

Analysis of Phonetic Language Disorder in Patients with Aphasia

Inggrit Meili

Universitas Subang

Email: inggritmeili9@gmail.com

Arlisma Faida Niarti

Universitas Subang

Email: arlismafaidaniarti@gmail.com

Lusiana Suciati Dewi

Universitas Subang

Email: lusianasuciatidewi11@gmail.com

Alamat: Jl. R.A. Kartini KM 3 Subang Telp. (0260) 411415 Fax. (0260)450543

Korespondensi penulis: inggritmeili9@gmail.com

Abstract. *Communication is the main medium for conveying information or a message. Communication does not work well when an individual experiences communication disorders, for example, language disorders. Language disorders are disorders or damage that attack the brain in the Broca and Wernicke areas so that the language acquisition process is not optimal. One of these language disorders is called aphasia. This research aims to find out how people with aphasia communicate, especially when they have difficulty pronouncing certain words or letters. This research uses descriptive qualitative methods using interviews and observations as research instruments. The individual who was resource person in this research was a woman who was diagnosed with aphasia as a result of an accident so she had to experience difficulties in communicating.*

Keywords: *Phonetic, Language Disorder, Aphasia*

Abstrak. Komunikasi merupakan media utama untuk menyampaikan informasi atau sebuah pesan. Komunikasi tidak berjalan baik ketika seorang individu mengalami gangguan komunikasi, contohnya gangguan bahasa. Gangguan bahasa adalah gangguan atau kerusakan yang menyerang otak pada bagian broca dan wernicke sehingga proses pemerolehan bahasa tidak maksimal. Salah satu gangguan bahasa ini disebut dengan aphasia (afasia). Tujuan dari penelitian ini adalah untuk mengetahui bagaimana penderita aphasia berkomunikasi terutama dalam kesulitan mengucapkan kata-kata atau huruf tertentu. Penelitian ini menggunakan metode kualitatif deskriptif dengan menggunakan wawancara dan observasi sebagai instrumen penelitian. Individu yang menjadi narasumber pada penelitian kali ini adalah seorang perempuan yang di diagnosa mengalami aphasia akibat dari sebuah kecelakaan sehingga harus mengalami kesulitan dalam komunikasi.

Kata kunci: Phonetic, Language Disorder, Aphasia

INTRODUCTION

Language is the most important means of communication at this time. As social creatures, communication plays an important role in exchanging information. There are 2 ways to communicate, the first is communication using language and the second is communication using body movements or sign language which is better known as non-verbal communication. Language communication produces sounds produced by our body organs, namely the lips, teeth, tongue, pharynx, and lungs. This sound process is studied by linguistics, namely phonetics.

Received: Juni 29, 2024; Accepted: Juli 04, 2024; Published: Juli 31, 2024

* Inggrit Meili, inggritmeili9@gmail.com

Phonetics is a linguistic science, part of phonology, which studies the sounds produced by our body organs. According to the Cambridge Dictionary, phonetics is the study of the sounds made by the human voice in speech. Phonetics focuses on how sounds are produced, heard, and processed by listeners. Phonetics is divided into three parts, namely: articulatory phonetics, acoustic phonetics, and auditory phonetics. Apart from being known as a science that studies the sounds produced by phonetics, it is also known as a science that studies how to improve clear and organized language pronunciation. It can be concluded that phonetics is the science that studies how sounds are produced by the body's organs to improve language pronunciation and communicate with fellow individuals.

The communication process will run smoothly when an individual can communicate well and the message is conveyed clearly. However, on the contrary, this process will be hampered when someone experiences problems in communicating, for example, language disorders or in English known as language disorders. Language disorder is a disorder that attacks language, resulting in difficulty in communicating. Usually, individuals who experience language disorders have difficulty understanding language conveyed either verbally, written, or signed. KBBI believes that disturbances are described as obstacles, obstacles, and temptations that cause abnormalities and irregularities.

Language disorder usually attacks children aged 0-8 years, but this does not rule out the possibility of this disorder affecting adults. One of the language disorders that attacks adults is aphasia. According to Dharmaperwira-Prins (2002), aphasia is an acquired language disorder caused by brain injury and is characterized by impaired understanding and impaired expression of language, both spoken and written. Field (2004) that aphasia is usually the result of brain damage caused by accidents, strokes, or invasive surgery; but some sufferers are included in the effects of dementia. (Gleason & Ratner, 1998) said aphasia is the inability to articulate speech due to neuromotor disorders of the speech organs due to loss of the ability to speak due to brain injury. It can be concluded that aphasia (aphasia) is a disorder that attacks the brain in the language acquisition section as a result of an accident or disease that attacks the brain so that the brain does not receive signals which causes the brain's work in the language section to not be optimal.

THEORETICAL REVIEW

Phonetics is a branch of linguistics that studies sound and grammar to produce speech that can be studied and listened to by listeners. Apart from that, phonetics also studies the delivery and reception of language sounds which is closely related to psychology. The sounds studied in phonetics are called neutral sounds or those that are not related to a particular language. According to (Gamal Thabroni (2020)) Phonetics itself is divided into 3, namely:

1. Articulatory phonetics = studying the mechanisms of speech organs in producing sounds.
2. Acoustic phonetics = studies language sounds as physical events, including vibration frequency and intensity amplitude.
3. Auditory phonetics = studies the mechanism of receiving language sounds from the ear.

Language as communication is used by members of social groups to relate socially and identify themselves. Some individuals experience difficulties in communicating which are called language disorders. Language disorder is a type of communication disorder in which individuals experience continuous difficulty in acquiring and using language, whether orally, written, or in language. Chaer (2003) said that speech disorders occur due to abnormalities in the lungs (pulmonary) which are characterized by small and intermittent volumes. The vocal cords (larynx) are characterized by a hoarse voice. On the tongue (lingual) it is characterized by the unclear articulation of spoken words, and in the oral cavity and throat (resonant), it is characterized by a nasal sound. Not only that, disorders can also be caused by various factors, including developmental delays, genetic factors, or conditions such as Down syndrome and autism.

This disorder often occurs in early childhood, with around 5-10% experienced by school children and early childhood. Language disorders usually attack the articulation, voice, and fluency in speaking. However, it does not rule out the possibility that language disorders also affect adults. Language disorders that attack adults are usually characterized by frequent speech errors, frequent repetition of words, difficulty understanding what other people are saying, and slow speech. And usually, people who experience language disorders consciously understand and know what they want to say, but have difficulty pronouncing these words.

There are several causes of language disorders in adults, one of which is that there is damage or abnormalities in parts of the brain so it is difficult for the brain to receive the language signals given. Brain damage that causes language disorders is called aphasia. Aphasia is a problem with human language abilities (spoken or written) caused by brain injury or brain

damage (Kusumoputro, 1999). Aphasia itself can be interpreted as a total loss of language, referring to the word aphasia which comes from the Greek 'a' which means without, and 'phasia' which means language (Worrall et al., 2016).

Aphasia (aphasia) is caused by damage to the brain which is responsible for language processing, especially in Broca's and Wernicke's areas. This aphasia (aphasia) occurs due to head injury, stroke, brain tumor, or disease that attacks the language area.

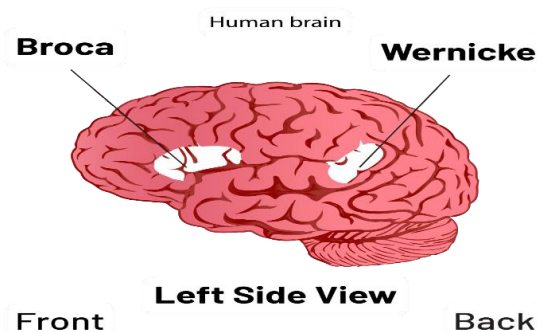


Figure 1. Broca and Wernicke

1. Broca's aphasia (aphasia).

Broca's aphasia (aphasia) is damage that affects the frontal lobe of the brain. These aphasic people usually have unstructured and halting pronunciation, often use short sentences, and have difficulty understanding sentences with complex structures but understand other people's speech. Sufferers also often experience weakness or paralysis in the right arm and leg as a result of impaired motor movements because the frontal lobe is disturbed.

2. Wernicke's aphasia (aphasia).

Wernicke's aphasia (aphasia) is damage to the Wernicke's area which results in sufferers being very bad at listening to language, speaking too quickly but without meaning, and being unable to understand the language they are communicating themselves.

3. Global Aphasia

This aphasia (aphasia) is damage to most of the language areas of the brain. Sufferers experience severe and limited difficulties in communication, having difficulty understanding simple words or sentences and losing almost all their language abilities.

RESEARCH METHODS

In this research, we used a descriptive qualitative research method based on interviews and observations of informants. The data collected is the result of interviews and observations so that it matches the reality and facts in the field. The samples used for this research were individuals diagnosed by doctors as suffering from aphasia as a result of a tragic accident. The data collection technique is to use interview and observation methods. To collect data, we created a list of five questions to give to the interviewees. This is to avoid topics outside the research discussion. We use observation techniques to explain the wrong words or letters spoken by the interviewee. In this research, we also used research instruments in the form of cellphones to record and photograph as supporting data.

Table 1 Interview Questions

No.	Question
1.	How does the resource person experience aphasia?
2.	Does the interviewee have difficulty pronouncing words?
3.	Are the words or sentences spoken by the source clearly pronounced?
4.	Does the resource person have difficulty speaking, reading, or writing?
5.	Has the resource person ever used tools for communication?

FINDINGS AND DISCUSSION

Aphasia (aphasia) is brain damage in the area of language acquisition so brain performance is not optimal. Based on the results of interviews and observations, aphasia (aphasia) occurs as a result of a hard impact during an accident, causing bleeding in the brain. The interviewee said that he had difficulty communicating, having difficulty pronouncing the letters *r* and the vowels *a i u e o* so that it made him sound like he had a lisp. Not only did he experience difficulty in speaking, but the interviewee also experienced difficulty in carrying out daily activities because his right arm was also affected by the accident.

Table 2 Interview and Observation Results

No.	Words spoken	Words that should have been said	Description
1.	Gala-gara	Gara-gara	Sulit mengucapkan huruf <i>r</i> ditengah-tengah kalimat.
2.	Kes-kesr-kerusakan	Kerusakan	Berbicara terlalu cepat membuat kata yang diucapkan salah.
3.	Tergagu	Terganggu	Sulit mengucapkan huruf <i>r</i> .

4.	Kesakan	Kerusakan	Pemendekan kata mengakibatkan kesalahan makna
5.	Awan-awat	Awal-awal	Pengucapan huruf tidak jelas sehingga terjadi salah ucap.
6.	Gak semasem-sem-smekali	Gak sama sekali	Pengulangan kata karena tidak jelas dalam mengucapkan kata
7.	Pendalahan	Pendarahan	Kesulitan mengucapkan huruf <i>r</i>
8.	Keteg-keteg-ketiga	Ketiga	Pengulangan kata karena tidak jelas dalam mengucapkan kata
9.	Pencern-penderita	Penderita	Pengulangan kata karena tidak jelas dalam mengucapkan kata
10.	Hampir saunan	Hampir setahunan	Kesulitan mengucapkan huruf <i>r</i>
11.	Hulup	Huruf	Kesulitan mengucapkan huruf <i>r</i>
12.	Ses-sers-sel	sel	Pengulangan kata karena tidak jelas dalam mengucapkan kata
13.	Serafsus	Seratus	Kata yang diucapkan tidak jelas sehingga kata yang diucapkan salah.



Figure 2. Interview Documentation

Based on this data, the interviewee experienced aphasia (aphasia) as a result of an accident, so it was difficult to pronounce the letter *r*, repeated to pronounce the actual word, had difficulty pronouncing words clearly, and spoke quickly so that the words spoken were not clear and meaningful. Therefore, it can be concluded that the resource person suffers from Broca's aphasia.

CONCLUSION

Language disorders are disorders that affect language, resulting in difficulty in communicating verbally. Language disorders affect both children and adults. One of the language disorders that attacks adults is aphasia (aphasia). Aphasia (aphasia) is a disorder that attacks the brain in the language acquisition section, specifically the Broca's and Wernicke's areas, as a result of several things, such as head injuries, strokes, brain tumors, and other diseases that attack the brain.

Aphasia (aphasia) is divided into three categories, namely Broca's aphasia (aphasia), Wernicke's aphasia (aphasia), and global aphasia (aphasia). Sufferers of Broca's aphasia (aphasia) have signs of halting spoken words, often use short sentences, and experience paralysis in the right arm as a result of the frontal lobe being disturbed. Sufferers of Wernicke's aphasia (aphasia) have signs of speaking too quickly and without meaning, being bad at listening, and not understanding the language being communicated. Global aphasia (aphasia) sufferers are sufferers whose brain language is mostly damaged so it is very difficult for them to communicate and almost all their language abilities are lost.

REFERENCE

- American Speech-Language-Hearing Association. (n.d.). *Aphasia*. Retrieved from https://www.asha.org/Practice-Portal/Clinical-Topics/Aphasia/#collapse_7 (accessed on June 24, 2024).
- Clinic Staff, Mayo. (2022). *Aphasia*. Retrieved from <https://www.mayoclinic.org/diseases-conditions/aphasia/symptoms-causes/syc-20369518> (accessed on June 25, 2024).
- English, D. (2023, March 20). Menguasai pronunciation dengan memahami konsep phonology dan phonetic. *Medium*. Retrieved from <https://medium.com/@decipher.eng/menguasai-pronunciation-dengan-memahami-konsep-phonology-dan-phonetic-70131a205da> (accessed on June 26, 2024).
- Gischa, S. (2023, March 9). Pengertian dan jenis-jenis fonetik. *KOMPAS.com*. Retrieved from <https://www.kompas.com/skola/read/2023/03/10/060000969/pengertian-dan-jenis-jenis-fonetik> (accessed on June 26, 2024).
- Masitoh, M. (2019). Gangguan bahasa dalam perkembangan bicara anak. *Edukasi Lingua Sastra*, 17(1), 40–54. <https://doi.org/10.47637/elsa.v17i1.105>
- Pierrehumbert, J. (1990). Phonological and phonetic representation. *Journal of Phonetics*, 18(3), 375–394. [https://doi.org/10.1016/s0095-4470\(19\)30380-8](https://doi.org/10.1016/s0095-4470(19)30380-8)
- Putra, T. A. (2014). Makalah gangguan bahasa dan bicara. UNY. Retrieved from https://www.academia.edu/9012715/MAKALAH_GANGGUAN_BAHASA_DAN_BICARA
- Sheppard, S. M., & Sebastian, R. (2020). Diagnosing and managing post-stroke aphasia. *Expert Review of Neurotherapeutics*, 21(2), 221–234. <https://doi.org/10.1080/14737175.2020.1855976>
- Sopia, C. S., Widianingsih, F. A., Amelia, I., & Dewi, L. S. (2023). The analysis of language disorder between children vs. adult: Aphasia. In *Proceeding Virtual English Education Students Conference* (Vol. 2, pp. 4-7).
- Susini, M. (2016, November 10). Phonetic variations in Indonesian induced by language contact. *Menara Ilmu: Jurnal Penelitian Dan Kajian Ilmiah*. Retrieved from <https://jurnal.umsb.ac.id/index.php/menarailmu/article/view/28/11>

- Tere. (2023, June 26). Komunikasi adalah: Pengertian, jenis, dan tujuannya. *Gramedia Literasi*. Retrieved from <https://www.gramedia.com/literasi/komunikasi-adalah/> (accessed on June 20, 2024).
- Yuliana, S., Handani, H., Selmia, S., Irmawati, I., & Yusri, Y. (2021). A psycholinguistic study of language difficulties in patients with Broca's aphasia and potential treatments. *HUMAN: South Asean Journal of Social Studies*, 1(2). <https://doi.org/10.26858/v1i2.23230>