

## Acupuncture Treatment for Post-Stroke Aphasia at Harvest City Therapy Center in Bogor

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Post-stroke;  
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Communication skills;  
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### Abstract

Aphasia is a communication disorder that often occurs in post-stroke patients due to damage to the language centers in the brain. This condition can impair the ability to speak, understand language, and interact with the environment. Therefore, therapy is needed to help restore communication function, one of which is acupuncture. This study aimed to determine the effectiveness of acupuncture therapy in improving communication skills in elderly post-stroke aphasic patients. The method used was a case study, with several sessions of acupuncture therapy administered. Assessment was conducted through observation of the patients' communication skills, including verbal expression, language comprehension, responses, and social interaction. The study results showed improvements in communication skills after acupuncture therapy. Patients demonstrated improvements in expressing simple words, understanding instructions, and responding better. Social interactions also improved, indicated by more active engagement in communication. The conclusion of this study shows that acupuncture therapy has the potential as a complementary therapy in supporting the recovery of communication function in elderly aphasia patients after stroke.

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## INTRODUCTION

According to the World Health Organization (WHO), older people are individuals aged 60 years and above who often experience various functional changes, including decreased communication skills and speech disorders as part of the aging process and chronic health conditions (Maresova et al., 2019; Palmer et al., 2019; Sardone et al., 2020). These speech disorders can hinder their ability to convey needs, express feelings, and interact socially effectively, which in turn may worsen social isolation, increase stress, and reduce quality of life if not supported with appropriate communication strategies, as outlined in the World Report on Ageing and Health (WHO Press 2015), which provides a comprehensive overview of the functional challenges faced by older adults across multiple health domains, including communication, as well as the necessary support strategies for this population.

In Indonesia, the elderly population continues to increase from year to year. Data from the Central Statistics Agency (BPS) in 2024 shows that around 12% of Indonesia's total population is elderly. This number is expected to rise to 20.31%, or approximately 65.82 million people, by 2045. This trend indicates that Indonesia has entered an aging population era (Ministry of Health of the Republic of Indonesia, 2023).

This condition requires preparedness in the health and social systems to address various problems, including speech disorders experienced by older adults (Sciences et al., 2020; Sharavanashree et al., 2026). Basic Health Research data (Riskesdas), measured through the Indonesian Health Survey (SKI 2023), shows that non-communicable diseases—especially stroke and neurological disorders—remain the leading causes of disability in later life, often accompanied by speech disorders as a long-term functional impact. However, post-acute care still tends to focus on medical aspects, while rehabilitation of communication function in community settings or non-medical therapy has not been extensively studied in a systematic manner. Limitations in available data and research in this field may cause delays in rehabilitative interventions, which can negatively affect independence and social participation among older adults (Baldwin et al., 2018; De Coninck et al., 2021; Townsend et al., 2021).

Therefore, research on the management of post-stroke aphasia in older adults is important as a basis for developing a comprehensive, function-oriented rehabilitation approach (Hebert et al., 2016; Li et al., 2026). Based on the description above, Acupuncture Treatment for Post-Stroke Aphasia at Harvest City Therapy Center in Bogor highlights the need for a study on the management of post-stroke aphasia in older adults (Fitri et al., 2025; Muhayyang & Sakkir, 2025; Purnama et al., 2024). This study is expected to contribute to improving the quality of life of older adults so they can live their later years in a more meaningful, independent, and fulfilling way.

Several previous studies have examined the use of acupuncture for post-stroke aphasia. First, Zhang et al. (2021) conducted a meta-analysis on acupuncture combined with speech therapy for post-stroke aphasia, finding that acupuncture as an adjunct therapy had a positive effect on aphasia rehabilitation through mechanisms of neuroplasticity and increased cerebral perfusion. Their study demonstrated that acupuncture could modulate cortical activity and enhance connectivity between language areas in the brain. Second, Zhu et al. (2020) systematically reviewed the efficacy of acupuncture for post-stroke aphasia, concluding that acupuncture significantly improved language function compared to conventional therapy alone, particularly in verbal expression and comprehension. Third, Li et al. (2015) investigated the neurological mechanisms of acupuncture in stroke rehabilitation, showing that acupuncture increases brain-derived neurotrophic factor (BDNF) and promotes neural network reactivation. However, these previous studies have generally focused on the clinical efficacy of acupuncture in hospital settings, while research specifically examining acupuncture care for elderly patients with post-stroke aphasia in community-based therapy centers remains relatively limited (Liu et al., 2021; Wu, 2025; Zhou et al., 2023). Furthermore, studies integrating Traditional Chinese Medicine (TCM) syndrome differentiation with Western neurological assessment in a case study approach are still scarce (Chen et al., 2024; Ren et al., 2024; Su et al., 2023).

The problem in this case study is limited to acupuncture care provided to elderly patients with speech disorders, specifically post-stroke aphasia, who undergo therapy at Harvest City Therapy Center, Bogor. The focus is on understanding the benefits of acupuncture care for older adults with post-stroke aphasia through its implementation at Harvest City Therapy Center, Cileungsi.

The objective of this research is to determine the benefits of acupuncture care in cases of post-stroke aphasia through its implementation at Harvest City Therapy Center, Cileungsi.

## METHOD

This study used a qualitative approach with a case study design to evaluate the benefits of acupuncture care in cases of post-stroke aphasia at Harvest City Therapy House in Bogor. The study documented the full course of acupuncture-based management in accordance with standard acupuncture practice guidelines. Data were obtained from the Client Data Sheet using four examination methods and were analyzed to establish a differential diagnosis as the basis for developing an acupuncture care plan for post-stroke aphasia cases at the same facility.

The case study focused on post-stroke aphasia as the central clinical condition. Aphasia was understood as a language impairment following stroke-related brain injury that affected verbal expression, comprehension, reading, and writing in daily communication. It was distinguished from dysarthria because the primary deficit involved language processing rather than motor speech production. In Western medical terms, aphasia was associated with damage to brain language centers following stroke and was managed through neurological rehabilitation approaches. In Traditional Chinese Medicine (TCM), aphasia (*Shi Yu Zheng* / 失语症) was interpreted as a systemic imbalance involving the Heart (Xin), brain (Nao), and tongue, reflecting disruptions of Shen and disharmony of Qi and Blood, often associated with phlegm obstruction and stagnation. Treatment principles in TCM emphasized restoring systemic balance through acupuncture and related therapies.

The study involved one elderly client with post-stroke aphasia undergoing acupuncture therapy at Harvest City Therapy House in Bogor. The participant criteria included adults aged 55–75 years with post-stroke aphasia who were willing to participate. The intervention consisted of six acupuncture sessions conducted twice weekly from 16 February 2026 to 7 March 2026 at Harvest City Therapy House in Cileungsi.

The research procedure began after receiving ethical and institutional approval, including permission from the relevant academic program and authorization from the therapy center. Data collection involved identifying eligible participants, obtaining informed consent, conducting clinical assessments using the four diagnostic methods (observation, listening and smelling, inquiry, and palpation), formulating an acupuncture diagnosis, implementing therapy, and conducting ongoing evaluation. Data reduction was performed by selecting clinically relevant findings from the Client Data Sheet and organizing them into meaningful diagnostic categories used to determine the treatment strategy.

An acupuncture diagnosis was established based on combined disease identification and syndrome differentiation derived from the four diagnostic methods. This diagnosis guided the development of the care plan. The treatment plan included acupuncture point selection, use of supporting modalities such as moxibustion and electroacupuncture when appropriate, and a twice-weekly treatment schedule. Adjunct recommendations included lifestyle and dietary adjustments based on TCM principles.

Acupuncture intervention procedures included preparation of sterile equipment, confirmation of client consent, appropriate positioning, skin disinfection, needle insertion using selected needle sizes, controlled retention time, needle removal and disposal into a sharps container, and post-treatment observation. Standard infection control measures and safety precautions were applied throughout the procedure. Emergency preparedness was maintained

to manage any adverse events, and client comfort and safety were prioritized at all stages of treatment.

Evaluation was conducted immediately after each session and during follow-up visits. Process evaluation included observation of clinical signs, speech and behavioral changes, auditory responses, and palpation findings such as pulse changes and local responses at acupuncture points. Outcome evaluation was used to determine whether therapy should continue according to schedule or be modified based on clinical response.

Prognosis was classified clinically as *sanam* (recovered), *bonam* (good), *dubia* (uncertain), or *malam* (poor), depending on observed progress across treatment sessions. Referral procedures were considered when client conditions required services beyond the scope of acupuncture practice.

Data validity was ensured using triangulation methods, including source triangulation (multiple participants), technique triangulation (interviews and clinical observation), and time triangulation (data collected at different times). Data were collected through interviews, observations, and documentation, then recorded as field notes and organized into structured formats.

Clinical assessment data followed the four diagnostic methods. Observation (*Wang*) included assessment of Shen, facial appearance, body condition, and tongue characteristics. Listening and smelling (*Wen*) included evaluation of voice, breathing patterns, and body odors. Inquiry (*Wen*) covered medical history, symptoms, lifestyle, and family history. Palpation (*Qie*) included examination of affected areas, specific acupuncture points, and pulse diagnosis. Supporting Western medical data were also reviewed when available.

Data analysis followed an inductive approach, moving from specific clinical findings to broader interpretations. Data were reduced, organized, presented in narrative form, and interpreted to identify patterns and draw conclusions. Findings were compared with relevant literature to support interpretation and validity.

Ethical considerations included informed consent, confidentiality, anonymity, voluntary participation, non-maleficence, non-exploitation, and fair treatment. All participant identities were protected, and data were used solely for research purposes to ensure compliance with health research ethics standards.

## **RESULTS AND DISCUSSIONS**

### **Research result**

From the case study research conducted from February 9, 2026 to February 26, 2026 at Harvest City Therapy House, Bogor, with 1 participant, regarding "Acupuncture Care for Clients with Post-Stroke Aphasia Disorders ", the following results were obtained:

### **Description of Research Location**

This research was conducted at the Harvest City Therapy House, Bogor, located at Harvest City Housing, Ruko Orhid Niaga, Jl Orchid Raya No. 30 RT 001 / RW 011, Ragemanunggal Village, Setu District, West Java. This facility is a traditional health service clinic that provides acupuncture therapy, with a capacity of one bed for therapy procedures.

The equipment used in acupuncture care includes sterile acupuncture needles, electrostimulators, moxa, and various other supporting tools and materials tailored to the therapy's needs. All data collection, including the implementation of acupuncture and moxibustion, is conducted on-site. Services are conducted in accordance with standard operating procedures applicable to traditional acupuncture practice.

### **Participant Characteristics**

Name: Mr. B

Age: 65 years

First Arrival Date: February 9, 2026

Male gender

Islam

Occupation: Traveling food vendor

Address : Depok

Telephone No.: 087xxxx

### **Governance**

In this case study, acupuncture care was provided in six (6) therapy sessions according to the prepared intervention plan. The first session was held on Monday, February 9, 2026, at Harvest City Therapy House, Bogor. Each session was conducted by considering the patient's clinical condition, evaluation of previous therapy results, and the basic principles of Traditional Chinese Acupuncture treatment.

The primary goal of this therapy is to provide therapeutic effects according to clinical indications and support the holistic healing process through stimulation of relevant acupuncture points. Periodic evaluations are conducted to assess the patient's response to the therapy provided at each session.

### **Acupuncture Care Data**

The collected Acupuncture Care examination management data were identified and selected to have diagnostic value for data reduction.

The results are as follows:

Six sessions of acupuncture therapy significantly improved the communication skills of post-stroke aphasic patients, including expression, comprehension, and verbal interaction. These findings suggest that acupuncture has the potential to be an effective complementary therapy in supporting language recovery through neuroplasticity mechanisms.

In this chapter, we will discuss the search for data that changes in several therapy sessions, namely comparing client data before therapy with after therapy.

### **Assessment**

Based on the results of the Wang, Wen, Wun, and Qie method, the post-stroke aphasia condition in patients indicates a disturbance in the flow of Qi and Xue as well as obstruction by phlegm pathogens (Tan) which inhibits the function of the brain orifice. The finding of a pale, purplish tongue with a thick, moist white coating indicates stagnation and accumulation of Tan,

while deep (Chen), smooth (Hua), and tense (Xian) pulses indicate a combination of deficiency and excess syndromes (Maciocia, 2009).

In TCM concept, this condition falls under the Zhong Feng category , where speech disorders occur due to the blocking of the orifices by Tan and stagnation of Qi and Xue (Xuemin, 2011).

With Thus, the diagnosis of the syndrome formulated as:

**Stagnation of Qi and Xue with obstruction Tan that closes orifice, accompanied by Qi and Xue deficiency**

### **Therapeutic principles and rationale of Acupuncture**

The therapeutic principles used include opening the orifices ( Kai Qiao ), smoothing Qi and Xue, and eliminating Tan. The selection of points such as REN-23, HT-5, DU-20, and EX-HN1 is based on their function in stimulating the speech area and increasing brain function connectivity (Maciocia, 2009; Xuemin, 2011).

Modernly, acupuncture is known to increase cerebral perfusion and modulate cortical activity which plays a role in the recovery of language function (Zhang et al., 2021).

### **Synchronization with therapy results during 6 sessions**

#### **1. Before Therapy:**

Before intervention, patients with post-stroke aphasia experience limitations in communication skills. This is evident in difficulty expressing words, limited understanding of instructions, and slow and inconsistent responses. Interaction with the environment is also minimal, characterized by a lack of eye contact and participation in communication.

#### **2. After Therapy:**

After six sessions of acupuncture therapy, the patient's communication skills showed improvement. She began to express simple words better, understand instructions better, and respond more quickly and consistently. Furthermore, her social interactions also improved, as evidenced by better eye contact and more active engagement in communication.

In addition, improved communication skills after repeated therapy were also reported in a systematic study that acupuncture as an adjunct therapy had a positive effect on aphasia rehabilitation (Zhang et al., 2021).

From a TCM perspective, therapeutic success indicates the smooth flow of Qi and Xue and the reduction of Tan obstruction. Meanwhile, from a modern neurological perspective, these effects are associated with increased neuroplasticity, reactivation of neural networks, and enhanced connectivity between language areas in the brain (Li et al., 2015; Zhang et al., 2021).

Thus, acupuncture can be viewed as a complementary therapy that has a strong theoretical basis in both TCM and modern medicine.

## CONCLUSION

The study on acupuncture care for elderly patients with post-stroke aphasia at Harvest City Therapy House, Bogor, found that after six therapy sessions there was noticeable improvement in communication abilities, including clearer pronunciation of simple words, better comprehension of instructions, faster and more consistent responses, and enhanced social interaction reflected in increased eye contact and active engagement. These outcomes suggest that acupuncture may serve as a promising complementary therapy to support recovery of communication function in post-stroke aphasia. Based on these findings, it is recommended that practitioners consider integrating the applied acupuncture protocol (REN-23, HT-5, DU-20, and EX-HN1 with tonification and reduction techniques) into clinical practice while continuing individualized evaluation of patient responses; future research should involve larger sample sizes, control groups, and longer follow-up periods, including randomized controlled trials comparing acupuncture alone, speech therapy alone, and combined interventions to strengthen evidence of efficacy. It is also recommended that families support ongoing therapy alongside conventional rehabilitation and home-based communication practice, while policymakers consider the inclusion of acupuncture as a complementary therapy within national health coverage for post-stroke rehabilitation to improve patient outcomes and quality of life.

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