

---

# Theoretical considerations about the physical, psychological and social impact on peripheral facial paralysis

Considerações teóricas acerca do impacto físico, psíquico e social na paralisia facial periférica

Consideraciones teóricas sobre el impacto físico, psicológico y social de la parálisis facial periférica

Mabile Francine Ferreira Silva\*

Maria Claudia Cunha\*\*

## Abstract

*This study emphasizes the importance of considering in clinical care, especially speech, physical, psychological and social aspects of recovery and rehabilitation of cases of facial paralysis. Therefore, we presented theoretical predictions about the history of the face, pathophysiology of peripheral facial palsy, therapeutic listening in psychoanalysis and the theory of stigma. One can show that changes in symmetry, tone and expression on the face carry significant psychological and social impairments. Finally, it is considered that the face as the primary representative of the verbal and non-verbal functions has a key role during social interactions and, therefore, limitations of facial movements can greatly compromise the process of communication and socialization, which is an important object of speech therapy work.*

**Keywords:** Facial Paralysis; Bell Palsy; Psychosocial Impact; Speech, Language and Hearing Sciences.

\*Universidade Ceuma (UC) - São Luis-MA - Brazil.

\*\*Pontifícia Universidade Católica de São Paulo (PUCSP) - São Paulo-SP, Brazil.

**Authors' contributions:** MFFS Theoretical foundation and project management. MCC Project management, analysis and content review.

**Correspondence address:** Mabile Francine Ferreira Silva. **E-mail:** mabilef@hotmail.com

**Received:** 11/08/2015

**Accepted:** 11/11/2015

## Resumo

*Este estudo enfatiza a importância de se considerar no atendimento clínico, principalmente o fonoaudiológico, os aspectos físicos, psíquicos e sociais para recuperação e reabilitação dos casos de paralisia facial periférica. Para tanto, foram apresentadas fundamentações teóricas acerca da história do rosto, aspectos fisiopatológicos da paralisia facial periférica, a escuta terapêutica na psicanálise e a teoria do estigma. Pode-se evidenciar que alterações na simetria, tonicidade e expressão na face acarretam prejuízos psíquicos e sociais significativos. Por fim, considera-se que o rosto como representante primordial da comunicação verbal e não verbal tem papel fundamental durante as interações sociais e, por esta razão, limitações dos movimentos faciais podem comprometer consideravelmente o processo de comunicação e socialização, sendo este um importante objeto de trabalho da fonoaudiologia.*

**Palavras-chave:** Paralisia Facial; Paralisia de Bell; Impacto Psicossocial; Fonoaudiologia.

## Resumen

*Este estudio pone de relieve la importancia de considerar en la atención clínica, especialmente el habla, los aspectos físicos, psicológicos y sociales de la recuperación y rehabilitación de los casos de parálisis facial. Por lo tanto, presentamos las predicciones teóricas sobre la historia de la cara, la fisiopatología de la parálisis facial periférica, la escucha terapéutica en el psicoanálisis y la teoría del estigma. Se puede demostrar que los cambios en la simetría, el tono y la expresión en la cara llevan alteraciones psicológicas y sociales. Por último, se considera que la cara como el principal representante de las funciones verbales y no verbales un papel clave durante las interacciones sociales y, por tanto, las limitaciones de los movimientos facial puede comprometer en gran medida el proceso de comunicación y socialización, que es un objeto importante de trabajo de terapia del habla.*

**Palabras claves:** Parálisis Facial; Parálisis de Bell; Impacto Psicossocial; Fonoaudiología.

## Introduction

The face is one of the aspects of greatest human subjectivity. One of the main identity elements is based on the face and its characterizing features distinguish it from any other individuals. This is the most evident part of the human body, and also the most dynamic and expressive. The emotion given to the face is able to exhibit a number of expressions, hence, it plays an important role in the mediation of social relationships<sup>1-3</sup>.

Therefore, it is necessary to investigate the physical, psychological and social impact caused by the limitation or impossibility to express facial emotions, such as reported in cases of peripheral facial palsy (PFP)<sup>4</sup>.

In PFP, impairments are observed in facial expression and mimicry, speech, chewing, swallowing and eyelid closure<sup>5-9</sup>, in addition to alterations in taste, salivation, lacrimation, hyperacusis and external auditory canal hypoesthesia<sup>10</sup>.

The psychological and social impact of PFP may comprise difficulties in verbal and non-verbal communication, social relationships<sup>4,11</sup>, emotional

stress, anxiety and depression<sup>12</sup>. Besides being or feeling rejected by others, the subject may avoid public places<sup>13</sup>.

In this sense, every aspect involved in the illness process of the subject with PFP must be investigated, such as the feelings facing the symptoms and his own way of dealing with the situation.

Thus, the aim of this study was to explicit the theoretical framework regarding the importance of face, the pathophysiology of PFP, and aspects of the study of the symptomatic body in psychoanalysis and in the theory of stigma.

### *The face as object of study*

Expression is an essential element for the human development for which the importance of the face is highlighted. While facial features and expressions are involved in the communicative and socialization processes, they are also essential for individualization, uncovering the interiority and the feelings of the subject<sup>1</sup>.

The face may be understood as a space of self-perception in relation to others, which announces

the certainty that “the face speaks”, i.e., the subject expresses himself through facial expressions<sup>3</sup>. Thus, the face is an important component of self-concept, representing a mark of subjectivity with a key role in the process of human communication<sup>3,14</sup>.

When it is qualified that communication is also understood through facial expressions, the face plays a key role in the interpretation of human thought, because the malleability and subtlety of mimicry movements lead to the inference of the possible feelings transmitted in an interaction<sup>1</sup>. In addition, facial expression is essential in emotional communication, connection and social relationships<sup>15</sup>.

The human appearance deciphering techniques argued that the face could reveal the intentions of the subject, including his faults and qualities, thus making the face a map of subjectivity<sup>1</sup>. From this assumption, the constitution of a “normal” appearance of the face has been shaped by society, and any deviation from this rule can lead to stigmatization<sup>15,16</sup>.

Thereby, it is emphasized the devastating character that a functional inefficiency in the face may cause. Thus, a reflection on how the subject with PFP is seen and how he feels is important, as the contemporary setting praises the physical appearance and admits that face lines are taken as signs that represent a writing of human personality.

### *Pathophysiology of peripheral facial palsy*

Facial muscles are characterized by maintaining direct connections with the skin. Their fibers are flat, thin and poorly defined. These particular anatomic characteristics determine the functional peculiarities and malleability of facial expressions<sup>17</sup>.

When the innervation of a muscle in this area is impaired, the fibers degenerate and the muscle atrophies, which causes the reduction of its normal volume and considerable substitution by fibrous tissue at long term<sup>17</sup>.

The PFP is an example of this, and it is due to the reduction or interruption of axonal transportation to the seventh cranial nerve, resulting in partial or complete palsy of facial mimicry. That frequently occurs because this nerve is the most affected of the human body, since it travels a long way

through angles and a narrow bone canal, known as Fallopian canal<sup>18</sup>.

This condition represents the manifestation of many diseases with different known causes<sup>18</sup>. Among them, the manifestation related to the herpes simplex virus has been mentioned recurrently in the last decade, however, the predominance of idiopathic palsy, also known as Bell’s palsy, still corresponds to 60% and 75% of the cases<sup>19</sup>.

The incidence of PFP has been estimated in 11.5 to 40.2 cases per 100.000 people per year<sup>20</sup>. Other data have indicated a variation of 13 to 34 cases per 100.000 people, annually<sup>19</sup>. The age peaks are in the ranges of 30 to 50 years and 60 to 70 years<sup>21</sup>.

The difficulties commonly found are:

1. decreased muscle tone, evidenced, mainly, in facial mimicry and emotional expression<sup>7</sup>;
2. difficulties in the chewing function and the oral phase of swallowing due to the decreased tone of the orbicularis muscle of the lips and the buccinator muscle, and restriction of intra-oral pressure. Choking may also occur due to the decreased salivation and palsy of the muscles stylohyoid and posterior belly of digastric<sup>5,6,8,9</sup>;
3. speech alterations, specifically in the production of bilabial and labiodental phonemes, caused by the impairment of the buccinator muscle and hindered by nasolabial deviation<sup>8</sup>;
4. hyperacusis and numbness around the ear<sup>7,10</sup> and;
5. inability to close the eyelids (lagophthalmos), decreased blinking reflex and tearing, which may cause corneal ulcers, discomfort and pain due to prolonged exposure<sup>8</sup>.

The recovering time of PFP is determined by the degree of facial nerve injury, its many etiologies, patient’s age, and how the case is conducted by the health professionals involved. The regeneration of facial movements can be total or partial<sup>22</sup>.

The sudden onset of the disease, frequently due to an unknown cause, intensify the psychological suffering and interfere on social relationships, leading to consequences that go beyond the functional ones<sup>4,10,11</sup>. Decreased self-esteem, anxiety, depression and isolation are known effects and will be explained in the next sub-items.



### *The body, its symptoms and therapeutical listening in psychoanalysis: contributions to Speech-Language Pathology*

For this study to make sense to the speech-language pathologists, it is necessary to study psychoanalysis. Cunha<sup>23</sup> have delimited that theoretical consistency of psychoanalysis contributes to the depth of speech-language practice, without losing the specificity of the field of action, i.e., adopting a psychoanalytical approach does not exclude the speech-language specificity, but it is important to understand that the “body-mind unity” is indissoluble.

From the association of symptomatic body and the theoretical psychoanalytic concept it is possible to reach a specificity of both listening and speech-language interpretations, however, in a distinct fit from the analytical<sup>23</sup>. To continue this discussion it is worth to list relevant concepts of psychoanalysis.

Psychoanalysis extracts its effectiveness from the therapeutical listening of a speech that substitutes the symptoms (signs) with representations (symbols), allowing the comprehension of symptoms to go beyond the bodily dimension<sup>24</sup>.

In psychosomatic disorders, the unregulated health causes the body to suffer with the disease, but the origin of their physiological dysfunction is an unconsciously psychological disorder<sup>25</sup>. Disorders lie in a lack of representation due to a trauma loaded with affection which, therefore, is excluded from associative connections with the rest of the being<sup>26</sup>.

Depression and anxiety conditions, for example, are frequently associated with somatization, and its symptoms manifested as complaints - usually vague - may appear as “bodily metaphors”, which is a way of communicating suffering<sup>27,28</sup>.

A disease may also be understood as an expression of the patient in dealing with the reality, therefore the illness process has to be seen as a mismatch of tendencies inside oneself. By adopting the organs of language and intentionality, the ill subject evidences his subjectivism<sup>28</sup>.

Throughout listening, the professional finds a way for the subject to access something in himself that is still unknown. In that case, the words uncover a latent content that, initially, produces discharges and then associations with what is being portrayed. This latent content requires a wish of being understood in his pain, and the therapist

uses listening as a pathway to access the unknown that inhabits the subject. The circulating demands are mostly not logical or easily deciphered but, in its essence, communicate the desire and need of being heard<sup>29</sup>.

This study suggests that therapeutical listening is used in speech-language practice so that the professional is able to receive the suffering of a subject, especially in cases of PFP. Freud, at the beginning of his clinical experience, even before he created psychoanalysis, proposed therapeutical listening<sup>29</sup>.

This is reaffirmed by Winnicott<sup>30</sup>, who explained that therapeutical listening can be adopted by other professionals. For example: in front of an audience of Anglican priests, he is asked about the moment in which the interference of the psychoanalyst is necessary in a case, once the very environment in which he lives – for example in the church with the priest – can supply these needs. Winnicott says that if what is said keeps the listener interested, regardless the severity of the conflict or suffering, the priest himself may help; however, when that speech causes weirdness, then guidance and treatment by other professional is needed.

It is important to remind that imagination and reality are brought through listening and mediation of transference, and that this occurs by establishing relationships between experiences, reminiscences of past or new situations for the subject, allowing the possibility of representing the mediation of mind in the production of the symptom<sup>25,26</sup>.

However, if the health professional goes against the patient’s subjective view, the relationship is commonly conflictive, especially if the health professional has the intention of reducing, ignoring or discarding the importance of these symptoms. This relationship tends to be shaken and the foreseen process of improvement tends to retard<sup>28</sup>.

In cases of PFP, the illness process represents a break in planning and routine, leading the subject not to find a sense and to live restrictively. The drastic and abrupt changes in PFP cause great impact.

Summarizing, if the speech-language pathologist is not aware of these signs, in many cases, there is a lack of evolution, because the recovery and rehabilitation techniques of PFP are not enough, even if applied correctly. Thus, uncovering the psychological function of the symptoms is indispensable.



## The theory of stigma

To present this sub-item, the theoretical approach adopted was the Goffman's Theory of Stigma<sup>16</sup>, an important study for the comprehension of the consequences that alterations in the face may cause to social interactions.

Stigma is a derogatory reference to an identity deteriorated by social action, which affects individuals with physical, psychological, character deformation or any other characteristic that makes them different before the others. Thus, affected subjects fight, daily and constantly, to build/strengthen their social identity.

The fact of not meeting the standards of aesthetical normality favors social rejection. In these circumstances, the individual suffers twice: for not presenting an expression appreciated by his social environment and, above all, for attributing an extremely painful character to his limitations, which weakens his identity.

This uncomfortable situation may intensify when strangers feel free to engage in conversations in which they express what they consider to be a curiosity about his condition, or when they offer a help that is not needed or wanted. Interactions may be distressful for both the stigmatized and the "normal" subjects. People can draw erroneous conclusions, supposing that the stigmatized subject is too aggressive or too shy. Still, "normal" people feel that they must show sensibility and direct interest for the other's situation, or else they would be failing for not being supportive to the stigmatized subject.

In front of that, the stigmatized subject may be defensive in advance, for example, by not exposing himself before the others or by avoiding certain places and social contacts. In the lack of healthy social interactions, the subject possibly becomes suspicious, depressed, anxious and confused.

Still, the stigmatized subject may use his identity for "secondary gains", for example, by making it an excuse for failures that occurred for other reasons, or analyzing it as a life lesson.

## Final considerations

The investigation of subjective contents is considerably involved in cases of PFP. Thus, the theoretical approach related to the history of the

face in society, psychoanalysis and the theory of stigma contributed to the development of the study. Changes in symmetry, tone and expression of the face may cause significant psychological and social impairments which are more intense according to the sequelae and duration of PFP.

The relevance of this study for speech-language pathologists who work in cases of PFP is justified by two factors: first, by the fact that the face has an essential function in verbal and non-verbal communication during social interactions and any limitations or impairments of facial movements may drastically affect the communication and socialization process, becoming an important object of work in Speech-Language Pathology.

Second, because these subjective contents are frequently brought to speech-language therapy due to the very condition of establishing conducts, the constant contact with the professional during the recovery, and rehabilitation process, and the bond established with the patient. However, many times, the speech-language pathologist believes that listening to these contents is not part of his competence and might not notice that a weakness condition may stall the therapeutical process and, consequently, transfers the responsibility for clinical failure exclusively to the subject.

For that reason, these aspects have been discussed throughout the study with the aim to support the subjective contents and turn this proposal into an extension of speech-language clinical practice.

## References

1. Courtine JC, Haroche C. História do rosto: exprimir e calar as suas emoções (do século XVI ao início do século XIX). Lisboa: Editora Teorema; 1988.
2. Ekman P. Facial expressions of emotion: new findings, new questions. *Psychol. Scien.* 1992; 3(1): 34-8.
3. Maluf-Souza O. Fealdade e Anatomia: Sentidos instalados a partir de uma história do rosto. In: III ENALIHC – Encontro Nacional Linguagem, História e Cultura e CEPEL – Centro de Estudo e Pesquisa em Linguagem. UNEMAT; 3ª edição do evento Campus Universitário de Pontes e Lacerda-MT, 2009.
4. Silva MFF, Cunha MC, Lazarini PR, Fouquet ML. Conteúdos psíquicos e efeitos sociais associados à paralisia facial periférica: abordagem fonoaudiológica. *Arq. Int. Otorrinolaringol.* 2011; 15(4): 450-60.
5. Seçil Y, Aydogdu I, Ertekin C. Peripheral facial palsy and disfunction of the oropharynx. *J Neurol Neurosurg Psychiatry.* 2002; 72(3): 391-3.



6. Swart BJ, Verheij JC, Beurkens CH. Problems with eating and drinking in patients with unilateral peripheral facial paralysis. *Dysphagia*. 2003; 18(4): 267-73.
7. Finsterer J. Management of peripheral facial nerve palsy. *EurArchOtorhinolaryngol*. 2008; 265(7): 743-52.
8. Tessitore A, Pfeilsticker LN, Paschoal JR. Aspectos neurofisiológicos da musculatura facial visando a reabilitação na paralisia facial. *Rev CEFAC*. 2008; 10(1): 68-75.
9. Mory MR, Tessitore A, Pfeilsticker LN, Couto Junior EB, Paschoal JR. Mastigação, deglutição e suas adaptações na paralisia facial periférica. *Rev CEFAC*. 2013; 15(2): 402-10.
10. Twerski AJ, Twerski B. The emotional impact of facial paralysis. In: May M. (ed.). *The facial nerve*. New York: Thieme; 1986: 788-94.
11. Silva MFF, Guedes ZCF, Cunha MC. Aspectos psicossociais associados à paralisia facial periférica na fase sequelar: estudo de caso clínico. *Rev. CEFAC*. 2013; 15(4): 1025-13.
12. Weir AM, Pentland B, Crosswaite MJ, Mountain R. Bell's palsy: the effect on self-image, mood state and social activity. *ClinicRehab*. 1995; 9(2): 121-5.
13. Beurskens CHG, Swart BJM, Verheij JCGE. Problems with eating and drinking in patients with unilateral peripheral facial paralysis. *Dysphagia*. 2003; 18(4): 267-73.
14. Bradbury ET, Simon W, Sanders R. Psychological and social factors in reconstructive surgery for hemi-facial palsy. *J PlastReconstrAesthetSurg*. 2006; 59(3): 272-8.
15. Ekman P. Psychosocial aspects of facial paralysis. In: May M. (ed.) *The facial nerve*. New York: Thieme; 1986: 781-7.
16. Goffman E. *Estigma: Notas sobre a manipulação da identidade deteriorada*. 4ª. Ed. Rio de Janeiro: LTC Editora; 1988.
17. Diels HJ, Combs D. Neuromuscular retraining for facial paralysis. *Otolaryngol Clin North Am*. 1997; 30(5): 727-43.
18. May M. Microanatomy and pathophysiology of the facial nerve. In: May M. ed. *The facial nerve*. New York: Thieme Inc; 1986: 63-73.
19. Falavigna A, Teles AR, Giustina AD, Kleber FD. Paralisia de Bell: fisiopatologia e tratamento. *Scientia Medica*. 2008; 18(4): 177-83.
20. Aboytes-Meléndez CA, Torres-Venezuela A. Perfil clínico y epidemiológico de la parálisis facial en el Centro de Rehabilitación y Educación Especial de Durango, México. *Rev Med Hosp Gen Mex*. 2006; 69(2): 70-7.
21. Teixeira LJ, Soares BGDO, Vieira VP, Prado GF. Physical therapy for Bell's palsy (idiopathic facial paralysis). *Cochrane Data base Syst Rev*. 2011 Dec7; 12: CD006283.
22. Irintchev A, Wernig A. Denervation and reinnervation of muscle: physiological effects. *European archives of otorhinolaryngology: official journal of the European Federation of Oto-Rhino-Laryngological Societies (EUFOSS): affiliated with the German Society for Oto-Rhino-Laryngology – Head and Neck Surgery*. 1994: S28-30.
23. Cunha MC. *Fonoaudiologia e psicanálise: a fronteira como território*. 2ª ed. São Paulo: Plexus; 2001.
24. Freud S. (1916-1917) Conferências introdutórias à psicanálise. Vol. 13. São Paulo: Companhia das Letras; 2014.
25. Dolto F. *A imagem inconsciente do corpo*. São Paulo: Perspectiva; 2002.
26. Freud S. (1894) *As neuropsiconeuroses de defesa*. Edição Standard Brasileira das Obras Completas de Sigmund Freud. vol. III. Rio de Janeiro: Imago; 1996.
27. Lipowski ZJ. Somatization: the concept and its clinical application. *Am J Psychiat*. 1988; 145(11): 1358-68.
28. Ávila LA. *O eu e o corpo*. São Paulo: Escuta; 2004.
29. Macedo MMK, Falcão CNB. A escuta na psicanálise e a psicanálise na escuta. *Psychê*. 2005;9(5):65-76.
30. Winnicott DW. *Holdering e Interpretação*. São Paulo: Martins Fontes; 1991.