Introduction

Developing cultural competence in interacting with people with aphasia representing varied racial, ethnic, and linguistic backgrounds is an important goal for all clinical and research aphasiologists. Given that Asian Indians (a) are one of the largest and fastest-growing ethnic minority groups to migrate to the North America (US Census Bureau, 2007a; Embassy of India, 2000), and (b) have a higher incidence of stroke than most other immigrant populations, clinical aphasiologists in the US and Canada are likely to interact with at least some Asian Indians with aphasia during their careers. It is important to know at least basic aspects of culture and etiquette as well as means of addressing cultural and linguistic differences when working with Asian Indians, especially first-generation immigrants.

What are differences in risk factors for and incidence of stroke and aphasia?

Compared to Caucasian Americans, Indian Americans tend to have more strokes and have strokes at younger ages, despite lower alcohol and tobacco use (Baweja & Nanda, 2004). Given the number of adult Asian Indians residing in the US (US Census Bureau, 2007b) and Canada (BC Stats, 2010; Statistics Canada, 2009), an overall stroke prevalence of almost 3% in Asian Indians living in the US (almost 4% for men and 2% for women) (Baweja & Nanda, 2004), and the likely incidence of aphasia in about 20% of the stroke population (Schoenberg, Anderson, & Haerer, 1986), Asian Indians with aphasia residing in the US and Canada alone may be projected to exceed 229,000.

What are regional variations in local populations including Asian immigrants?

There is great regional variability in North American subpopulations of Asian Indians. Statistics (Embassy of India, 2000) will be shown.

What languages might an Asian Indian patient/client/participant with aphasia speak?

In every region or state, in addition to regional majority languages, there are numerous minority languages and caste and class dialects. Most Asian Indians are multilingual, complicating diagnostic and treatment planning processes for those with aphasia, and also introducing multiple potential confounds in research involving this population (Grosjean, 1989; Paradis, 2001; 2004). There any of are literally hundreds of languages that an individual may have spoken prior to aphasia onset. Asian Indian languages most commonly spoken by immigrants to North America are Bengali, Hindi, Telugu, Marathi, Tamil, Urdu, and Punjabi (BC Stats, 2010; Steinbergs, 1997).

Competence in English is highly variable in first-generation Asian Indians in North America. From 21% to 75% of new immigrant groups from India are not proficient in spoken or written English (BC Stats, 2010; U.S. Census, 2000). Of Asian immigrant populations, Asian Indians are the most likely to having a household member who is proficient in English.

What published language assessment instruments are there?

It is important to assess an individual's premorbid and expressive and receptive abilities in each of the languages her or she uses (or has used). A major challenge is the lack of published standardized tests in Indian languages. The Bilingual Aphasia Test (BAT; Paradis, 1987) is available online in Hindi, Urdu, Kannada, Tamil, Oriya, and Tulu (McGill University, 2010). However, standardization, reliability and validity of these tests remain a concern.

What might be expected in terms of recovery across varied languages?

There is great variability in the relative severity of impairments in specific modalities across languages in bilingual/multilingual adults with aphasia and in patterns of recovery (Grosjean, 1989; Lorenzen & Murray, 2008; Paradis, 1977; Roberts & Deslauriers, 1999). Additionally, linguistic interference across languages is common. Further research is sorely needed.

What are influences of religion and culture on rehabilitation?

Despite great diversity among Asian Indians, there is a commonly shared reverence for older adults (Bhat & Dhruvaranjan, 2001). At the same time, old age may also be associated with negative connotations of depression, loneliness, and alienation, perhaps as a result of loss of authority, absence of work relationships, material insecurity, and diminishing intergenerational relationships (Bali, 1999).

In many cases, even when medical and rehabilitation services are available, Asian Indian elders choose not take advantage of them. Reasons for this may relate to (a) avoidance of loss of face in acknowledging disabilities and need for help, and (b) cultural preferences to handle needs and disabilities of adults within the family structure rather than through medical or rehabilitation facilities (Prakash, 1999; Nanda, Khatri, & Kadian, 1987).

The most predominant religions followed by Asian Indians are Hinduism, Islam, and Sikhism (Collier, Longmore, & Brinsden, 2006). Religious beliefs, apart from cultural and personal attributes, play an important role in social interactions. Additionally, cultural and religious beliefs regarding the role of spiritual influences and dharma/karma rather than personal initiative in determining one's health outcomes may be important factors in rehabilitation.

What resources are available to support my work with Asian Indian people?

The Aphasia and Stroke Society of India publishes free materials in multiple Indian languages to help people with aphasia and their significant others learn about aphasia and the recovery process: http://www.ratnasagar.com/communitysercvices.aspx

The American Speech-Language-Hearing Association (ASHA) Asian Indian Caucus has as a central part of its mission the assistance of Asian-Indians with communication disorders: http://www.asianindiancaucus.org/

National Aphasia Association (NAA) state representatives may be contacted to seek help in finding speech-language pathologists or other professionals who speak specific languages: http://www.aphasia.org/aphasia_community/state_representatives_network.html

The ASHA Special Interest Division 2 (Neurophysiology and Neurogenic Speech and Language Disorders) listserv may be used to seek related advice from other clinical and research aphasiologists: http://www.asha.org/members/divs/div_2.htm

ASHA (www.asha.org), the Canadian Association of Speech-Language Pathologists (www.caslpa.ca), and the Indian Speech and Hearing Association (http://ishaindia.org.in)

provide a great deal of online information pertaining to clinical practice with multilingual and multicultural individuals.

Helpful pointers about basic aspects of interaction

- Tune into multilingual abilities. The nature of language deficits in multilingual adults is complex and not a matter of tuning into the use of each language as a separate ability. Seek help in differentiating premorbid and current levels of expressive and receptive competence in each of an individual's languages and dialects.
- Be careful to consider English dialectic variations. Even when an individual is proficient in English, his or her English may differ from American English in terms of phonology, vocabulary, grammar, idioms, and pragmatics. What might be considered an "error" or "deficit" on the part of the clinician may actually be due to dialectic and cultural variation.
- Appreciate cultural influences on the role of family and significant others in the rehabilitation context.
- Appreciate cultural and linguistic barriers to accessing services. Initiate offers to assist, or refer for assistance, with understanding of care systems and communication with health care providers.
- Ask about what names and titles should be used. Name conventions are inconsistent. It is best to ask. If in doubt about names and titles, "sir" and "madam" are always safe.
- Don't assume that a lack of continuous eye contact indicates a lack of attentiveness during interactions.
- The degree of comfort that Asian Indians have with personal contact such as hand shaking and hugging is highly variable across individuals. It is important to observe the nuances of individual interaction styles. If in doubt, refrain from personal touching.
- Asian Indians typically ask personal questions even of people they barely know and in professional contexts. Be careful about making related conclusions regarding pragmatic abilities or executive functioning.

References:

American Speech-Language-Hearing Association (1989). Bilingual speech-language pathologist

and audiologist: Definition. Retrieved January 2, 2010 from

http://www.asha.org/docs/html/RP1989-00205.html.

Bali, A. (1999). Introduction. In Bali, A. (ed). Understanding Greying People of India. Inter-

India Publications: New Delhi.

- Baweja, G., & Nanda, N.C. (2004). Prevalence of stroke and associated risk factors in Asian Indians living in the state of Georgia, United States of America. *The American Journal of Cardiology* 93, (2), 267-269.
- BC Stats (2010). Special Feature: Immigrants from India: *Immigration Highlights, 1* (1).

 Retrieved January 2, 2010 from http://www.bcstats.gov.bc.ca/pubs/immig/imm011sf.pdf
- Bhat, A. K., & Dhruvarajan, R. (2001). Ageing in India: Drifting intergenerational relations, challenges, and options. *Ageing and Society*, *21*, 621-640.
- Collier, J., Longmore, M., & Brinsden, M. (2006). Primary care: Bedside manners in a multicultural world. In Collier, J., Longmore, M., & Brinsden, M (eds.). *Oxford Handbook of Clinical Specialties*, 468-533. Oxford University Press: Oxford.
- Embassy of India (2000). Retrieved January 9, 2010 from http://www.indianembassy.org/ind_us/census_2000/ia_population_map_2001.pdf
- Grosjean, F. (1989). Neurolinguists beware! The bilingual aphasia is not two monolingual speakers in one person. *Brain and Language*, *36* (1), 3-15.
- Lorenzen, B. & Murray, L. L. (2008). Bilingual aphasia: a theoretical and clinical review. *American Journal of Speech Language Pathology, 17*, 299-317.
- McGill University (2010). *Bilingual Aphasia Test*. Retrieved January 12, 2010 from http://www.mcgill.ca/linguistics/research/bat/
- Nanda, D. S., Khatri, R. S. and Kadian, R. S. (1987). Aging problems in the structural context. In Sharma, M. L. and Dak, T. M. (eds), *Aging in India : Challenge for the Society*. Amanita, New Delhi, 106-116.
- Paradis, M. (1987). The assessment of bilingual aphasia. Lawrence Erlbaum: Hillsdale, NJ

- Paradis, M. (1977). Bilingualism and aphasia. In H. Whitaker, H., & Whitaker, H. A., (Eds.), *Studies in neurolinguistics*, Academic Press; New York, 65-121.
- Paradis, M. (2001). Bilingual and polygot aphasia. In R. S. Berndt (Ed.), *Language and Aphasia*, Elsevier science: Amsterdam. 65-91.
- Paradis, M. (2004). A neurolinguistic theory of bilingualism. John Benjamins: Amsterdam.
- Prakash, I. J. (1999). Ageing in India. World Health Organization: Geneva.
- Roberts, P. M., & Deslauriers, L. (1999). Picture naming of cognate and non-cognate nouns in bilingual aphasia. *Journal of Communication Disorders*, 32 (1), 1-22.
- Schoenberg, B.S. Anderson D.W. and Haerer A.F. (1986). Racial differentials in the prevalence of stroke. *Archives of Neurology*, 43 (6), 565–568.
- Statistics Canada. (2009). Census of ethnic origin for the population of Canada. Retrieved

 January 12, 2010 from <a href="http://www12.statcan.ca/census-recensement/2006/dp-pd/tbt/Rp-eng.cfm?LANG=E&APATH=3&DETAIL=0&DIM=0&FL=A&FREE=0&GC=0&GID=837928&GK=0&GRP=1&PID=92333&PRID=0&PTYPE=88971,97154&S=0&SHOW

 ALL=0&SUB=0&Temporal=2006&THEME=80&VID=0&VNAMEE=&VNAMEF
- Steinbergs, A. (1997). The classification of languages. In Grady, W., & Archibald, J. (eds), *Contemporary Linguistics: An introduction*. Bedford/St. Martin's; Boston, 372 – 412.
- U.S. Census(2000). *We the People: Asians in the United States. Retrieved January 15, 2010 from http://www.census.gov/prod/2004pubs/censr-17.pdf
- US Census Bureau (2007a). ACS demographic and housing estimates: 2007. Retrieved January 12, 2010 from http://factfinder.census.gov/servlet/ADPTable?_bm=y&-geo_id=01000US&-qr_name=ACS_2007_1YR_G00_DP5&-ds_name=ACS_2007_1YR_G00_&-_lang=en&-redoLog=false.

US Census Bureau (2007b). Selected Population Profile in the United States: Asian Indian alone or in any combination. Retrieved January 12, 2010 from: http://factfinder.census.gov