

Enviado 30 de abril de 2020  
Aprobado 30 de junio de 2020

## EL DESAFÍO DE CONSTRUIR IMÁGENES MENTALES DE LAS ENFERMEDADES CRÓNICAS NO TRANSMISIBLES EN PACIENTES ASINTOMÁTICOS

*The challenge of building mental images of chronic non transmissible diseases in asymptomatic patients*

**Miguel Ángel Carrasco García<sup>1</sup>**

Universidad Austral de Chile-Universidad de la Frontera. Chile.

[miguel.carrasco@alumnos.uach.cl](mailto:miguel.carrasco@alumnos.uach.cl)

**Ricardo Andrés Neira Mellado**

Universidad Austral de Chile. Chile

[ricardo.neira@uach.cl](mailto:ricardo.neira@uach.cl)

**Paulina Lisbett Fierro Pinot**

[paulylis@hotmail.com](mailto:paulylis@hotmail.com)

### Resumen

En las primeras etapas de la enfermedad, la diabetes, la hipertensión o la dislipidemia, pueden ser asintomáticas para la mayoría de los pacientes. Por ello, es una tarea compleja para el equipo de salud encontrar la forma de explicarles que padecen de una patología que “silenciosamente” los daña a nivel neurovascular. Si una persona no tiene una imagen mental de su enfermedad, difícilmente podrá tomar conciencia de los riesgos que corre si no logra compensarse adecuadamente. La construcción de imágenes mentales de las patologías crónicas es una tarea pendiente en Salud Primaria, área en la que tanto la educación como el rol de la comunicación han sido relegadas a un segundo plano. Los profesionales de la salud primaria deben generar junto a sus pacientes, una co-construcción de las imágenes mentales de sus enfermedades. Esta nueva visión, implica que el profesional deberá insertarse en el contexto del paciente y desde ahí iniciar una exploración y explicación de cada realidad.

**Palabras clave:** Imágenes mentales; Comunicación en salud; Enfermedades crónicas; Adherencia terapéutica; Medicina.

### Abstract

During an early stage of diagnosis, diabetes, hypertension or dyslipidemia can be considered asymptomatic for most patients. Hence, how to explain their pathologies is

<sup>1</sup> **Miguel Angel Carrasco García.** Universidad Austral de Chile- Universidad de la Frontera. [miguel.carrasco@alumnos.uach.cl](mailto:miguel.carrasco@alumnos.uach.cl) Periodista y Médico Cirujano de la Universidad Austral de Chile (UACH). Diplomado en medicina Familiar, Universidad de la Frontera (UFRO). MBA en Salud, Universidad Andrés Bello. Estudiante Doctorado en Comunicación UACH-UFRO.

# El desafío de construir imágenes mentales de las enfermedades crónicas no transmisibles en pacientes asintomáticos

framed for patients becomes a challenging task, especially for acknowledging the risks associated with diseases with a high rate of neurovascular damage. The construction of mental images of chronic pathologies is a pending task in Primary Health systems, which deny education and communication as essential assets for clinical treatments. In this sense, efforts from the health professionals are required to jointly create mental images of the diseases with their patients. This approach implies new communication dynamics, which promote acknowledgement of the economical, social, and cultural context of the patient in order to explain and explore the patient's reality.

**Keywords:** Mental images; Health communication; Chronic diseases; Treatment adherence; Medicine.

## Cómo citar el artículo

Carrasco García, M. E., Neira Mellado, R. A. & Fierro Pinot, P. L. (2020). El desafío de construir imágenes mentales de las enfermedades crónicas no transmisibles en pacientes asintomáticos. *Revista de Comunicación y Salud*, 10 (3), 23-32. doi: [https://doi.org/10.35669/rcys.2020.10\(3\).23-32](https://doi.org/10.35669/rcys.2020.10(3).23-32)

## 1. INTRODUCTION

Currently, one of the main public health problems are chronic non-communicable diseases, where diabetes, hypertension and obesity are the three most frequent conditions in the population. Statistics show that three out of four deaths worldwide are attributable to these diseases, representing the greatest health burden in industrialised countries and a rapidly increasing problem in underdeveloped countries (Moiso, 2007).

Therapeutic adherence is one of the main strategies used in the fight against these diseases, and is defined as the context in which the person's behaviour coincides with health-related recommendations, and includes the patient's ability to attend scheduled appointments, take medications as prescribed, make the recommended lifestyle changes and finally complete the requested laboratory studies or tests (Peralta and Carbajal, 2008).

How do you convince the carrier of an asymptomatic pathology to comply with the health care team's instructions? Achieving therapeutic adherence is a multidimensional problem, where the ideas or representations that patients have about the diseases they suffer and the treatment they are prescribed mark their prognosis (Ramos, 2015).

For decades, the therapeutic approach to illnesses has been based on the biomedical model, which is useful and infallible for acute illnesses (which hurt, bleed and hospitalise), but insufficient for those that are asymptomatic. If the person neither perceives a symptom nor sees a clinical sign, he or she cannot construct a mental image of dyslipidaemia (high cholesterol which causes most heart attacks) and without this representation, it is highly probable that medical indications will fall on infertile ground.

# El desafío de construir imágenes mentales de las enfermedades crónicas no transmisibles en pacientes asintomáticos

## 2. OBJECTIVE

This paper seeks to reflect on the importance of mental imagery in the treatment of chronic pathologies such as diabetes, hypertension and dyslipidaemia, which in their early stages are asymptomatic and require enormous efforts from the health team to achieve therapeutic adherence.

## 3. THE IMAGES

For Villafaña (1992), in the image there is a selection of reality, configuring elements and a syntax understood as a manifestation of order. "Any phenomenon that can be reduced in this way, without altering its nature, can be considered an image" (p.30), and its study can be reduced to two main processes: perception, with its mechanisms of selection of reality, and representation, with the explanation of a particular form of such reality or an aspect of it.

While all images must have a correlate in reality, the individual can create images on the basis of learning and ideas generated on the basis of experience. Frusser (cited in Soto, 2015), explains that imagination is the specific capacity to create and decipher images; however, imagination alone is not sufficient for the creation of such images. What is seen must be fixed and made accessible to others. It must be reconverted into symbols, and that resulting code must then be fed into memory and deciphered by others. Traditionally, imagination has played a fundamental role in the process of knowing, for it has been believed that it is from imagination that the ways that man constructs to mediate with the world emerge; it is the way he has to access it from within his existence, in other words, from outside of it.

Images can be described as endogenous, such as memories, and exogenous, which need a technical support to reach our gaze. These endogenous images are not always of an individual nature, they can have a collective origin and people unwittingly incorporate them as their own, influenced by the mass media (Belting, 2007).

Images are often given the expression of meaning and the duration of a personal memory and are subject to self-censorship (Belting, 2007). Therefore, the experience with images is based on a construction that the subject himself elaborates and is determined by the particular conditions in which they are mediated and shaped; this kind of metamorphosis occurs when images of something that happened are transformed into memories.

### 3.1. The Mental Image

According to cognitive psychology "Images are not only a type of code intended to favour memory, but seem to play a central role in creative thinking" (Otero, 2016, p. 96).

For the group of Teaching Innovation Image and Text<sup>2</sup> University of Granada (2011) mental images constitute internal representations of knowledge and belong to the concept level, as they are the result of the manipulation of symbolic entities in the dynamic processing of information. Mental images help to reduce the load sent to working memory and thus increase the efficiency of comprehension processes.

To activate all the processes involved in the transformation from physical to mental images, perception is fundamental, as is memory, defined by Ballesteros (1999) as a psychological process that serves to store encoded information, which can be retrieved, sometimes voluntarily and consciously, and sometimes involuntarily.

In relation to how images are formed, the dual coding theory explains that people have two forms of representation: the verbal system and the image system. The latter specialises in processing information concerning non-verbal, concrete, sensory objects and events, whose main function is the generation and processing of mental images (Fernández, 2013).

With a strong subjective charge, mental imagery is a term that refers to mental representations that give the experience of perception without the presence of an afferent sensory stimulus. It would be the sound images of linguistic signs, versus visual ones, better to explain the involvement of imagery in the way conceptual ideational thought materialises (Martinez, 2014). However, most research has focused on the study of visual mental imagery and there is almost no research focused on imagery related to the other senses (Pardos, 2017).

Mental imagery can also have a proprioceptive substrate through movements that "provide the perceiver with kinaesthetic information obtained from muscles, tendons and joints" (Ballesteros, 1999, p.709). The absence of this sense, which can cause a loss of the body, may have a cause that has nothing to do with physiology: Baitello (2005) explains that social and cultural factors, such as the hypertrophy of communication by images, can alter proprioception, the sensation of one's own body, space and self.

Despite advances in the study of these representations and the processes involved in their genesis and evocation, there is still much uncertainty and there is not total clarity between the connection generated by mental images and thought, mainly because of the variety of mental images that exist, and the diversity of ways of thinking (Campos and González, 2017). However, there is some consensus that mental images are present when thinking and making decisions.

---

<sup>2</sup> <http://www.ugr.es/~ImagenyTexto/trad/>

### **3.2. Images and the In-Communication Media**

On a daily basis, people are exposed to images of elements and themes, most of them coming from the media. The media are generators of social values through images, disseminating and creating cultural stereotypes, some of which revolve around an overestimation of the cultural image (Herrero, 2005), which has led to an excessive bombardment of circulating images to the detriment of communication itself (Browne, 2006). This indiscriminate and compulsive proliferation of exogenous images in all types of media spaces generates an exacerbated compulsion of appropriation in the receivers (Baitello, 2004). Iconophagy (impure) then arises, where bodies devour the images that arrive through propaganda, fashion, lifestyles and the media.

An indiscriminate consumption of images can lead to an iconic indigestion or an iconoaddiction, something similar to what happens with drugs, explains Browne (2017), generating a narcotising effect and a kind of tele-addiction or tele-dependence. He even speaks of "Iconorrhea" to create a simile between physiological indigestion and mental saturation by images.

### **3.3. Images of Health and Illness**

The construction of the image of the illness in the patient can also be explained through the mental model or context proposed by Van Dijk (2001). These mental representations control the communicative event and regulate the relations between the discourse and its social-cognitive environment, ensuring the appropriate components according to the situation. There is also shared knowledge (Common Ground) that manages the complex structure of implicit and explicit discourse, as well as presuppositions and implications. The media's treatment of news content is also relevant in this process, as it contributes to the construction of the social image of diseases and of those affected by them (García, 2013).

The personal models of the disease include among their elements the beliefs that have been constructed, which means that the affected person acts on the basis of the mental representation (cognitive or emotional) that they have of the pathology and not so much on the basis of the symptoms or the objective evidence that they possess, all "with the aim of giving it meaning in a personal vision or interpretation of the condition and, based on this interpretation, to manage the problem as appropriately as possible" (Castillo, 2016, p.43).

Among the most relevant aspects of chronic non-communicable diseases are that they extend over long periods, are asymptomatic in the early stages, affect daily life and can only be monitored, because they have no cure (Espinosa and Ordúñez, 2010). Sufferers have little awareness of self-care, which causes 30-80% of them to stop taking their medication within six months of starting treatment. This neglect, which can be explained by the initial asymptomatic experience and conceptions of the disease, is also amplified by the media and the education received (Facchini, 2004). Consequently, the

## El desafío de construir imágenes mentales de las enfermedades crónicas no transmisibles en pacientes asintomáticos

absence of bothersome symptoms and an underestimation of the severity of the disease explain the low frequency of visits to the doctor (Castillo-Morejón, Martín-Alonso and Almenares-Rodríguez, 2017).

Mental images reflect the beliefs that people have about their illness, explaining their fears, worries and even hope for recovery. However, it is unclear whether these images originate from the influence of health professionals or from cultural beliefs about one or another pathology (Harrow, Wells, Humphris, Taylor, & Williams, 2007).

For example, findings have shown that the representation of people with diabetes is not consistent with the biomedical view that defines the natural history and course of the disease. This is mainly because emotional processes, life changes, religious beliefs and the possibility of healing of those affected are not considered (Torres-López, Sandoval-Díaz and Pando-Moreno, 2005).

In the same vein, reports have reported on perceptions of overweight and obesity in women, concluding that their mental image makes them think that their BMI (Body Mass Index) is normal and they are not aware of their nutritional problem (Rodríguez-Guzmán, Carballo-Gallegos, Coria, Arias-Flores and Puig-Nolasco, 2010).

### 4. CONCLUSIONS

Communication between the doctor and the chronically ill person is one of the main tools to be used to construct mental images of pathologies such as diabetes, dyslipidaemia or hypertension. This, in a context of asymptomatology, which will require prolonged treatment, where the establishment of a basic link is fundamental for therapeutic action (Facchini, 2004).

Health professionals must double their efforts to build mental images together with patients in order to promote assertiveness and adherence in subsequent treatments, guiding them towards the prevention of complications, compliance with indications and, in this way, helping them to manage their illness.

For decades, the biomedical model has been characterised by presenting the patient as an individual separated from the environment or the place where he or she comes from, forgetting that mental images constitute internal representations of knowledge and link people to their environment. This leads us to conclude that each individual brings different internal representations, which depend on their social, cultural and economic context, and where their perception allows them to interpret and understand the information received through the senses (Fuentemayor and Villasmil, 2008).

In the analysis of this problem, the possibility of an erroneous self-perception of health should not be ignored, with the media and social networks having a severe impact on the population. These media and information platforms can sometimes even distort the subject's perception, to the extent of provoking a pathological reaction, an

## El desafío de construir imágenes mentales de las enfermedades crónicas no transmisibles en pacientes asintomáticos

iconorrhea (Browne, 2006), but this time, in such a delicate context as the health and well-being of the individual.

All of the above forces us to rethink and rethink interpersonal communication in the field of health, adding more visions to what we know as the doctor-patient relationship and giving way to innovative strategies in the field of cognitive psychology, health education and cultural studies. It is clear that the current biomedical approach masked in a biopsychosocial model is not providing answers to specific aspects and challenges of modern medicine.

The new primary health specialists will have to generate, together with patients, a co-construction of the mental images of their illnesses. This new vision implies that the professional will have to insert him/herself into the patient's context and from there begin an exploration and explanation of each reality. Religious and ethnic beliefs, socio-cultural factors associated with the territory - such as extreme rurality or urban marginality - are some of the elements to be considered with similar importance to pharmacological dosage, nutritional assessment or physical exercise. The above always remembering that the lack of therapeutic adherence is a multidimensional problem, where the ideas or representations that patients have about the diseases they suffer and about the treatment they are prescribed mark their prognosis (Ramos, 2015).

This approach should be addressed in undergraduate and clinical training of future doctors, nurses, psychologists, nutritionists, kinesiologists and paramedical technicians. The aforementioned efforts and innovations will not make sense if the State, through its approach and public policies, is not able to address the treatment of diseases in a holistic logic, abandoning the purely pharmacological and therapeutic approach. It is also essential that education systems are innovative and inclusive and that development models are able to overcome the associated economic gaps.

## 5. REFERENCES

- Baitello, N. (2004). Las cuatro devoraciones. Iconofagia y antropofagia en la comunicación y la cultura. *Comunicación: Revista Internacional de Comunicación Audiovisual, Publicidad y Literatura*, 1 (2), 159-168. Recuperado de <http://hdl.handle.net/11441/57556>
- Baitello, N. (2005). A era da iconofagia: ensaios de comunicacao e cultura. São Paulo: Hacker.
- Ballesteros, S. (1999). Memoria humana: investigación y teoría. *Psicothema*, 11 (4), 705-723. Recuperado de <http://www.psicothema.com/psicothema.asp?id=323>
- Belting, H. (2007). *Antropología de la imagen*. Madrid: Katz editores.
- Browne, R. (2006). Leyes (Neo) Totémicas y Sociedades de Discurso: Antecedentes para la Iconofagia. *Revista Internacional de Comunicación Audiovisual, Publicidad y Literatura*, 1 (1), 277-290. Recuperado de

El desafío de construir imágenes mentales de las enfermedades crónicas no transmisibles en pacientes asintomáticos

[http://www.revistacomunicacion.org/pdf/n1/LEYES\\_NEOTOTEMICAS\\_Y\\_SOCIEDADES\\_DE\\_DISCURSOS\\_ANTECEDENTES\\_PARA\\_LA\\_ICONOFAGIA.pdf](http://www.revistacomunicacion.org/pdf/n1/LEYES_NEOTOTEMICAS_Y_SOCIEDADES_DE_DISCURSOS_ANTECEDENTES_PARA_LA_ICONOFAGIA.pdf)

Browne, R. (2017). Comunicación indisciplinada: iconofagia e iconorreya en los medios de (in)comunicación. *Revista Austral de Ciencias Sociales*, 11, 101-114. Recuperado de <https://dialnet.unirioja.es/servlet/articulo?codigo=2251335>

Castillo, A. D. (2016). *Representaciones cognitivas y emocionales del cáncer y la hipertensión: Aplicaciones del modelo de autorregulación en población sana* (Tesis Doctoral Programa Oficial de Doctorado en Diseños y Aplicaciones en Psicología y Salud, Granada, España). Recuperado de <https://digibug.ugr.es/handle/10481/43570>

Castillo-Morejón, M., Martín-Alonso, L., y Almenares-Rodríguez, K. (2017). Adherencia terapéutica y factores influyentes en pacientes con diabetes mellitus tipo 2. *Revista Cubana de Medicina General Integral*, 33 (4), 1-10. Recuperado de <https://www.medicgraphic.com/cgi-bin/new/resumen.cgi?IDARTICULO=79094>

Campos, A., y González, M. Á. (2017). Importancia de las imágenes mentales en el pensamiento. *Revista Mexicana de Investigación en Psicología*, 9 (2), 113-119. Recuperado de <https://www.medicgraphic.com/cgi-bin/new/resumen.cgi?IDARTICULO=77018>

Espinosa, A., y Ordúñez, P. (2010). Necesidad de integración de salubristas, epidemiólogos y clínicos en la atención de pacientes con enfermedades crónicas. *Revista Cubana de Salud Pública*, 36 (3), 262-266. Recuperado de [http://scielo.sld.cu/scielo.php?script=sci\\_arttext&pid=S0864-34662010000300011](http://scielo.sld.cu/scielo.php?script=sci_arttext&pid=S0864-34662010000300011)

Facchini, M. (2004). Cambio de conductas en tratamientos de larga duración: relación médico-paciente. *Medicina*, 64 (6), 550-554. Recuperado de <https://www.medicinabuenosaires.com/demo/revistas/vol64-04/6/CAMBIO%20DE%20CONDUCTAS%20EN%20TRATAMIENTOS%20DE%20LARGA%20DURACION.PDF>

Fernández, C. I. (2013). Influencia de la imagen mental en el aprendizaje. *Revista Iberoamericana de Educación*, 62 (1), 1-8. doi: <https://doi.org/10.35362/rie621888>

Fuenmayor, G. & Villasmil, Y. (2008). La percepción, la atención y la memoria como procesos cognitivos utilizados para la comprensión textual. *Revista de Artes y Humanidades UNICA*, 9 (22), 187-202. Recuperado de <https://www.redalyc.org/articulo.oa?id=170118859011>

García, I. M. (2013). Los medios de comunicación y la construcción de la imagen social de las enfermedades congénitas y crónicas: El caso de la esclerosis múltiple. *Cuadernos de Gestión de Información*, 2, 105-114. Recuperado de <https://revistas.um.es/gesinfo/article/view/207671>

Harrow, A., Wells, M., Humphris, G., Taylor, C. & Williams, B. (2008). Seeing is believing, and believing is seeing: an exploration of the meaning and impact of women's mental

## El desafío de construir imágenes mentales de las enfermedades crónicas no transmisibles en pacientes asintomáticos

images of their breast cancer and their potential origins. *Patient Education and Counseling*, 73 (2), 339-346. doi: <https://doi.org/10.1016/j.pec.2008.07.014>

Herrero, C. (2005). Mujer y medios de comunicación: Riesgos para la salud. *Trastornos de la conducta alimentaria*, 1, 55-75. Recuperado de [http://www.tcasevilla.com/archivos/mujer\\_y\\_medios\\_de\\_comunicacion\\_riesgos\\_para\\_la\\_salud.doc](http://www.tcasevilla.com/archivos/mujer_y_medios_de_comunicacion_riesgos_para_la_salud.doc)

Martínez, N. T. (2014). Imagería mental: neurofisiología e implicaciones en psiquiatría. *Revista Colombiana de Psiquiatría*, 43 (1), 40-46. doi: [https://doi.org/10.1016/S0034-7450\(14\)70041-1](https://doi.org/10.1016/S0034-7450(14)70041-1)

Moiso, A. (2007). Enfermedades crónicas no transmisibles: El desafío del siglo XXI. En A. Moiso, M. A. Mestorino, y O. A. Ojea (Eds.), *Fundamentos de la salud pública* (pp. 265-280). La Plata: EDULP Ediciones.

Otero, M. R. (2016). Psicología cognitiva, representaciones mentales e investigación en enseñanza de las ciencias. *Investigações em Ensino de Ciências*, 4 (2), 93-119. Recuperado de <https://www.if.ufrgs.br/cref/ojs/index.php/ienci/article/view/651>

Pardos, A. (2017). Las imágenes en el pensamiento. *Revista Mexicana de Investigación en Psicología*, 9 (2), 87-102. <http://www.revistamexicanadeinvestigacionenpsicologia.com/index.php/RMIP/article/view/263>

Pech, S. W., Baeza, J. E. y Ravell, M. J. (2010). Factores que inciden en el fracaso del tratamiento del paciente diabético en Tekax, Yucatán, México. *Revista de Especialidades Médico-Quirúrgicas*, 15 (4), 211-215. Recuperado de <https://www.medigraphic.com/cgi-bin/new/resumen.cgi?IDARTICULO=30087>

Peralta, M. L. y Carbajal, P. (2008). Adherencia a tratamiento. *Revista del Centro Dermatológico Pascua*, 17(3), 84-88. Recuperado de <https://www.medigraphic.com/cgi-bin/new/resumen.cgi?IDARTICULO=19137>

Ramos, M. L. (2015). La adherencia al tratamiento en las enfermedades crónicas. *Revista Cubana de Angiología y Cirugía Vascular*, 16 (2), 175-189. Recuperado de <https://www.medigraphic.com/cgi-bin/new/resumen.cgi?IDARTICULO=60591>

Rodríguez-Guzmán, L. M., Carballo-Gallegos, L. F., Coria, F., Arias-Flores, R. y Puig-Nolasco, Á. (2010). Autopercepción de la imagen corporal en mujeres y su correlación con el índice de masa corporal. *Medicina Universitaria*, 12 (46), 29-32. Recuperado de <http://eprints.uanl.mx/id/eprint/8288>

Soto, A. (2015). Las imágenes en el pensamiento de Vilém Flusser. *Paradigma: Revista Universitaria de Cultura*, 18, 38-47. Recuperado de <http://hdl.handle.net/10630/8829>

Torres, T. (2002). Una aproximación cualitativa al estudio de las enfermedades crónicas: las representaciones sociales. *Revista Universidad de Guadalajara [Dossier de Ciencias Sociales y Ciencias de la Salud]*.

## El desafío de construir imágenes mentales de las enfermedades crónicas no transmisibles en pacientes asintomáticos

Torres-López, T. M., Sandoval-Díaz, M., y Pando-Moreno, M. (2005). Sangre y azúcar: representaciones sobre la diabetes de los enfermos crónicos en un barrio de Guadalajara, México. *Cadernos de Saúde Pública*, 21 (1), 101-110. doi: <https://doi.org/10.1590/S0102-311X2005000100012>

Van Dijk, T. (2001). Algunos principios de una teoría del contexto. *Revista Latinoamericana de Estudios del Discurso*, 1 (1), 69-81. Recuperado de <http://discursos.org/oldarticles/Algunos%20principios%20de%20una%20teor%EDa%20del%20contexto.pdf>

Villafaña, J. (1992). *Introducción a la teoría de la imagen*. Madrid: Pirámide.

### AUTHORS

#### **Miguel Ángel Carrasco García.**

Austral University of Chile - University of La Frontera. Journalist and Surgeon, Austral University of Chile (UACH). Diploma in Family Medicine, University of La Frontera (UFRO). MBA in Health, Andrés Bello University. Master's student in Clinical Gerontology, Universidad Mayor. PhD student in Communication, UACH-UFRO.

[miguel.carrasco@alumnos.uach.cl](mailto:miguel.carrasco@alumnos.uach.cl)

ORCID ID: <https://orcid.org/0000-0003-4657-6390>

#### **Ricardo Andres Neira Mellado.**

Austral University of Chile. Chile. Dental Surgeon graduated from the University of Concepción (2005). Specialist in Oral Rehabilitation, Universidad del Desarrollo, Chile (2010). Master in University Pedagogy and Higher Education, Universidad Mayor. Chile (2012). Adjunct Professor at the Institute of Odonto-Estomatology, Faculty of Medicine, Universidad Austral de Chile.

[ricardo.neira@uach.cl](mailto:ricardo.neira@uach.cl)

ORCID ID: <https://orcid.org/0000-0002-3693-226X>

#### **Paulina Lisbett Fierro Pinot.**

Teacher of basic general education, with a degree in education from the Pontificia Universidad Católica de Chile. Psychologist from the University of Aconcagua. Diploma in Application of Brief Systemic Therapy from the Centre for Systemic Studies of Concepción.

[paulylis@hotmail.com](mailto:paulylis@hotmail.com)