Factors Influencing Aphasia Assessment for Bilingual Adults

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EXECUTIVE SUMMARY

This chapter provides a brief overview of stroke, aphasia, and aphasia assessment. Additionally, it considers various issues associated with the standardized assessment of aphasia, including problems related to cultural and linguistic biases. The chapter also includes information on working with people who are bilingual, as well as working with interpreters. A hypothetical case study is presented as a teaching avenue to discuss these topics in greater length. This section contains details regarding how both cultural and linguistic barriers associated with the assessment of the patient's aphasia may have influenced the intervention provided by the speech-language pathologist (SLP). Medical terminology and procedures related to stroke intervention are also discussed as it relates to the SLP's plan of care.

INTRODUCTION

Overview of Stroke and Aphasia

Stroke is the fifth leading cause of death in the United States (Nichols, 2019). A stroke, also known as a cerebrovascular accident (CVA), occurs when there is a change in blood flow to the brain or the area surrounding the brain, which causes injury to the brain's cells. A stroke can happen to anyone at anytime, though there are certain risk factors, such as history of heart disease, high blood pressure, poor diet, age, genetics, and race, that may predispose one person over another to be at an increased risk for stroke (American Stroke Association, 2019).

Brain cells have a dedicated function within the brain that in turn correspond to a specific ability; therefore, how each person is affected by stroke is different, based on where the stroke occurred within the brain, and how much of the brain was damaged. According to the American Stroke Association (2019), some people recover completely from a stroke, but more than two-thirds of survivors will have

some type of permanent disability as a result of their stroke. Impairments after stroke can be related to visual disturbances, motor movement of one or more extremities, slurred speech, numbness of one or more parts of the body, balance or coordination issues, or numerous other difficulties (Tatemichi, Desmond, Stern, Paik, Sano, & Bagiella, 1994).

Changes related to a person's language abilities are referred to as aphasia. Aphasia is an acquired disorder due to an injury to the brain and is commonly secondary to stroke (National Institute on Deafness and Other Communication Disorders, 2019). Aphasia can affect any component of language: spoken language expression, auditory language comprehension, reading comprehension, or written expression. It can range in severity from mild to severe. In the most severe cases of aphasia, communication exchanges between the patient and the listener may be almost impossible. Multiple domains of language are typically affected by aphasia, such as naming objects, formulating grammatical sentences, understanding complex directions, or reading paragraphs. Aphasia can be extremely frustrating for some patients as they may know exactly what they want to say, but cannot get the words out to say it. Other patients with aphasia may believe they are speaking perfectly clear and appropriately to their communication partner, when in reality the words coming out of their mouths are merely jargon with no meaningful communicative intent. A person with aphasia often has relatively intact nonlinguistic cognitive skills, though cognitive deficits may co-occur with aphasia (American Speech-Language-Hearing Association [ASHA], 2015).

Aphasia in Culturally and Linguistically Diverse (CLD) Populations

Aphasia intervention within CLD populations is a topic that has gained increased awareness in the field of speech-language pathology over the last several decades (Goral & Conner, 2013; Paniagua & Yamada, 2013; Penn & Armstrong, 2017; Roger, Code, & Sheard, 2000). This is especially important as SLPs are starting to see an increase in the number of patients on their caseload from diverse backgrounds, while also reporting increasing numbers of bilingual speakers (ASHA, 2014). This may be due to a steady increase in the numbers of older minority individuals (Ortman, Velkoff, & Hogan, 2014) or a high incidence of stroke reported in older members of minority groups (Payne, 2014). Cultural and linguistic factors impacting aphasia may include such things as verbal and gestural communication, use of eye contact, number of languages spoken, the patient's level of acculturation or acclimation to a more mainstream culture, and/or paralinguistic aspects of expressive language (ASHA, 2004).

Aphasia in people who speak more than one language involves multiple factors to consider. Grosjean (1994) defined bilingualism as the use of at least two languages in one's daily life. Considerations for bilingual speakers also depend on when and how each language was learned, how frequently each language is used, and how proficient the speaker is for each language (Hallowell, 2017). Multiple studies have demonstrated how people who are bilingual process language in both similar and different ways than people who are monolingual (Fabbro, 2001; Hernandez, Dapretto, Mazziotta, & Bookheimer, 2001; Lorenzen & Murray, 2008). Understanding that the neural pathways for language processing may be different in bilingual speakers is important for any clinician working with someone who has aphasia as this can impact how aphasia presents itself clinically. Language impairment can present differently in bilingual speakers compared to monolingual speakers. For example, in parallel impairment, the most common type of aphasia impairment noted in bilingual speakers (Hallowell, 2017), both languages are impaired in the same manner and to the same degree. There are other types of impairment in bilingual aphasia, such as differential impairment with one language more severely impaired than the other.

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