

ORGANIZATION NEWS

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Aphasia FAQs for the Rehabilitation Professional



What is aphasia?

Aphasia is a communication impairment that results from injury or damage to the left side of the brain. It may occur after a stroke, brain injury, or other neurologic condition. Aphasia refers to loss of language abilities. It can result in difficulty speaking, listening, reading, or writing. Many individuals also have difficulty repeating things spoken to them, although some people with aphasia can completely mimic utterances, leading those around them to assume greater language abilities than they have. The consequences of aphasia can be debilitating for the individual's communication and ability to participate and enjoy life events (quality of life).

How common is aphasia?

Stroke is the most common cause of aphasia, with about one-third of stroke patients presenting with aphasia.¹⁻⁴ Approximately 17 million people worldwide experience a first stroke annually; therefore, the number of people with aphasia is sizeable. In fact, the prevalence of aphasia in the United States has been estimated to exceed 2 million people.⁵ This number is likely to increase because stroke incidence rises due to the aging population and increasing rates of stroke risk factors, such as diabetes mellitus, obesity, and physical inactivity. Advances in acute stroke treatment also have improved stroke survival, leading to an increased number of stroke survivors with aphasia.

How does aphasia affect daily life?

People with aphasia can feel alone and socially isolated. Aphasia makes it more difficult to

communicate with friends and family, which hurts one's sense of well-being. Disability ratings are higher after a stroke in people with aphasia than without aphasia.³ These negative effects of aphasia can affect all areas of life.

Mental health

The communication challenges aphasia causes can negatively impact self-esteem, self-identity, and personal competence.⁵ Even when they are in the presence of others, people with aphasia have difficulty connecting with people, so they still feel alone. In addition, people with aphasia have higher degrees of anxiety than those without aphasia poststroke. Although depression after stroke can be high, it is even higher for people with aphasia (60%-70%).⁶ In addition, their communication difficulties make it harder for people with aphasia to access mental health care.

Relations and social participation

Because of the challenges with communication, aphasia changes personal relations. Social networks shrink, and close personal relations are difficult to maintain. People with aphasia have a harder time taking part in leisure activities they used to enjoy, especially when they are with people who do not understand what it means to have aphasia.⁷

Employment

People with aphasia have a harder time returning to work than stroke survivors without aphasia. Those who do return to work often return to lower paying jobs than they had before their stroke.⁸

Table 1 Patterns of aphasia

| Syndrome | Fluency | Auditory Comp | Repetition |
|-------------------------------|-----------|-------------------|------------|
| Broca's aphasia | Nonfluent | Relatively intact | Impaired |
| Wernicke's aphasia | Fluent | Impaired | Impaired |
| Conduction aphasia | Fluent | Relatively intact | Impaired |
| Global aphasia | Nonfluent | Impaired | Impaired |
| Transcortical sensory aphasia | Fluent | Impaired | Intact |
| Transcortical motor aphasia | Nonfluent | Relatively intact | Intact |
| Mixed transcortical aphasia | Nonfluent | Impaired | Intact |

Caregivers and family

The effect of aphasia is not just on the stroke survivor, but also on caregivers and family members. Communication challenges, changes in finances, and changes in social networks and support systems can strain these relations. As a result, family members of people with aphasia are also prone to depression and may feel socially isolated.⁷

What are the types of aphasia?

There are many types of aphasia depending on what part of the left cerebral hemisphere is affected.⁹ Speech-language pathologists diagnose types of aphasia based on results of a language assessment that tests fluency of verbal expression, auditory comprehension, and repetition. Generally, aphasia can be classified as fluent or nonfluent and further broken down into specific types within those categories as shown in [table 1](#).

A person with nonfluent aphasia produces utterances that are shorter in length and frequently lacking grammatical words (eg, is, the, should). A person with fluent aphasia produces longer utterances that may be incoherent or have frequent word or sound errors (eg, *papsel* for *apple*). Although most people suddenly develop aphasia poststroke, some individuals experience primary progressive aphasia (PPA). PPA is a progressive form of aphasia caused by degenerative disease of the brain. Aphasia is always an impairment of language and should not be confused with motor speech impairments of the nervous system, such as apraxia of speech or dysarthria. Although these motor speech impairments can sometimes

accompany aphasia, they affect programming and execution of speech articulatory movements, not the language system for words and grammar.⁹

What do people with aphasia say?

When individuals with aphasia try to speak, they often make errors in their words or sentences. When they experience anomia, or difficulty finding words, they make errors or paraphasias. These mistakes can be related words from the same category (*orange* for *apple*), mispronounced sound errors (*apsel* for *apple*), or neologisms that do not even resemble familiar words (*clospow* for *apple*). They sometimes use circumlocution to describe a word that they are unable to produce (*that thing that grows on a tree* for *apple*). At times they display agrammatism by simplifying their sentences and omitting grammar words (eg, is, before) or word endings (eg, past tense—ed). Finally, some individuals perseverate, or repeat a word or phrase they produced earlier even though it is not the current intended response (9).

What is the role of the speech-language pathologist in aphasia treatment?

A speech-language pathologist (SLP), or logopedist, is a certified rehabilitation professional trained to evaluate and treat persons with aphasia. SLPs provide treatment that facilitates recovery of the brain for language functioning and increased participation in life activities. They also train individuals on compensatory strategies for communication and educate and train caregivers on how to be a supportive communication partner. In

addition, SLPs provide resources and training on how to use alternative modalities for communication (writing, gestures, drawing) and technology that is available for augmentative and alternative communication. In some settings, SLPs may require an order from a patient's physician for evaluation and treatment. SLPs are part of the rehabilitation team and work closely with other team members, such as physical and occupational therapy, to target patient's rehabilitation goals (9).

Authorship

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References

1. Dickey L, Kagan A, Lindsay MP, Fang J, Rowland A, Black S. Incidence and profile of inpatient stroke induced aphasia in Ontario, Canada. *Arch Phys Med Rehabil* 2010;91:196-202.
2. Ellis C, Dismuke C, Edwards KK. Longitudinal trends in aphasia in the United States. *NeuroRehabilitation* 2010;27:327-33.
3. Flowers HL, Skoretz SA, Silver FL, et al. Post-stroke aphasia frequency, recovery, and outcomes: a systematic review and meta-analysis. *Arch Phys Med Rehabil* 2016;97:2188-201.
4. Pedersen PM, Jorgensen HS, Nakayama H, Raaschou HO, Olsen TS. Aphasia in acute stroke: incidence, determinants, and recovery. *Ann Neurol* 1995;38:659-66.
5. Simmons-Mackie N. *Aphasia in North America*; 2018. AphasiaAccess, Moorestown, NJ.
6. Morris R, Eccles A, Ryan B, Kneebone II. Prevalence of anxiety in people with aphasia after stroke. *Aphasiology* 2017;31:1410-5.
7. Worrall LE, Hudson K, Khan A, Ryan B, Simmons-Mackie N. (2017). Determinants of living well with aphasia in the first year poststroke: a prospective cohort study. *Arch Phys Med Rehabil* 2017;98:235-40.
8. Graham JR, Pereira S, Teasell R. Aphasia and return to work in younger stroke survivors. *Aphasiology* 2011;25:952-60.
9. Raymer AM, Rothi LJ. Aphasia syndromes: introduction and value in clinical practice. In: Raymer RM, Rothi LJJ, editors. *The Oxford handbook of aphasia and language disorders*. New York: Oxford University Press; 2018. p 3-9.