

## A teaching model to improve nursing assistants' knowledge of aphasia and communication strategies

### Background

Access to quality healthcare depends on clear communication between patients and healthcare providers. The barriers caused by aphasia often make this difficult, as observed by one man with chronic aphasia, "The most frustrating part was that I was surrounded in the hospital by intelligent and educated individuals who did not seem to understand my condition," (Liechty & Buchholz, 2006, p. 54). Nurses and nursing assistants have been effectively trained to work with people with dementia (Dijkstra, Bourgeois, Burgio, & Allen, 2002; McCallion, Toseland, Lacey, & Banks, 1999) and volunteers have been trained to work with people with aphasia. (Kagan, 1998, Hickey, Bourgeois, & Olswang, 2004). However, while in the hospital, at a nursing home, or when receiving home care services, many people with aphasia (PWA) rely on nursing assistants (NAs) for much of their everyday health and personal care. To our knowledge, there are no programs specifically geared toward training NAs to communicate with persons who have aphasia.

Recent studies have demonstrated the benefits of including the voices of patients in the training of health care personnel. This is seen in medical schools with geriatric mentors for medical students (Tomkowiak & Gunderson, 2004), ambulatory clinics where people with HIV teach medical students (Vail, Mahon-Salazar, Morrison, & Kalet, 1996), and pre-service rehabilitation therapy programs where people with strokes teach physical therapy students (Ottewill, Demain, Ellis-Hill, Greenyer, & Kileff, 2006) and PWA teach communication strategies to graduate speech-language pathology clinicians (Avent, Patterson, Lu, & Small, 2008).

The present study applies such a model to the training of NAs. We hypothesized that learning about aphasia from a *first person perspective* would improve NA students' knowledge of aphasia and equip them with some of the insight and general communication tools for use in caring for and communicating with future patients.

### Methods

This project is the result of collaboration between a community-based aphasia center and an NA training program at a nearby community college. Intervention was a 75-minute presentation delivered as part of NA students' classroom curriculum. Nineteen such presentations were made over the course one and a half years to groups ranging in size from 7-10 students. All presentations were co-delivered by one PWA and one speech-language pathologist and covered basic information about aphasia including its definition, characteristics, and causes. Presentations also included firsthand accounts of and insights from a PWA's experiences communicating with a chronic communication disorder. Finally, communication tips and strategies based on principles of Supported Conversation for Adults with Aphasia™ (Kagan, 1998) were taught. The presentation format included first person narratives, group discussions, and videotaped examples as well as time for questions-and-answers.

Ten different PWA were involved as co-instructors in this project. They were members of the Aphasia Advocacy or Education and Training groups that met weekly at the center. Each PWA prepared for the presentation through discussion in his/her groups and/or consultation with the co-presenting speech-language pathologist.

NA students completed brief pre- and post-presentation surveys to assess their knowledge of aphasia. The survey consisted of four true/false questions about aphasia and an open-ended item to write a definition of aphasia. At the end of the session, participants completed a program evaluation consisting of five statements rated on a 5-point Likert scale (1 = *strongly disagree* to 5 = *strongly agree*), and open-ended questions about what they learned from the session and about future learning needs.

The results presented here are based on data from 168 students who attended one of the 19 sessions. This is an ongoing project. If accepted for presentation, data from sessions conducted between January and April 2010 will also be included.

## **Findings**

We looked at pre- and post-test results of the 168 surveys completed by NA students. Interestingly, 83.3% of participants reported that they had heard about aphasia prior to attending the session.

Correct responses for each true/false item were tabulated. As a whole, NA performance improved on each true/false item from the pre to the post measure. The percentage of students who accurately responded to each item ranged from 54.2% and 67.3% on the pretest and increased to between 79.2% and 88.7% on the post test (Table 1). Comparing individual performance on pre- and post-tests, 103 students (61.3%) showed increased response accuracy, 54 students (32.1%) maintained their performance, and 11 students (6.6%) answered more questions incorrectly on the post measure than they did on the pre (Table 2).

When responding to the program evaluation statements using the Likert scale, more than 90% of the 168 respondents either 'agreed' or 'strongly agreed' that they (a) better understood aphasia and its impact on people; (b) knew at least two strategies they could try when talking with a PWA; and (c) would incorporate elements of what they learned into their work as an NA (Table 3).

Anecdotal conversations following the training sessions indicated that most PWA who served as co-instructors felt empowered by being able to share their knowledge and felt proud of the work they were doing. This is consistent with the reported benefit to patients noted by Vail et al. (1996) and the observation that repeated practice as expert may help to build a PWA's confidence and contribute to an overall sense of purpose (Avent et al., 2008). If accepted for presentation, reflections from the PWA involved in this project will be included.

## **Discussion**

Comparison of pre and post data indicates that NA students demonstrate increased knowledge about aphasia and communication when a 75-minute program co-presented by a PWA and an SLP was included as part of their classroom curriculum. This preliminary study suggests that explicit aphasia and communication training delivered in this format has positive learning outcomes for the participating NA students. Results also suggest that teaching NA students about aphasia and communication in the classroom in a format that includes the first person perspectives of PWA is a viable training option that may be easily implemented with a number of professional and paraprofessional groups.

There may also be unexplored psychosocial benefits for all program participants, NA students and instructors alike. It is possible that the NA participants experience job satisfaction

when appropriately equipped with the knowledge and skills to care for patients well. Instructors may feel reward in the notion that they are doing something meaningful to improve communication experiences for unknown PWA.

Follow-up investigation is warranted to assess knowledge retention and generalization of knowledge into “real world” interactions between NAs and PWA. Future study should attempt to determine which aspect of the session is most beneficial to students, compare this program to other types of intervention to identify the best approach, and explore psychosocial benefits to participants.

### References

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## Tables

Table 1  
*Pre/Posttest Percent Correct on True/False Questions about Aphasia*

Item	Pretest % correct (n = 168)	Posttest % correct (n = 168)
Aphasia can affect a person's ability to read and write.	54.2	81.5
People with chronic aphasia can continue to get better to or more years after they first have it.	63.7	88.7
Aphasia affects a person's intelligence.	67.3	87.5
A person who has aphasia is able to make decisions about healthcare and other important life matters.	64.3	79.2

Table 2  
*Individual NA Pre/Posttest Performance*

Type of change	No. of NAs	Percentage (n = 168)
<b>Improved response accuracy (total)</b>	<b>103</b>	<b>61.3%</b>
1 more correct on post- than pre-test	61	36.3%
2 more correct on post- than pre-test	29	17.3%
3 more correct on post- than pre-test	12	7.1 %
4 more correct on post- than pre-test	1	0.6%
<b>Maintained accuracy</b>	<b>54</b>	<b>32.1%</b>
<b>Decreased response accuracy (total)</b>	<b>11</b>	<b>6.6%</b>
1 more incorrect on post- than pre-test	10	6.0%
2 more incorrect on post- than pre-test	1	.06%

Table 3  
*NA Student Responses on Post-Program Evaluation*

Item	No. of NAs who <i>agreed</i> or <i>strongly agreed</i>	Percentage (n = 168)
I have a better understanding of what aphasia is.	162	96.4%
I have an idea of at least two things I can do when talking with a person with aphasia.	157	93.5%
I will incorporate elements from today's seminar into my work as a CNA.	158	94.1%