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Language Competency Recovery Model Using Inclusive Therapy for Post-Stroke Wernicke Aphasia Patients: A Neurolinguistic Study

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Abstract- Wernicke's aphasia is a type of aphasia caused by damage to parts of the brain associated with language comprehension. Those who experience Wernicke's aphasia generally cannot understand the words said by others or themselves. This condition occurs in adults who have had a stroke due to a blockage or rupture of blood vessels in the brains of left and right hemispheres. This article discusses one model of language therapy that can be done to restore the ability of production and language competence in patients with post-stroke Wernicke's aphasia in the form of inclusive therapy. This research uses qualitative methods, using theoretical and methodological approaches (Maseleno et al., 2019). The focus of the study is a case study of one post-stroke patient suffering from Wernicke's aphasia. The results showed that people with Wernicke's aphasia still had cognitive abilities in language. The difficulty lies in syntactically and semantically speaking language production. There are three models of therapy conducted in an inclusive and integrated, ie physiological recovery post-stroke therapy, language competency restoration therapy, and motivational therapy. The therapy is carried out regularly and continuously can accelerate the process of restoring language competence for sufferers of post-stroke Aphasia Wernicke.

Keywords: **Wernicke's aphasia, inclusive therapy, post stroke, neurolinguistics, language competence.**

I. INTRODUCTION

Stroke is one of the diseases that is the highest cause of disability and death in the world. Stroke becomes a dangerous disease after heart disease and cancer, and is a major cause of disability in adults in developed countries (Ignatavicius& Linda, 2002). Each year in Indonesia is estimated at around 500,000 residents suffered a stroke, about 25% or 125,000 people have died and the rest suffered mild to severe disability (Yastroki, 2011). In Indonesia, based on data obtained from the Center for Data and Information (Pusdatin) of the Indonesian Ministry of Health, the prevalence of stroke in 2018 over the age of 15 years reached 10.9% or around 2,120,362 people. The majority who experienced strokes were residents living in urban areas (63.9%), while those who lived in rural areas were smaller (36.1%).

Health problems arising from stroke vary greatly, depending on the extent of the brain area that is infarcted and the location affected. These health problems are in line with the opinion of Silbernagland Lang (2007) that the clinical manifestations of stroke are determined based on the disturbed perfusion site. The most affected artery is the middle cerebral artery. If stroke hits the media cerebral artery, the patient may experience aphasia.

Aphasia is a disorder of language function caused by abnormalities in the brain, due to brain injury or pathological processes, brain stroke and bleeding, and can appear slowly as in the case of brain tumors in the frontal, temporal or parietal lobes that regulate language skills. The condition of this language disorder generally attacks adults who have or stroke sufferers. Aphasia is a language incompleteness function caused by damage to the left side of the brain hemispheres (Goodglass& Kaplan, 1983). The manifestations of the incompleteness of verbal abilities include abnormal verbal expressions, difficulty understanding spoken or written language, repetition, naming, reading and writing (Sinanovico, 2005; Occic G, 1998; and La Pontine LL, 1990).

Diseases caused by cerebral blood vessels become the initial cause of aphasia occurring in approximately 80% in adults. Ischemic stroke (embolic or thrombotic) and hemorrage (intracerebralhemorrhage) in the

area of the cerebral circulation (anterior cerebral circulation), especially in the left middle part of the arteries of the brain, are common causes of aphasia syndrome. Temporary aphasia is also found in patients with transient ischemic attacks. In this case, neurological disorders that occur can be in the form of impaired ability to speak within 24 hours. The main characteristics of aphasia due to blood vessels occur in a fast time, so that action must be taken immediately, because it determines the success of recovering partial or total speech (Sarno MT, 1991; Pedersen etc., 2004; Smajlovic etc., 2005; Brown, etc. 1996, and Sinanovic, etc., 2006).

Stroke patients with aphasia experience obstacles in carrying out daily life activities due to the inability of patients to express what they want, unable to answer questions or participate in conversations that make patients frustrated, angry, lose self-esteem, and emotions become unstable. This situation eventually causes the patient to become depressed. Aphasia may negatively impact a person's independence, functional ability, participation of the social environment, quality of life and mortality because of inadequate communication (Kirshner, 2009).

Based on the symptoms experienced by sufferers, aphasia can be divided into several types, one of which is a type of wernicke aphasia. Wernicke's aphasia is a type of aphasia caused by damage to parts of the brain associated with language comprehension, namely the left side of the temporal lobe of the brain. Those who experience Wernicke's aphasia generally cannot understand what other people say or even themselves say. This is because at the time of speaking, sentence structure becomes very random. Goodglass&Geschwind explains that Wernicke's aphasia sufferers can compose cohesive phrases and clauses but no coherence and clarity of communication objectives appear (in Schovel, 2004: 75).

This shows that the characteristic of this aphasia is a decrease in understanding of the words and sentences spoken. People with Wernicke's aphasia are generally fluent in sound and syntax, but semantically speaking is incoherent. This incoherence is shown through the appearance of words that don't make sense over real-world concepts, and the replacement of incorrect word functions for word content (eg verb, noun). It also includes the production of sentences that have the basic structure of spoken language, but without taste so as to produce sentences without meaning, for example 'Yeah, that was the pumpkin furthest from my thoughts' and 'the scroolishprastimer ate my spanstakes' (Code, 1987).

This error of speech is then known as logorrhea and is the most easily recognized characteristic or symptom of Wernicke's aphasia. However, this aphasia sufferer felt if what he said was true. The reduced ability to identify errors in speaking (anosagnosia) is the reason it can occur. Eventually, Wernicke's aphasia sufferers will realize that their speech is completely untrue. In these conditions, sufferers will become emotional and feel depressed. The handling of Wernicke's aphasia patients often includes support and encourages non-linguistic communication (Damico & Ball, 2010).

Other terms of Wernicke's aphasia are sensory aphasia, acoustic-amnestic aphasia, receptive aphasia and verbal agnosia. This aphasia is characterized by easy speech production and like fluent aphasia with normal speech production or sometimes more than normal. Some patients who are very logorrheic can be stopped with an energetic reaction from the interlocutor. Furthermore, sufferers speak spontaneously with articulation that is prepared and rhymes. Speak in long sentences, which are grammatically correct, but more or less comprehensive, according to vocabulary and paraphrases and neologisms. Someone with this type of aphasia has a low understanding of the interlocutor and poor repetition, repetitive speaking, often irregular comparison of the speed of speaking with the level of understanding of his hearing.

At the highest level of Wernicke's aphasia, the contents of the conversation cannot be summarized in full to the interlocutor, and usually the sufferer says that he does not understand what is said, or does not understand the contents of the conversation. This contrasts with the type of motory aphasia where the impression arises that the patient understands what he is talking about, but cannot speak correctly, or answer correctly.

Wernicke's aphasia can also occur due to lesicortical damage in the right hemisphere, namely the Wernicke region which is located associatively between the visual area, the sensory area, the motor area, and the hearing area. Damage to this area causes not only the understanding of everything that is heard to be disturbed, but also the understanding of something that is seen to be disturbed. However, sufferers still have verbal abilities even though they cannot be understood by themselves and others.

The case of Wernicke's aphasia is one interesting study that can be analyzed linguistically. This condition occurs in adults who have had a stroke due to a blockage or rupture of blood vessels in the brains of left and right hemispheres. Post-stroke patients not only have motor language disorders, but also sensory disorders. Damage to the area causes not only the understanding of what is heard to be disturbed, but also about the understanding of what is seen to be disturbed.

There has been much research that discusses the handling and therapy for recovery of language disorders in the case of Wernicke's aphasia. However, there is no specific standardization established as a standard and effective method for this case. Therefore, this article discusses one model of language therapy that can be used to restore the ability of production and language competence in post-stroke Wernicke aphasia sufferers in the form of inclusive therapy.

The term inclusive in this context is used based on the stages of therapy that not only use one or two ways, but the overall collaboration of techniques and methods of language therapy. Then combined with physical neurological therapy that uses a psychological approach to improve brain response in language processing in Wernicke aphasia sufferers after stroke

II. METHOD

In general, this study is included in qualitative research, carried out using two approaches, namely theoretical and methodological. The theoretical approach in this research is based on neurolinguistics, while the methodological approach uses descriptive-analytical. The focus of this study is the case study of one post stroke patient who suffered from Wernicke's aphasia.

Data collection techniques used in this study were observation, deep interview with the patient and his family. Then after the patient is observed and data is collected, an analysis is carried out by listening to (paying attention to) the patient's conversation with the closest person, talking and questioning and answering with the patient, recording and transcribing recorded data in written language. The process of identifying and classifying data is based on the type and pattern of sentences produced by patients with post-stroke Wernicke's aphasia.

The instrument used in this study was in accordance with the method of free and recorded notes, the instrument used was in accordance with the guidelines for determining the type of aphasia (Wernicke or not) and the guidelines of each test to determine the lack of language aspects of phonological, morphological, syntactic and semantic. The next step is an assessment process in the form of tests conducted on aphasic patients, the questioning of the relationship between language and cognitive functions. The Boston Aphasia Examination (BDAE) model was used, which was introduced by Goodglass and Kaplan (1983). This aphasia assessment model can be selected by outputing the results of the assessment in the form of aphasia. It also used PALPA tests and TADIR to find out what type of aphasia suffered by the patient, and the results of other speech abilities tests.

The stages of data processing are carried out through the process of interpretation and analysis comparing data with theory, and ending with the process of drawing conclusions from the results of the analysis. After the analysis results are completed, the next step is to determine the type of therapy needed, then compile it into a model of inclusive therapy for these patients.

III. FINDINGS AND DISCUSSION

Findings

Post stroke stroke aphasia sufferers have difficulty in language, especially when combining words into sentences (syntax) and saying sentences but the meaning is unclear (semantic). This indicates that basically, people with Wernicke's aphasia still have cognitive abilities in language and other knowledge, only have difficulty expressing clearly what they are thinking through language. That is, they experience language disorders syntactically and semantically.

DW, the research subject in this study, was a 58-year-old post-stroke aphasia sufferer, and had experienced stroke for 5 years. Physically, the condition of DW has returned to normal as healthy people in general, and can do their daily activities independently. DW realized he had a language disorder when

he wanted to express something but felt difficult and confused, until finally an examination was made and was declared to have Wernicke's aphasia.

The data that was successfully collected during this research shows that DW still has good cognitive abilities in language, especially in the pronunciation and mention of words, including nouns, adjectives and verbs. DW has difficulty when starting to combine phrases into a sentence. The following are the evaluation results of the observations made, covering four aspects namely, verbal expression, speech, syntax and semantics.

1) Verbal expression

Verbal statements or known as verbal expressions are a person's ability to express the contents of their thoughts and knowledge through language. Verbal expression signifies one's cognitive ability in producing language. In general, DW has a fairly good verbal expression, especially when saying words and phrases, as shown in the table below: (DW was immediately asked to show objects and writings)

Table 1. Verbal expression of DW in word pronunciation

No.	Words / phrases spoken by DW	Target Words / Phrases	Result
1	*Hee... Meja* (table)	*Meja* (table)	Appropriate, only preceded expression
2	*Kursi* (chair)	*Kursi* (chair)	Appropriate
3	*Kunci* (key)	*Kunci* (key)	Appropriate
4	*Pulpen*(pen)	*Pulpen* (pen)	Appropriate
5	*Sendal...bapak* (sandals... me)	*Sendal* (sandals)	Appropriate, followed by an expression indicating ownership
6	*Gelas* (glass)	*Gelas* (glass/mug)	Appropriate
7	*Buku* (book)	*Buku* (book)	Appropriate
8	*Jam... Dinding...* (clock)	*Jam Dinding* (clock)	Appropriate, rather slow
9	*Ini... cincin...* (this... is ring)	*Cincin* (ring)	Appropriate, prefixed word shows
10	*Kerja... sibuk* (work... busy)	*Kerja* (work)	Appropriate, caption added
11	*Nulis*(write)	*Tulis* (write)	Meaning is appropriate but words are not the same

Based on the table above, it can be seen that DW is not too problematic with the pronunciation of words because it is in accordance with the target word and meaning requested. There are only a few words that begin with certain expressions are intended to affirm something, as well as pronunciation slow process (no. 8 and 9) but still in accordance with the requested target. This is the first indicator to show DW suffering from Wernicke's aphasia after stroke. DW is always given a stimulus to express nouns, adjectives or verbs.

2) Speech in sentences

DW can say the words requested by showing objects and writing. However, the language disturbances experienced by DW began to be seen when asked questions to stimulate him to reveal the answers requested, as seen in the following dialogue:

Tabel 2. Dialogue with DW

No.	Question	Answer	Result
1	*Bapakkabarnyabagaimana?* (how are you?)	*DW : Ehh... anak... bapakmana... anakbapak*(looking for his son to sit together)	Not yet listened to the question
2	*BapakApakabar?* (how are you?)	*DW : Baik, Kabar... Baik... Bapak...*	Appropriate
3	*NamaBapakSiapa?* (what is your name?)	*DW: Namasaya DW* (my name is DW)	Appropriate
4	*Bapaktinggaldimana?* (where do you live?)	*DW: Saya... di rumah...euh...jalan...euh...* (I... in... home..eh.. street..eh)	hard to say the home address but DW knows and

			remembers the location
5	*HobiBapakapa?* (what is your hobby?)	*DW: Banyak, kabel... radio..tv...rusakbetulin* (many... cable... radio... tv.. repair)	Delivering his hobby of repairing damaged electronic devices
6	*Bapakmasihharusterapiya?* (Do you still need therapy?)	*DW : Pagi... Pagi... keDokter... Lagi... iyaa...* (morning... doctor... yes..)	Syntax is not appropriate Semantics are incompatible intent clearly wants to tell the schedule of therapy
7	*BapakCape gak?* (are you tired?)	*DW : Kerja.... nganggur... lama* (working... unemployed... long time)	Incorrect answer
8	*Oh Iya, Bapaktadisudahmakan?* (Did you eat?)	*DW : Pagimakan... trusObat... tunggu...* (morning... eat... medicine... wait)	Partially correct answers then begin to reveal difficulties

The two tables above are the data that were successfully obtained during the study of DW who suffered Wernicke's aphasia after stroke. Based on these data, it was found that the character of Wernicke's aphasia suffered by DW led to more disturbances in producing language, especially in forming sentences and their meanings. Because cognitively, basic language skills such as spelling, word pronunciation, meaning of words, and fluency in speaking DW can be said to be still normal.

3) Syntax and semantic analysis

In table 2 above, it appears that DW has difficulty when stimulated by questions that require it to answer in full sentences. In the first dialog DW can still answer with a fairly good arrangement of words and sentences (dialogues 2 and 3).
The composition of DW sentences when answering questions in the second dialog are:

"Baik...., kabarbaikbapak" (Fine..., i am good)
K Pr K S

From this sentence, it can be said that DW still has the ability to say words and phrases that have clear meanings, it's just that the sentence structure is irregular. In the third dialog, DW says the sentences in the correct order when asked by name:

"NamaSaya DW" (my name is DW)
S K

DW's condition began to change when given questions that were complicated enough for him to answer, as shown in dialog no. 4 and 5. DW was asked about the address of the house where he lived, but he was only able to answer with words that were suddenly said:

Q : *Bapaktinggaldimana?* (where do you live?)
DW : *Saya... di rumah...euh...jalan...euh...* (I... in... home..eh.. street..eh)
S K .....

In meaning, DW is able to explain that he lives at home, and his answers can be categorized according to the questions given. However, DW had trouble mentioning the clear address even though from the expression shown he knew the exact address of his house. Syntactically, DW does not utter complete sentences, consisting only of subjects and information.

In the fifth dialogue, DW was asked about his hobbies. DW understood the purpose of what was asked, but still had difficulty expressing and speaking, so that only words that related to the hobbies he liked appeared.

Q : *HobiBapakapa?* (what is your hobby?)
DW : *Banyak, kabel... radio..tv...rusakbetulin*(many..cable... radio..tv.. repair)

The dialog above shows that DW wants to convey his hobby of repairing damaged electronic devices. Syntactically, the order of phrases and sentences is irregular, but in the beginning it shows that DW understands the question by answering "many", followed by nouns related to the hobbies to be conveyed, and ending with the words "broken" and "fix" which negated that DW's hobby was to like repairing electronic devices.

Based on the above analysis, it can be said that DW has a language disorder especially in conveying the contents of the mind that are sometimes out of sync with the answers he utters. DW has difficulty arranging words into sentences (syntax) and saying sentences but the meaning is not clear (semantic), but basically DW knows the words or sentences that must be spoken. This has become a communication obstacle for DW who is now active again in his daily activities, and sometimes makes his psychological condition disturbed due to stress.

IV. DISCUSSION

Wernicke's aphasia is a language disorder caused by damage to the left part of the temporal lobe of the brain. This characteristic of aphasia is the decrease in understanding of the words and sentences spoken. People with Wernicke's aphasia are generally fluent in sound and syntax, but semantically speaking is incoherent. The condition looks more severe when someone experiences Wernicke's aphasia due to stroke.

As has been explained in the analysis of research data above, it is clear that DW as an adult suffers from Wernicke's aphasia because of this stroke, his language ability decreases, especially in understanding the words and sentences spoken. In table 2 we can see a pattern of language impairment experienced by DW. Structurally, there are several sentences which correspond to the basic structure in syntax. However, when repeated dialogs were carried out, DW said many irregular words in terms of structure and meaning, even though the words were clearly spoken. This is a sign that DW suffers from Wernicke's aphasia due to stroke.

Based on the language errors arising from the dialogue patterns carried out against DW, the language deficiencies mapped by Stemmer and Whitaker, (2008) are presented in Table 3.

Table 3 Language Deficiency Syndrome in Aphasia

Syndrome	**Disadvantages Language**	**Language errors**
Fluent aphasia		
Anomic	Normal fluency, good auditory comprehension and repetition	may resolve to minimal word-finding difficulties
Conduction	Normal fluency, good auditory comprehension	Phonemic paraphasias, poor repetition)
Transcortical sensory aphasia	preserved repetition, poor comprehension	Verbal paraphasias, anomia
Wernicke	**Normal fluency, poor comprehension, poor repetition)**	**Jargon, loghorrhea, anomia**

In the table, it is stated that Wernicke's aphasia is classified as fluent aphasia. If analyzed based on the table above, what happens in this DW case is not only experiencing Wernicke's aphasia, but there are other symptoms that follow partially. There are some symptoms of transcortical sensory aphasia experienced by DW, such as repetition of words done well and maintained, but still in poor understanding. When viewed from the side of conduction syndrome, DW has a normal fluency and good hearing, only from repetition that is not good.

The conditions that occurred in DW showed that Wernicke's aphasia he suffered had its own complexity. This is because of the impact of the stroke that occurs on it so that in addition to the symptoms of Wernicke, symptoms will appear from other language disorders, although not too significant.

Deficiencies, errors and physical symptoms that occur in DW as a post-stroke Wernicke aphasia sufferers need special treatment, which is not only done in the form of physical therapy related to damage to the brain (left and right hemispheres for sensing), but also needs to be stimulated with language therapy that is more focused on aspects of repetition and understanding in saying a word or sentence. The handling of Wernicke's aphasia patients often includes support and encouragement of non-linguistic communication, meaning that there is a need for psychological therapy that supports the patient's recovery.

Inclusive Therapeutic Model for Wernicke Afasia Sufferers after Stroke

Wernicke's aphasia sufferers need a complete and continuous form of therapy, especially in patients who have had stroke. Damage to the Wernicke field will result in failure to understand spoken language. Because written language is learned through spoken language, a damage to the Wernicke field will also eliminate the understanding of written language and cause chaos in language production.

The handling process will be more complex because biologically, sufferers also experience interference on the body parts due to stroke. Therefore, language therapy must be integrated with physical and psychological therapy for sufferers.

In the case of DW, stages of language therapy have been carried out which are integrated with several physical and psychological therapies to help accelerate recovery. There are three types of recovery models performed on DW, namely post-stroke physiological therapy, language competency recovery therapy, and motivational therapy.

1) Post-stroke Physiological Therapy

This therapy is done to restore the function of the body that had experienced stroke. DW, who has been suffering from stroke for 5 years, has been undergoing regular physiotherapy at the hospital with intensive assistance from a doctor. This step is the initial stage to diagnose damage to the brain that causes DW to suffer from Wernicke's aphasia. This process focuses more on repairing the medical damage that occurs in the left and right hemispheres of the brain as a language production area. The expected outcome of this process is the improvement of the function of the hemispheres which will ultimately be able to facilitate the process of recovering language disorders.

2) Language Competency Recovery

Recovery of language competence is a primary process conducted on DW suffering from Wernicke's aphasia. DW has decreased language competence, especially in conveying words and sentences that are semantically incoherent. There are four stages of the process that are carried out continuously, including the narrative process, writing, composing sentences, and understanding of meaning.

a. The Narrative Process

The narrative process is divided into two stages. First, patients are asked to say a few words and sentences by listening (auditory). This listening process is carried out to stimulate and stimulate the right hemisphere in producing language. Words and sentences are listened to patients starting from the simple to the more difficult ones. This process is carried out periodically, until the patient is able to speak words and sentences easily. Second, patients are asked to read words and sentences that have been written. This process is also carried out periodically, until the patient is able to tell the words and sentences that are read.

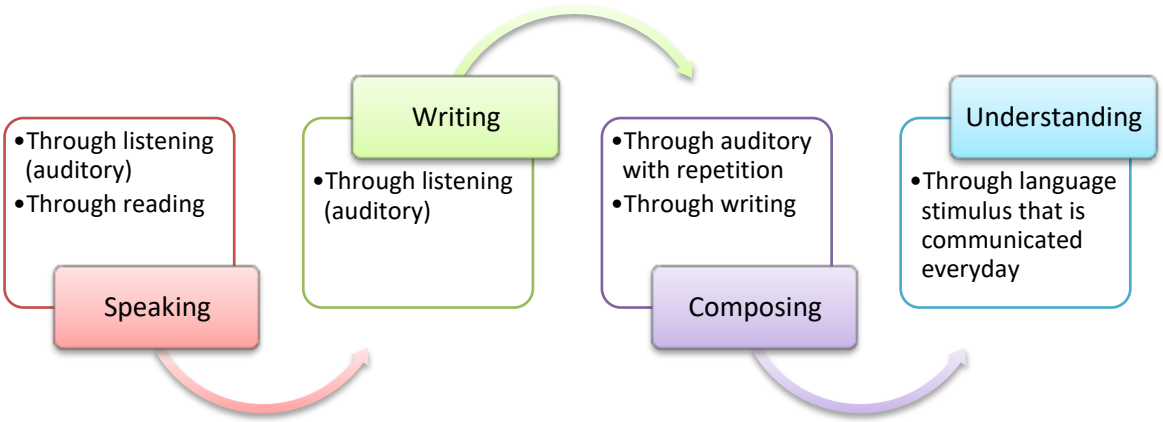

Figure 1. Stages of the Process in Recovering Language Competence

b. The Writting Process

Once the narrative has been done, then the next menu is the recovery of language competence through writing. In this process, the patients were asked to listen to a word or phrase, then spoken and written. This process can be done when the patient has passed the narrative process with a minimum scale of ability that has been made (this scale is very subjective and differs in each person). In the DW case, the writing process began when the speech ability scale from DW was quite smooth and able to repeat words clearly.

c. The Composing Sentences Process

This process is done in two ways. First, through an auditory process with repetition. The preparation of words into sentences through hearing can be directly carried out by the patient if the speech process is felt to be good enough. That is, patients do not have to go through the writing process first because of the verbal treatment. Usually, in the process of preparing words and sentences, the patient is given a stimulus in the form of a short question. Patient answers in the form of words and sentences are indicators of communication skills possessed. Patient's answers may be irregular, and it is a record to do the repetition process.

The second way is to arrange words and sentences through writing. In this second method, the prerequisite is to have gone through the stages of the writing process first. This means that the patient has enough competence to write the wording into simple sentences. In this second method, the patient is asked to arrange the sentence orally and then write it down.

Both methods are carried out gradually and periodically. An indicator of the patient's initial success is that they are able to answer the questions given with simple to complex verbal and written sentence structures.

d. Understanding the Meaning Process

This is the final stage of language recovery therapy. The process of understanding the meaning is by giving stimulus to the patient to re-understand the meaning of the word or sentence spoken. This means that this process is more often the patient is invited to dialogue verbally, and began to be introduced about the material surrounding environment and daily activities. This was done to facilitate the understanding of the patient to the spoken words and sentences.

3) The Motivational Therapy

A person's psychological condition will become unstable when experiencing a severe, terrible or frightening event such as an accident or severe illness that results in impaired bodily functions. As was the case in the DW, suffered a stroke which resulted in him experiencing aphasia, and indirectly create the psychological and motivation impaired. This motivational therapy aims to stabilize the psychological condition of the patient so that he has enthusiasm to recover from his illness. This is because the psychological aspect is one of the main factors that can accelerate the recovery process, especially for aphasia sufferers. In this process, not only patients are involved but also the people closest and the family becomes an important element of the success of therapy.

Therapy can be in the form of encouraging the patient in the form of support to continue to support, encourage positive thinking, and help him carry out daily activities that are routinely carried out before the patient suffers from illness. This will make the patient feel the atmosphere of life again and foster motivation to recover faster.

Motivation Therapy is carried out from the beginning of recovery until the patient recovers. There is no time limit for doing this therapy because motivation must always be given by people around the patient, so as to create conditions that are conducive for the patient to do their normal activities.

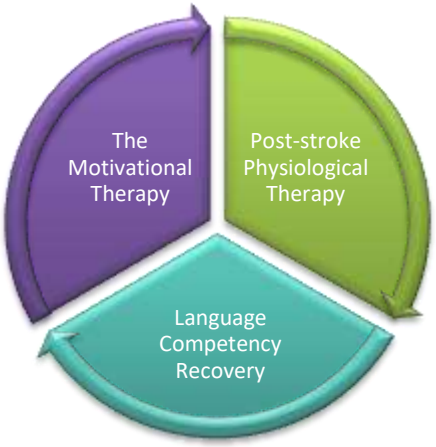

Figure 2. Relationship and Integration 3 Models of Recovery Therapy for Language Competence for Wernicke Aphasia Post-stroke Patients

The recovery therapy model is one alternative that can be done to restore language competence for sufferers of post-stroke Wernicke aphasia. This therapeutic model is inclusive and integrated with each other. This means that the implementation of therapy can be done simultaneously in a certain period of time, depending on the condition of the patient being treated.

The method is being carried out on DW as an example case, and has been running for a period of 6 months. The sequence of therapy conducted in accordance with the needs of DW, so that therapy is not always applied sequentially. For DW, motivation and physical therapy are performed first, then proceed in parallel with the language competency recovery therapy.

The results obtained indicate that DW has progressed quite well, as shown in the following table:

Table 4. Comparison of DW conditions before and after treatment

Type of Therapy	Before Therapy	After Therapy
Physiological	Language production on the body are still limited in their functions; The ability to pronounce fluently	The function of language production has begun to improve;

	but is still unclear; Looks hard to say the word	The ability to pronounce is smooth and clear
Recovery of language competence	Narrative: Current but unclear meaning; Irregular arrangement of words spoken; Not able to provide appropriate responses / answers when dialoguing; Writing: Physically have not been able to write words or sentences Arranging words into sentences is still irregular Understanding and meaning of words and sentences is still biased	Narrative: Smooth and clearer the meaning is heard; The wording has begun regularly; Able to provide an appropriate response when dialogue; Writing: It's getting stimulated to write a few words Arranging words into verbal sentences has begun to be organized and in accordance with the stimulus provided It has been able to understand spoken words and sentences
Motivational Therapy	Sufferers tend to be Reticent Unstable emotions	Start a lot of light activity in the home environment; Emotion is more restrained; More eager to recover and diligently doing therapy

The process of observation of DW is still carried out using the recovery therapy model. However, this model can be used as an alternative way to restore language competence for people with Wernicke's aphasia, especially for post-stroke patients.

V. CONCLUSION

Wernicke's aphasia is a language disorder caused by damage to the left part of the temporal lobe of the brain. The characteristic of this aphasia is the decrease in understanding of the words and sentences spoken. Wernicke aphasia post-stroke patients have difficulty in speaking syntactically and semantically.This indicates that basically people with Wernicke's aphasia still have the cognitive abilities of language and other knowledge, it's just that it's difficult to express clearly about what they are thinking through language. Wernicke's aphasia sufferers need a complete and continuous form of therapy. There are three models of therapy that are carried out inclusively and integrated, namely post-physical physical and physiological recovery therapy, language competency recovery therapy, and motivational therapy. The implementation of therapy regularly and continuously can accelerate the process of recovering language competence for sufferers of post-stroke Afasia Wernicke

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