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The clinical view on the prognostic factors of aphasia

O olhar clínico sobre os fatores prognósticos das afasias

Visión clínica sobre los factores pronósticos de la afasia

Camila Neves[*]
Melissa Catrini[*]

Abstract

Objective: To identify how prognostic factors have been approached and their implications on the theoretical and methodological foundations that underlie the clinical reasoning regarding prognosis in the field of aphasiology. **Method:** A literature review was conducted in the databases SciELO, PubMed and Periódicos CAPES, using the keywords "aphasia", "prognosis" and "factors", as well as their correspondent Portuguese keywords. All articles that related the prognosis of aphasia to a variable (factor), published between 2005 and 2015, in Portuguese, English or French were considered. **Results:** Fifteen articles were selected, from which 29 prognostic factors were identified. The most frequently mentioned of these factors were age, extent and location of lesion, gender and schooling. However, age, sex and education were not considered significant to predict the prognosis, in most articles. **Discussion:** In general, researches involving prognostic factors related to aphasia are analyzed under an organicist perspective, which leads to homogenization of patients and symptomatic manifestations of language, disregarding subjective and social aspects in favor of organic aspects. This is due to a specific conception of healing and therapeutic success, reflecting in the choice of research methodology. **Conclusion:** It is necessary to study subjective and social aspects through a clinical view that focuses the plurality of symptoms. For this purpose, a qualitative research method would be more appropriate.

Keywords: Aphasia; Prognosis; Review; Language Therapy; Speech, Language and Hearing Sciences.

*Universidade Federal da Bahia, UFBA, Salvador, BA, Brazil.
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Correspondence address: Camila Neves - neves.cns@gmail.com
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Resumo

Objetivo: Identificar o modo como os fatores prognósticos têm sido abordados e sua implicação nos alicerces teórico-metodológicos que fundamentam o raciocínio clínico com relação ao prognóstico no campo da afasiologia. **Método:** Foi realizada pesquisa bibliográfica nas bases de dados SciELO, PubMed e Periódicos CAPES, utilizando as palavras-chaves "afasia", "prognóstico" e "fatores" e seus correspondentes em inglês. Foram incluídos artigos publicados entre 2005 e 2015, em português, inglês ou francês, que relacionassem o prognóstico da afasia a uma variável (fator). **Resultados:** Foram selecionados 15 artigos, nos quais foram identificados 29 fatores prognósticos. Destes, os mais citados foram idade, extensão e local da lesão, sexo e escolaridade. No entanto, idade, sexo e escolaridade não foram considerados como significantes para a previsão do prognóstico na maioria dos artigos. **Discussão:** Em geral, as pesquisas que envolvem fatores prognósticos relacionados às afasias são analisadas sob uma perspectiva organicista, o que leva à homogeneização dos pacientes e das manifestações sintomáticas de linguagem, desconsiderando os aspectos subjetivos e sociais em favor dos aspectos orgânicos. Isto se deve à uma concepção específica de cura e sucesso terapêutico, sendo refletida na escolha da metodologia da pesquisa. **Conclusão:** Faz-se necessário estudar os aspectos subjetivos e sociais, através de um olhar clínico que contemple a pluralidade sintomática. Para isso, um método qualitativo de pesquisa seria mais indicado.

Palavras-chave: Afasia; Prognóstico; Revisão; Terapia da Linguagem; Fonoaudiologia.

Resumen

Objetivo: identificar cómo los factores pronósticos han sido abordados y su implicación en los fundamentos teóricos y metodológicos que forman la base del razonamiento clínico con respecto al pronóstico en el campo de afasiología. **Metodos:** La búsqueda bibliográfica se realizó en las bases de datos SciELO, PubMed y Periódicos CAPES, utilizando las palabras clave "afasia", "prognóstico" y "fatores", y sus correspondientes en inglés. Se incluyeron artículos que relacionaban el pronóstico de la afasia a una variable (factor), publicados entre 2005 y 2015, escritos en portugués, inglés o francés. **Resultados:** Fueron seleccionados 15 artículos, en los que se identificaron 29 factores pronósticos. De éstos, los más citados fueron la edad, la extensión y localización de la lesión, el sexo y la educación. Sin embargo, la edad, el sexo y la educación no se consideraron como significativos para predecir el pronóstico en la mayoría de los artículos. **Discusión:** En general, las investigaciones que implican factores pronósticos relacionados con las afasias son analizadas bajo una perspectiva organicista, lo que conduce a la homogeneización de los pacientes y de las manifestaciones sintomáticas del lenguaje, sin tener en cuenta los aspectos subjetivos y sociales. Esto se debe a una concepción específica de curación y éxito terapéutico, que se refleja en la elección de la metodología de investigación. **Conclusión:** Es necesario estudiar los aspectos subjetivos y sociales, a través de una visión clínica que contemple una pluralidad sintomática. Para esto, un método de investigación cualitativo sería más apropiado.

Palabras claves: Afasia; Pronóstico; Revisión; Terapia del Lenguaje; Fonoaudiología.

Introduction

Aphasia is a language impairment that commonly occurs in individuals who suffered brain injury. It is defined by Mansur and Machado[1] as an "alteration of the acquired communication caused by neurological injury, […] affecting the modalities of production and comprehension of oral and written language, not due to sensorial, intellectual or psychiatric deficits". The term "aphasia" is used to describe a very heterogeneous group of disorders, considering the complexity of language and the multiple ways of being aphasic[2].

Since there are no data on the incidence of aphasia, it is only possible to infer this information based on the incidence of cerebrovascular accident (CVA)[2]. Several epidemiological studies indicate that CVA – or stroke – is the most common etiology of aphasia, the second cause being traumatic brain injury (TBI). Tumors are another relevant etiology indicated by aphasiology studies[3-5].

A study carried out in Brazil, between 1995 and 2000, with 192 subjects with speech and language alterations showed that 70% of these individuals were aphasic and the most common etiology was stroke, representing 58% of all the registered cases of aphasia[3]. Another study, also conducted in Brazil, showed that, from 244 cases of acquired neurological injuries, 56.1% presented aphasia and 69.4% of the patients with speech-language diagnosis had had strokes[5]. A research performed in 2013 in the city of Santiago (Cuba) identified 253 aphasic individuals registered in the health service, from which 41.1% were 65 years or more, and 77.4% were caused by ischemic stroke[4].

The improvements in treating the acute phase of stroke resulted in significant decrease of mortality, leaving the challenge of a greater number of long term impairments, including impairments involving linguistic difficulties, such as aphasia. Therefore, there is an increasing need to understand the mechanisms of language recovery/treatment, in order to determine more precise prognosis and evaluate and optimize the rehabilitation strategies[6].

From an etymological point of view, the word prognosis has the suffix "gnos/o", which means knowledge, and the prefix "pro", which means before; thus, prognosis refers to previous knowledge, that is, a forecast of the outcomes of a disease[7]. In this direction, knowing the effects of a pathological process is essential for the clinical approach, since it makes it possible to predict who can benefit from determined treatment or strategy of care. In other words, the establishment of evolution indices for a symptomatic condition is decisive to guide therapeutic strategies, considering that the greater the precision of this stage, the greater the probability of success in therapy[8], reducing time and costs of treatment. It is then understood that prognosis indicators have great importance for clinical management[9].

In view of these brief considerations on the relationship between prognosis and therapeutic success, this study has the aim to identify the way that prognostic factors have been approached in the field of aphasiology and how they reflect on the theoretical and methodological background that are the bases for clinical speech-language reasoning.

Method

A literature review was conducted in the databases SciELO, PubMed and Periódicos CAPES, using the keywords "aphasia", "prognostic" and "factors", as well as their counterparts in Portuguese. All articles that related the prognosis of aphasia to a variable (factor), published between 2005 and 2015, in Portuguese, English or French were included.

The articles retrieved were selected by title in each database. Then, the duplicated articles (retrieved from more than one database) were eliminated. The second and third phases of the selection were conducted by analyzing the abstracts and by reading the full-texts, respectively.

After reading each article, the prognostic factors identified were listed according to the articles in which they were cited, and the research methodology of each study was highlighted for later analysis.

Results

The search in the databases retrieved: 2 records in SciELO, 67 in Periódicos CAPES, and 162 in PubMed, totalizing 231 records. After the titles were analyzed, 1 study was selected from SciELO, 13 from Periódicos CAPES, and 12 from PubMed. After eliminating the duplicated studies, a total of 20 articles remained for abstract analysis. Four other articles were eliminated in the selection by

abstract, and one more in the full-text analysis, as they did not fit the theme of this research. A total of 15 articles were selected for literature review (Figure 1).

The analysis of the selected articles resulted on a list of 29 prognostic factors. Among these factors, the ones cited in a greater number of studies were: age (10), extent (9) and location of lesion (9), sex (8), and schooling (7). However, age, sex and schooling were not considered significant to predict the prognosis in most studies.

Some literature review studies[10-12] classify the prognostic factors into three groups: factors related to the lesion, or neurobiological factors; factors related to the patient, or individual factors; and factors related to the treatment (Figure 2). For systematization of data, this classification was used for the initial presentation of all the variables found in this review.

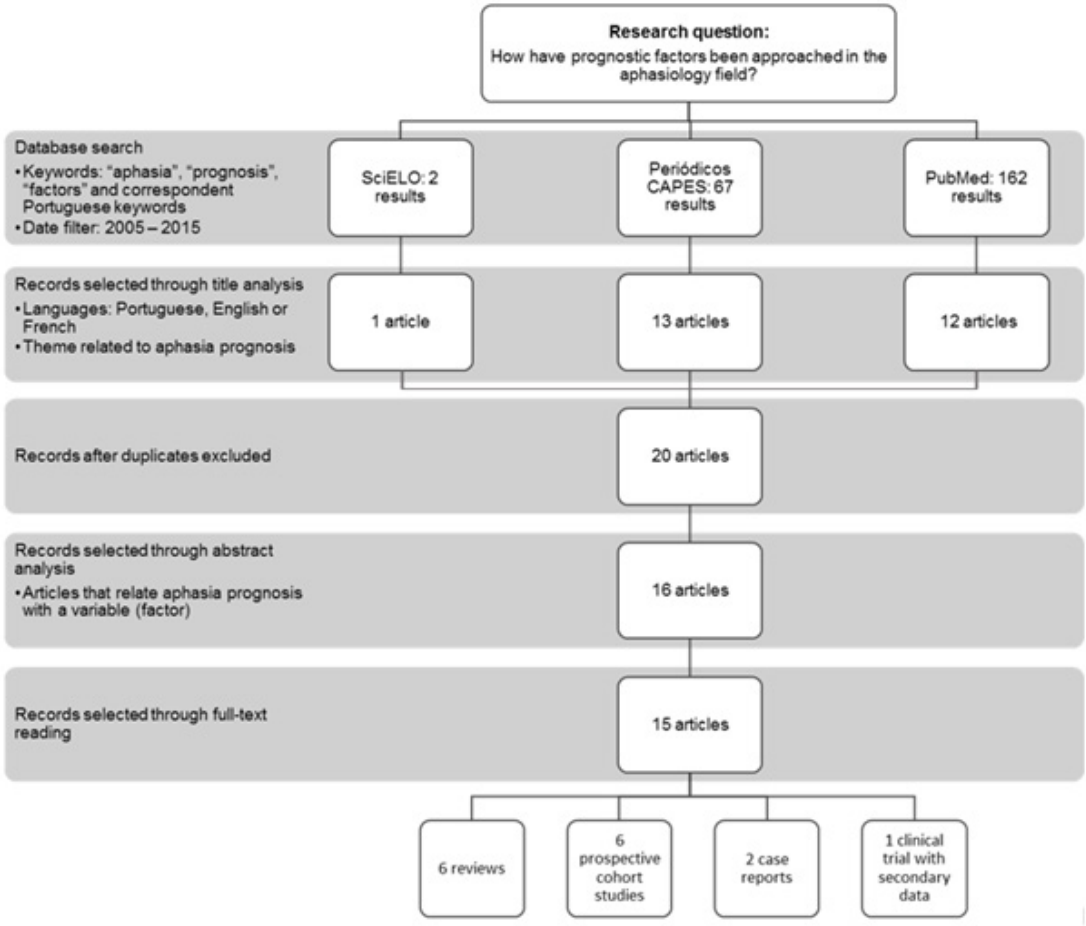

Figure 1. Flowchart of the selection of studies for the review.

Factors - Prognosis	
Neurobiological or lesion-related factors	**Influences on prognosis**
Impairments after injury[13,19]	Impairments caused by injuries lead to worse prognoses.
Premorbid impairments[10,13,14,17]	Premorbid impairments have negative influences on recovery.
Etiology[20]	Sudden etiologies have worse prognoses.
Extent of lesion[9–11,13,14,17,20,21]	More extensive injuries are related to worse prognoses.
Metabolic factors[10,11,14,15,21]	No proven influence.
Lesion site[9–11,15–17,21]	Indirect influence.
Initial severity of aphasia[10,11,15,17]	Aphasias that are initially more severe have worse recovery.
Severity of the stroke[10,11,19]	Indirect influence.
Survival[9,14]	No proven influence.
Subtype of stroke[10,16]	Survivors from hemorrhagic stroke have better prognosis.
Type of aphasia[9,10,15,16,21]	Type of aphasia and affected language modalities influence on recovery.
Individual or patient-related factors	**Influences on prognosis**
Bilingualism[12]	Bilingual patients do not have all languages equally affected. However, recovery varies.
Emotional characteristics[20]	Loneliness and isolation have negative influence on rehabilitation.
Mood disorders[17,21]	Mood disorders have negative influence on recovery.
Schooling[9–11,15,16,21]	No proven influence.
Exposure to language and practices performed by the patient[20]	The aphasic patient may present improvements in language due to exposure to their natural speech environment.
Environment factors[10,20]	Aphasic patients that are aware of their impairments and receive good family support usually have better results.
Vascular history and other risk factors[16]	None of the factors were associated to prognosis.
Age[9–11,14–17,19,21]	Inconclusive evidence.
Independence in daily activities[16]	Patients that are more independent in their daily activities tend to have better prognosis.
Intelligence[11]	No proven influence.
Laterality[10,11,15–17]	No proven influence.
Socioeconomic level[11]	No proven influence.
Sex[9–11,14–17]	Inconclusive evidence.
Personal values[22]	Better recovery is observed when the patient's priority is to obtain quality in his interactions, intimacy in his connection with the family, and independence.
Treatment-related factors	**Influence on prognosis**
Treatment intensity[10,17–19,21]	More intensive treatments tend to have better results.
Early onset of therapy[10,18,20]	Early onset of therapy favors the patient's recovery.
Speech-language therapy[14,15,17,21]	There is no evidence that there is a better type of therapy; however, therapy is more effective when personalized according to the deficit's nature and the individual's functional daily needs. There were also comments suggesting that therapy is more effective when it involves both hemispheres.
Use of medicines[10,17,21]	Some drugs benefit recovery, and other have no proven influence.

Figure 2. Prognostic factors of aphasia found in the literatures review.

Based on the classification cited above, it is noticed that, in most studies, factors related to the lesion were considered more relevant to the prognosis of aphasia compared to the other two groups. The review articles that used this classification[10-12] reported that patient-related factors did not show significant influence on the recovery, except for social and motivational factors[12]. Therapy-related factors, although less prominent in general, were considered relevant for prognosis, with emphasis on the frequency of therapy.

Among the factors related to the lesion, extent and site were the most studied. These variables are related to the type of aphasia and influence the individual's pattern of recovery. The extent of the injury was also cited as predictive of the severity of aphasia[11,13,14]. The site of the lesion, on the other hand, indirectly influences prognosis, since it will influence the type of language impairment that the patient will present, and this was considered a relevant factor. In addition, cortical lesions cause more severe aphasia than subcortical injuries[10].

The most cited lesion-related variables were type and initial severity of the aphasia, with the latest being the one of the most important variables in some studies[15]. Regarding type, global and anomic aphasia showed low recovery rate, while Broca's and conduction aphasia presented good prognosis[10]. It is worth emphasizing that these studies state that the patient may present different types of aphasia over time. This transition may occur gradually or abruptly, and may be transient or represent the final stage of evolution[15]. Some studies have mentioned the relation between the linguistic characteristics typical from the different types of aphasia and language recovery[10,16], and others compare expression and comprehension, which presents faster recovery[10].

From the factors related to therapy, the intensity of therapy was the most mentioned variable, and may be defined as the frequency or number of sessions. It is believed that the intensity of therapy influences its effectiveness[17], and results in early activation of language areas in the left hemisphere[18]. The number of therapy sessions is considered as significant as factors universally accepted, such as severity of aphasia and impairments caused by the stroke[19].

Therapy onset was also considered a relevant prognostic factor, being determinant for better recovery[10], since early onset may prevent major flaws in the organization of neural circuits[20]. In addition, the influence of medication on the recovery of aphasia was also studied, however, the findings were inconclusive[17,21]. Some medications were considered beneficial for promoting neural reorganization and increasing acetylcholine concentration, while others presented varied results, including antidepressants[10]. The concomitant pharmacological treatment was mentioned as a possibility, using drugs that increase motivation and improve learning or favor the neuroplasticity of the injured brain[17].

Speech-language therapy is the most indicated treatment for aphasic patients[17]. However, the difficulty to study its influence on prognosis was emphasized in some studies[10,17,19]. Such difficulty would be due to a) the diversity of approaches and interventions; b) the need to individually adapt therapy and define objectives[17]; c) spontaneous recovery, which may mask therapy effects; d) the exclusion of patients with moderate aphasia in order to prevent the "ceiling effect", and the consequent inclusion of patients with more severe deficits in the studies[10].

Bakheit and Gatehouse[17] affirm that not all patients benefit from speech-language therapy; however, there is no method to select the ones that will do. Yet, without treatment, improvements are minimal after the spontaneous recovery period, because speech therapy is responsible for great part of the late evolution[20]. Nonetheless, it is believed that aphasia therapy is more effective when the results are specific and the therapy is personalized according to the nature of the deficit and the daily functional needs of the individual[15].

Speech-language therapy is also analyzed according to the brain areas that are stimulated. Oliveira, Marin and Bertolucci[21] defend that language rehabilitation is more effective when it involves working with both hemispheres, since laterality conversion induces mechanisms of neuroplasticity. Mattioli et al.[18] concluded, when comparing patients with and without speech-language therapy, that rehabilitation resulted in the early activation of the inferior frontal gyrus on the left hemisphere, while untreated patients activated the homologous area on the right hemisphere, which does not present the same compensatory potential.

Other therapeutic strategies have been studied, although with less emphasis. Melodic therapy, constraint-induced therapy, action observation

therapy, semantic feature analysis, and transcranial magnetic stimulation were considered to be beneficial because they facilitate neuroplasticity[10].

Patient-related prognostic factors were varied. Age and sex were mentioned in most studies, although they all indicated that these variables have no influence on prognosis. Schooling and laterality of the patient were, in this order, the ones with greater number of citations. Even though these factors are classified as individual, they are analyzed by the neurobiological perspective, as well as other factors less studied.

Age might be relevant for patient's recovery because reorganization and function transfer occur more easily in the immature nervous system and, therefore, worse prognoses are usually associated with older patients[15,28]. Moreover, older adults tend to present more comorbidities that may interfere with language recovery[12] due to organic issues that are inherent to the aging process, and also tend to present higher incidence of aphasia[10,11], especially the fluent type of aphasia, which is more common in this population.

Vascular history and other risk factors – which is a group of cardiovascular diseases, smoking, excessive use of alcohol, hypercholesterolemia, hypertension, diabetes mellitus, and atrial fibrillation – are also related with neurobiological aspects. No relationship has been established between these factors and prognosis[16].

Some factors were included in the studies because they interfere with the distribution of language areas between brain hemispheres. Women[12,15], illiterate[12], left-handed, and ambidextrous[10–12,15] tend to present areas of language representation bilaterally distributed and, therefore, would have better prognosis. However, sex, schooling, and laterality were not considered relevant factors in any of the studies.

Schooling, however, can be seen from another perspective. Plowman, Hentz and Ellis[11] highlight its strong relation with socioeconomic level, which, in turn, has a complex interaction with several factors, such as income, access to health services, and health-related beliefs. In addition, they mention intelligence as a factor that impacts the initial severity of aphasia[11]. Schooling, occupation and the expectations about the environment will affect what the patient and family consider as impairment, recovery, and quality of life[15], which are important aspects in speech-language therapy. Still, there has been no evidence of the influence of schooling, socioeconomic level, and intelligence on prognosis.

Polyglot patients do not have all the languages equally affected by aphasia. However, there is no prognostic factor that favors the recovery of one language over another and, in the clinical cases reported, the recovery is varied. In opposition to common sense, the native language is not necessarily the less affected after lesion. Some patients even present better recovery of the less-mastered language, even without having any emotional preference[12].

Mood disorders and emotional characteristics are considered by Kahlaoui and Ansaldo[12] as social and motivational factors that have direct impact on the individual's quality of life, since sudden and permanent change of social image has a devastating effect on aphasic patients. Depression was the mood disorder highlighted for negatively influencing recovery[12,17,21]. In addition, loneliness and isolation caused by the fear of rejection reduce the communication situations that favor improvement of the language level[20]. This exposure to the natural speech environment may be responsible for language improvements in aphasic patients, even without speech-language therapy, although it is not as effective in this case[18].

Despite acknowledging the importance of the environment as a potentiating element of recovery, few studies have deepened this aspect. The following factors were mentioned as positive influences for prognosis: independence of patients for daily activities[16], good familiar support[10,20], and awareness of their impairments[10]. Patients who cannot count on familiar support tend to suffer physical and emotional deterioration[20].

The patient's motivation, although mentioned several times and even considered as relevant to prognosis[12], was not discussed in the studies. However, one of the case reports evidenced that aphasic individuals who achieved success in treatment had obtaining quality in their interactions, intimacy in their connection, and the independence that would help both the patients' and their families' as priority, and not only increasing the average time of speech and the ability to follow commands[22].

Discussion

The prognostic factors found in the review, although divided into three categories, are ana-

lyzed, mostly, from an organicist perspective. In general, when studied from this perspective, factors tend to homogenize patients because they do not consider the subjectivity nor the diversity implied in the relation between speaker and speech, lesion and symptom. From the organicist view, even the so-called individual factors regard the brain capacity – hence, organic – of reorganizing according to the category in which the aphasic individual falls. However, language recovery does not depend only on the biological potential of the brain to regenerate or reorganize. Notice that, from the neurobiological view, speech-language therapy is understood as a variable related to the viabilization of this organic potential and, in this sense, subjective characteristics influence therapy, although they are little contemplated in the studies. This happens due to the notion of cure and therapeutic success that involves this approach and, thus, the way that prognosis is approached, which reflects on the methodology of the studies, as we will see below.

In analyzing the justification of each factor, considering the perspective from which they are analyzed, it is noticed that they could be classified into two categories, rather than three, as mentioned in specialized literature: factors that influence the organic potential of language recovery, and factors that influence the success of speech-language therapy. The organic factors, such as type of aphasia (related to the lesion site), injury site and extent would fall into the first category, with no exceptions. That is because they are factors directly related to the brain's capacity of finding a new functioning organization. It is not excluded that there are some approaches in which the therapeutic project aims to reach this new organization. The question is how this reorganization of the brain's functioning would reflect the idea of recovery of the aphasic condition.

It is worth emphasizing that in Goldstein's work* (1948 apud Fonseca, 2006, p. 221-2) the idea of recovery would already involve only situations where the neurological condition prior to the lesion is restored, referring to the cure as symptomatic reversal, which is only possible when there is spontaneous improvement or through surgical procedure. By the way, the transitory condition, also called "transitory aphasia", is not considered as aphasia by some authors because it does not match the definition of persistent language deficit due to irreversible brain injury[23].

Canguilhem[24] reaffirms that the individual structure modified due to the pathological phenomenon is not residual from the prior normal behavior, but reactions never presented by the normal individual in the same manner and under the same conditions. The aphasic patient, therefore, presents a new functioning, a "new individual standard"[24].

Thus, Goldstein* (1948 apud Fonseca, 2006, p. 222) proposes the clinical reeducation, which leads to the compensation of the language deficit without restoring the lost function. In the present review, the idea of compensation was observed in some studies, but attributing the language recovery function to the brain regions not damaged, which should be stimulated in therapy[10,18,21,25]. This way, the notion of deficit compensation may be biological or functional. Although not explicitly written, this idea is noticed in most researches, as it is believed that the distribution of language areas between hemispheres influences the aphasia prognosis.

This clinical conception defines the disease simultaneously as deprivation and reformulation, as it causes losses to the organism at the same time that it makes a new order reappear[24], resizing the concept of "cure"[26]. Goldstein, therefore, opens the possibility of thinking about a non-medical clinic for aphasia.

Currently, most of this clinical practice is conducted by speech-language pathologists, who are trained to care for the so-called communication impairments. The second category proposed in this study refers exactly to factors related to the success of this therapeutic undertaking.

The factors that would compose the second category depend on the perspective from which these variables will be analyzed. From an organicist view, therapy is focused on reaching the organic potential, since neuroplasticity mechanisms are pointed out as responsible for the functional reorganization of the language brain systems, from which the recovery of vascular aphasia depends[9]. From this perspective, it is acceptable that factors such as intensity and onset of therapy, for example, would be relevant for therapeutic success, in view of what it is believed that early intensive therapy offers great brain stimulus, maximized by the spontaneous recovery period. Likewise, treatments like

* Goldstein K. Trastornos del lenguaje. Las afasias. Su importancia para la medicina y la teoría del lenguaje. Barcelona: Editorial Científico Médica; 1948.

transcranial magnetic stimulation and drug therapy are justified as belonging within this category.

Nevertheless, there are other therapeutic approaches that, although benefitting from these organic variables, do not have them as essential for their conduct. This so-called linguistic-discursive approach focuses on the subject's relationship with language, and seeks to change the aphasic individual's speech, as well as his speaker positioning[26], with subjective and social factors being strongly linked to therapeutic success. From this perspective, factors such as personal values, motivation, family support, and independence for daily activities would fit into the second category.

Some of the individual and therapy-related factors could fit into both categories, depending on the perspective from which they are studied. For example, the variable sex was analyzed from an organicist perspective, considering its influence in neural reorganization; however, it could be analyzed according to sociocultural differences related to gender, which would make it a subjective factor, important to therapeutic success. In general, studies have evaluated these variables from the organic perspective.

When analyzing the factors found in the review from a linguistic-discursive perspective, based on the new classification proposed, it is noticed that little relevance is given to the factors that influence therapeutic success. In addition to the fact that they are little contemplated in the studies, these variables were mentioned sometimes as issues to be considered in therapy, but not as essential for therapeutic success. That is because, from the organicist perspective, the clinical approach has an uniform, homogenizer method that does not consider the "symptomatic plurality and the subtleties of subjective expressions"[26].

The methodology chosen for the study reveals the researcher's point of view. In addition to the literature review studies, there was a predominance of cohort studies, which gather the participants with a common characteristic in groups to follow them for a certain period of time[27]. Although it is the indicated study design to evaluate the association of factors and to study prognosis[27,28], cohort studies homogenize the aphasic individuals by categorizing them. On the other hand, qualitative studies, such as case report, allow a deep understanding of the relationship between the elements and of how the object of study happens or is shown[28]. Moreover, this method has smaller samples and the researcher is an instrument of research[28], which allows a clinical view on the studied theme.

Some researches recognize that the forecast models elaborated until then were not sufficient to get to a precise projection of prognosis and that there were still prognostic factors to be discovered[15,16,19]. In fact, in an approach that has the relation of the subject with language as a marker of the end of the treatment[26], subjective and social aspects are essential to aphasia prognosis and need to be studied, even if they are not as predictable as the organic variables. Boles[22] emphasized that, in the era of Evidence-Based Practice, these concepts are difficult to quantify. This, however, should not be a limiting obstacle, but rather a call to develop methods that contemplate such purpose[22].

Conclusion

This review identified 29 prognostic factors of aphasia, mentioned in 15 articles. Age, injury extent and site, sex, and schooling were the most frequently mentioned among them. Most articles were literature review or prospective cohort studies, and only two were case reports.

In general, the studies conducted their analyses from an organic perspective, which tends to disregard the symptomatic plurality, contemplating mostly the organic aspects, rather than subjective and social aspects. From this perspective, therapy has the aim to reach the brain potential for aphasia recovery.

In a linguistic-discursive approach, the focus is the relation of the subject with language. Therefore, therapeutic success is directly influenced by subjective and social aspects. However, contemplating this subjective dimension is only possible from the clinical point of view. Thus, methodological choices reflect on the perspective from which these factors are analyzed. Cohort studies homogenize the aphasic individuals because they gather them in groups. Hence, the qualitative method is the most indicated to study subjective factors, as it uses the researcher as an instrument of the research, allowing a consideration of the singularity of pathological speech and language.

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