize general procedure, resources / materials required)

**Purpose:** To assess the effectiveness of trained volunteers (students) using multi-modal communication during conversational interactions with Nursing Home patients with Broca’s aphasia. Goal to increase comprehensible utterances. Questions: 1. Does the patient’s comprehensible utterances increase, 2. Does the training work and do the students use of multi-modal communication increase post training during probe conversations (and in how many training sessions do they achieve this in), 3. Do the students maintain good multi-modal communication style and 4. Are there changes in communication across dyads clinically significant (as determined by observation and ratings of unfamiliar judges).**

**Design:** ABA design across multiple baseline’s (subjects and partners) looking at interactions and use of multi-modal communication from probe questions. Students moved from levels (baseline, with subject and trainer, independent) once they were achieving stable use of multi-modal communication aspects as determined by fidelity training. Moved to conversations with patients independently once using it 70% of time. Looked at 1) baseline 2) training and 3) post training, primary variable assessed were volunteer’s communication modalities and patient comprehensibility. **TIME** for this not specifically documented but occurred over weeks.

**Training:** Students received training X3 times per week by a certified SP, included 5 steps (including education, identify communication modalities via videotape, self-evaluation of the use of multi-modal communication, conversation practice with feedback and conversation feedback with no online feedback.). Each training day was followed by a probe conversation at the Nursing Home. Visual stimuli were used in all interactions (e.g. newspaper, atlas, cards) as probes. NO information on TIME spent training in total.

**Data Collection:** Conversation probes for 10mins x3 per week (examiner instructed then left the students with patient and recorded interaction), used SALT to analyse (this information is given on page 628-629) video tapes. Social validation measures were obtained from 15 unfamiliar judges (SP students) to assess if any changes were evident. Rating scales from segments of visual communication, unfamiliar episodes with patients and volunteers and segments were chosen. Reliability and training tests occurred for assistants transcribing.

?? How long this went for overall
Coding consisted of analysing student’s utterances as specific multi-modal or just general, patient’s utterance for comprehensibility

**Social Validation measures:** were obtained from 15 unfamiliar judges (all students in health science) to determine if multi-modal communication training of volunteer’s produced clinically significant changes in conversation, as observed by an unfamiliar person. One baseline and one post training probe conversation were randomly selected. Judges viewed these for 3 minute segments then rated n 6 dimensions using an visual analogue scale (0-100%) rating for 1) comfort level of participant 2) amount of information conveyed by patients 3) effectiveness of volunteers communication 4) equity of turn-taking and 5) topic maintenance.

**Reliability:** Trained assistants (‘? Whether students/SP’s) completed reliability for transcription and dependent measures on 4 random probe conversation for each dyad and phase. (high inter-rate judgement received).

Adherence to treatment procedures was achieved by sticking to a manual (high procedure reliability achieved).
Method: Participants (where relevant note number of participants, inclusion/exclusionary criteria, characteristics of participants in experimental group and control group/s):

Participants: 4 student volunteers all from a university majoring in communication science and disorders, all females, 20-25 years, nil prior experience with individuals with aphasia or course work.
Subjects: 2 Nursing Home residents with aphasia, criteria included primary diagnosis of Broca’s (WAB maximum quotients 40/100); minimum 6 months post stroke, hearing and vision within functional limits, informed consent.

Results: (briefly summarize the results, note whether the outcome was evaluated with/without blinding, note how many (if any) of the participants ‘dropped out’ of the study, note if effect size was reported)

Volunteer use: changes in communication style evident, 70% usage of multi-modal communication on average at end of ABA. Majority received 5 training sessions before deemed competent (not sure on how long these went for) and 70% stayed stable. Inter-rater reliability used. Improved comprehensibility of utterances over time noted and this improved more post a multi-modal interaction versus speech only interaction.
Social validity- randomly selected utterances were rated- significant better on all dyads analysed.

In summary- improved communication style of volunteers post training (more multi-modal versus speech only utterances), which was maintained. Improved trained behaviour's noted over the ABA design, improved comprehensible utterances but? If these were significant, significant improvements in social validation measures (dyads).

Level of Evidence (NH&MRC, 2009) Circle one I II III-1 III-2 III-3 IV

Quality of Evidence: ☐ Rated ☑ Not Rated
  (i) rating system (e.g., PEDRo, RoBiN-T Scale from SpeechBITE) ____________________________
  (ii) score ____________________________

Nature of Evidence: ☐ feasibility ☐ efficacy study ☑ effectiveness study

Relevance to practice (e.g., were the participants and/or treatment context similar/different to everyday clinical practice? Is replication possible in clinical practice? What barriers might prevent the results from be applied to everyday clinical practice? What could be done to address barriers? If barriers can’t be modified, how could the procedure be modified to accommodation limitations in clinical practice?)

This study is different in that it looks at volunteer training in a Nursing Home setting.

Additional comments (e.g., limitations of the study, need for further research addressing a specific issue)

Small sample size and homogeneity of subjects is recognised by authors. Future research into variety of aphasia types differing volunteers and larger sample.

Appraised By: Luisa Renna Date: 13/08/12