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Impact of The HBM Psychotherapeutic Model on Anxiety Disorder: A Case Study

Catarina Certal
Sociedade Portuguesa de Psicoterapia HBM, Portugal

Milene Medeiros
Sociedade Portuguesa de Psicoterapia HBM, Portugal

ABSTRACT

Generalized anxiety disorder (GAD) is characterized by excessive worrying and/or fear in everyday contexts, for at least 6 months (APA, 2014). The study participant is female, 41 years old and she has severe anxiety symptoms. We used as a method a psychodiagnosis with a clinical interview, following the assessment protocol of the Human Behavior Map Model (HBM), the Beck Anxiety Inventory (BAI), the Pittsburgh Sleep Quality Index and the Beck Depression Inventory - Second Edition (BDI-II). The theoretical framework adopted was the HBM Psychotherapeutic Model, in which the intervention was anchored on the human behavior map. This map describes the conscious and unconscious processes of the human mind. HBM has two techniques to release emotional states: athenese and morfese (Certal et al., 2016). This intervention led to the improvement of the studied variables in the participant, particularly the reduction of the GAD symptoms.

Key-words: Human Behavior Map, Psychotherapy, Generalized Anxiety Disorder, Case Study

INTRODUCTION

Epidemiological studies conducted in the last decade show that psychiatric disorders and mental health problems are the main cause of years lived with disability (DALY) and they are one of the main causes of morbidity and premature mortality in western industrialized countries (Direção-Geral da Saúde [DGS], 2016).

Portugal is among the countries in Europe with the highest prevalence of mental health disorders in adulthood (DGS, 2016; Ministério da Saúde [MS], 2018), representing 21% of the morbidity and disability rates of the Portuguese population. Anxiety disorders, in particular, correspond to 17% (DGS, 2016; MS, 2018).

Generalized anxiety disorder (GAD) is characterized by an excessive daily anxiety that persists for at least 6 months. It is associated with a significant functional impairment that restrains several areas of the individuals' lives as a result of several physical and cognitive

symptoms, in particular sleep disorders, irritability, muscle tension, concentration deficit, gastrointestinal symptoms and headaches (American Psychological Association [APA], 2014; Newman, Crits-Christoph, Gibbons, & Erikson, 2006; Zhao et al., 2019).

The widely accepted goal for the treatment of GAD is remission, in which the patient returns to the previous level of functioning and he/she does not have or has only a few residual anxiety symptoms, infrequently. Therefore, currently, the conventional outpatient treatment of GAD integrates drugs and psychotherapy (Christensen, Loft, Florea, & McIntyre, 2019; Craighead & Dunlop, 2014; MS, 2018; Nordahl et al., 2018; Rama et al., 2016). Among the several typologies of psychotherapy, we highlight the Psychotherapy based on the HBM Psychotherapeutic Model that has demonstrated efficiency in Generalized Anxiety Disorder, mostly between five to ten sessions (Rama et al., 2016).

Human Behavior Map Therapy (HBM Therapy) is a model of psychotherapeutic intervention based on the human behavior map that describes the conscious and unconscious processes of the human mind. Knowing these processes help us understand human behavior (Certal, Ferreira, Domingues, Oliveira & Clemente, 2016; Rama et al., 2016).

The HBM methodology is based on two intervention techniques: athenese and morfese that work the dissociation and emotional resignification, modifying the perception about the reality that created the contradictory beliefs (Certal et al., 2016; Rama et al., 2016). Athenese uses the conscious thinking as a means of resignification, helping individuals to articulate new strategies of thinking and understanding of the reality. Morfese uses the unconscious thinking as a means of dissociation of past conditioning experiences, simultaneously associating them with positive emotions (Certal et al., 2016; Rama et al., 2016).

METHOD

Participants

The present study is a qualitative, quantitative and exploratory case study. The participant in this study was selected using a non-probabilistic sampling method, based on a selection by convenience, from a population of subjects undergoing treatment in Clínica da Mente.

The participant, who will be from now on addressed as C.C., is a female participant. She is 41 years old; she is married and she has got two daughters, aged 11 and 16, and a son who is 8 years old. She completed year 9 of school education and she has no professional activity (by choice and family decision). She lives in Fafe, where she is from, with her husband and with her three children. She takes medication occasionally (in SOS), only when she has more severe anxiety attacks (Victan).

Procedure

In the Evaluation and Diagnosis Appointment (EDA[6]), a clinical interview was conducted, following the evaluation protocol of the Human Behavior Map (HBM), an anamnesis with the

[6] EDA is the abbreviation we use in Clínica da Mente to refer to the first appointment with the individual (there is no treatment at this point, only a prescription if necessary)

patient; and three self-report scales in particular: the Beck Anxiety Inventory (BAI), the Pittsburgh Sleep Quality Index and the Beck Depression Inventory - Second Edition (BDI-II). We chose these instruments because they are internationally recognized and validated for the Portuguese population.

The intervention conducted with the participant consisted of 15 individual psychotherapy sessions based on the HBM psychotherapeutic model, anchored on a protocol aimed at subjects with GAD, created by Brás (2010). In this way, HBM psychotherapy was applied by an HBM psychotherapist, with eight intensive sessions that occurred on a weekly basis, in which each session lasted approximately two hours. After these intensive sessions, seven sessions were carried out with the purpose of process consolidation, over six months.

In order to assess the effects of the psychotherapy based on the HBM psychotherapeutic model, after the intensive treatment phase, the three self-report scales that were applied in the EDA[i], were once again administered.

Material

With the intention of assessing the effects of the psychotherapy based on the HBM psychotherapeutic model in the participant, the following self-report scales were applied, in the EDA and after the intensive treatment phase: the BAI, the Pittsburgh Sleep Quality Index and the BDI- II.

The BAI is a self-report instrument that comprises 21 items and it assesses the intensity of Anxiety symptoms, to clearly distinguish them from Depression symptoms (Beck & Steer, 1993). Here, the Portuguese version of Quintão (2010) was used, which confirmed the unidimensional content of this measure. The instrument assesses the affective, cognitive and somatic dimensions of Anxiety through symptoms scored on a 4-point Likert scale. In the BAI, the categories were defined as “No Anxiety” (up to 10 points on the scale), “Mild Anxiety”

(between 11 to 19 points), “Moderate Anxiety” (between 20 to 30 points) and “Severe Anxiety” (above 31 points on the scale). In the Portuguese population, this measure presents appropriate psychometric values, with a validity of 0.79 and a consistency of items of 0.99. It is important to highlight that both values are considered appropriate compared to the original study (Beck & Steer, 1993; Quintão, 2010).

The Pittsburgh Sleep Quality Index was built in 1988 by J. Buysse and colleagues, with the aim of developing an instrument that could assess an individual's sleep quality within a month and that it could be used in clinical studies (Buela-Casal & Sanchez, 2002).

The Pittsburg Sleep Quality Index consists of nineteen self-rated questions. The 19 items analyze the different factors of sleep quality that are grouped into seven component scores: subjective sleep quality, sleep latency, sleep duration, sleep efficiency, sleep disturbances, use of sleeping medication and daytime dysfunction (Buela -Casal & Sanchez, 2002).

To each component is assigned a score ranging from 0 to 3 points. A score of 0 points shows absence of difficulty, while a score of 3 points shows severe difficulty. The seven components are

added to achieve an overall score, which fluctuates between zero (0) (there are no difficulties) and twenty-one (21) (severe difficulties in all areas investigated). The authors of the scale present a cutoff point of 5. Indices equal to or superior than five suggest individuals with poor sleep quality (Buela-Casal & Sanchez, 2002).

The Beck Depression Inventory – BDI - built by Aaron Beck in 1961, is a self-assessment instrument, composed of a Likert-type scale with twenty-one items referring to symptoms and cognitive attitudes. Each item is organized on a scale from 0 points (no symptoms; e.g., I don't feel sad) to 3 (severe symptoms; e.g., I'm so sad I can't stand it), according to how they felt during the last week, obtaining a total score through the sum of all items (this score can vary between 0 and 63). Its main goal is to measure the presence of depressive symptoms. In addition to this global score, the rating of the instrument also allows that the intensity of depressive symptoms can be categorized from the cutoff points.

A clinical interview was conducted concomitantly, following the assessment protocol of the HBM Model (Human Behavior Map) and the verification of the presence of symptoms described in the Diagnostic and Statistical Manual of Mental Disorders (DSM-5).

RESULTS

C.C. came to the appointment because she had difficulties sleeping and an exacerbated anxiety symptomatology, as well as associated sadness and discouragement, translated by

impatience, irritability, tachycardia, shortness of breath, tremors, severe sleep changes and lack of energy.
There is a previous family history of stomach adenocarcinoma. C.C.'s father died when he was 44 years old, due to this malignant tumor (detected at a late stage and with metastases).

C.C. underwent a small surgical intervention in late 2016, in order to remove a stomach polyp, using an endoscopic approach.

All anxiety symptoms emerged immediately when the endoscopy appointment was scheduled, after a traumatic event in the previous interaction with her family doctor. She focused on some specific words that the doctor had said: "be careful if you have the same as your father", with exacerbation of psychosomatic symptoms, creating accelerated and catastrophic thinking about the possibility of dying young, like her father "he passed away at the age of 44 and I am already 41…".

Table 1 presents, quantitatively, the C.C. scores on the BAI, Pittsburgh and BDI-II scales at the pre-test and post-test moments. In the pre-test, C.C. showed severe anxiety symptoms (BAI = 31), severe depressive symptoms (BDI-II = 42) and sleep disorder (Pittsburgh = 15). However, in the post-test the values decreased, and there were mild anxiety symptoms (BAI = 15), absence of depressive symptoms (BDI-II = 9) and good sleep quality (Pittsburgh = 4).

In addition, C.C. also fulfills the multiaxial axes, expected in the DSM-5: Axis I: F41.1 Generalized anxiety disorder [300.02]
Axis II: Z03.2 Without Diagnosis [V71.09] Axis III: Stomach polyp

Axis IV: None
Axis V: GAF = 55 (at the moment of the assessment) GAF = 90 (after intervention)

Table 1: Assessment pre- and post-test of anxiety symptoms, depressive symptoms and sleep quality

Moment/ Instrument	BAI	Pittsburgh	BDI-II
Pre-Test	31	15	42
Post-Test	15	4	9

Differential Diagnosis

Since among the complaints presented by C.C., there are symptoms such as apathy, lability, discouragement, disbelief in the future, we could consider, from the start, the diagnosis of Major Depressive Disorder, with depressed mood. Indeed, the symptoms presented arose following the realization that her father's cancer problem may have associated hereditary factors and that she needs to be monitored from time to time (despite the fact that, to date, the patient does not have any clinical pathological indicator). In turn, this generated exacerbated anxiety symptoms and associated suffering.

Nonetheless, the above hypothesis has to be excluded, since these symptoms exist as a result of the generalized anxiety verified by the fulfillment of the diagnostic criteria for Generalized Anxiety Disorder: where the patient presents anxiety and excessive worrying about some activity or event, difficulty controlling the worrying that occurs daily and associated with at least three of the following symptoms: agitation or feeling of nervousness or tension, easy fatigue, difficulty concentrating, muscle tension, sleep changes, among others; these symptoms cause clinically significant distress and they cannot be attributed to the physiological effects of a substance or other medical condition. Besides, they are not better explained by another disorder.

Work Hypothesis/ Clinical Conceptualization

According to the HBM model (Human Behavior Map), generalized anxiety is defined by the constant presence of anxiety symptoms motivated by permanent exposure to circumstances that the individual considers aggressive.

In daily normative events, the human being feels fear whenever the unconscious mind predicts and analyzes a negative situation through thoughts and/or worries (Brás, 2010). Thus, this analysis causes a physiological anxiety response. However, in addition to physical preparation, the brain gets more reasoning agility, in an attempt to find a solution in the face of fear (Brás, 2010).

Thus, fear and anxiety are states absolutely frequent that help to avoid and manage pain and/or discomfort of bad experiences. Brás (2010) adds that «the levels of fear and anxiety work in parallel, as far as the intensity of anxiety symptoms varies according to the degree of fear felt».

Therefore, Generalized Anxiety Disorder (GAD) is characterized mainly by various anxiety symptoms (physiological sensations and worrying), such as tachycardia, tremors, dry mouth, shortness of breath, muscle stiffness, among others. However, these symptoms are considered of excessive intensity according to the individual's own perception, thus, impairing his/her well-being.

According to the Diagnostic Statistical Manual of Mental Disorders (APA, 2013):

> *Excessive worrying impairs the individual's capacity to do things quickly and efficiently, whether at home or at work. The worrying takes time and energy; the associated symptoms of muscle tension and feeling keyed up or on edge, tiredness, difficulty concentrating, and disturbed sleep contribute to the impairment (p.225).*

The Human Behavior Map approach (HBM) explains the cause of GAD by analyzing the cognitive and physiological process of fear. Brás (2010) states that the individual feels fear whenever he expects to feel pain or discomfort in the situation he/she is supposed to perform. This natural and normative process happens through the unconscious analysis of the set of lived experiences. Thus, negative and/or traumatic experiences condition our unconscious mind in situations similar to those experienced, causing feelings of anxiety. We consider a conflict when the feelings of discomfort are antagonistic to the intended state, when the individual is able to realize that he/she should not experience anxiety. According to Brás (2010), all of this takes place when the traumatic and/or negative past experiences give the wrong signals to our emotional structure. This condition is due to the emotional strength attributed to previous experiences. Traumas, child violence, bullying, divorces, maltreatment, among other negative situations, can be experienced with such intensity that it is difficult to overcome the suffering that they entail. Consequently, over time, the individual, increasingly associated with emotions, feels limited in his/her freedom and in his/her perception of quality of life (Brás, 2010).

Considering the psychometric tests results of the psychological assessment and behavioral observation, we conclude that “C.C.” has a generalized anxiety disorder, as she demonstrates exaggerated anxiety and worrying about a set of events or activities (such as fear of dying young, like her father, “he died at the age of 44 and I am already 41”, fear of not "being here" to accompany her kids, fear that something will happen to her, she repeatedly thinks about the words she heard from her doctor "be careful if you have the same thing as your father", excessive worrying about her children, she is constantly anxious about not being able to do all the household chores without feeling tired, excessive worrying about having difficulty sleeping, stating that “I never sleep more than four hours in a row throughout the night”. This anxiety and excessive worrying regarding everything around her, started right after the surgical intervention to remove the stomach polyp, and “C.C.” states that she has "a lot of difficulty in controlling this excessive worrying" and that "she doesn't sleep because they cut out her sleep vein".

Anxiety is associated with several symptoms, such as: nervousness and inner tension, easy fatigue, difficulties concentrating, irritability and easy crying, muscle tension and sleep

disorders translated by a huge difficulty in falling asleep and not being able to sleep more than three or four hours per night (Figure 1).

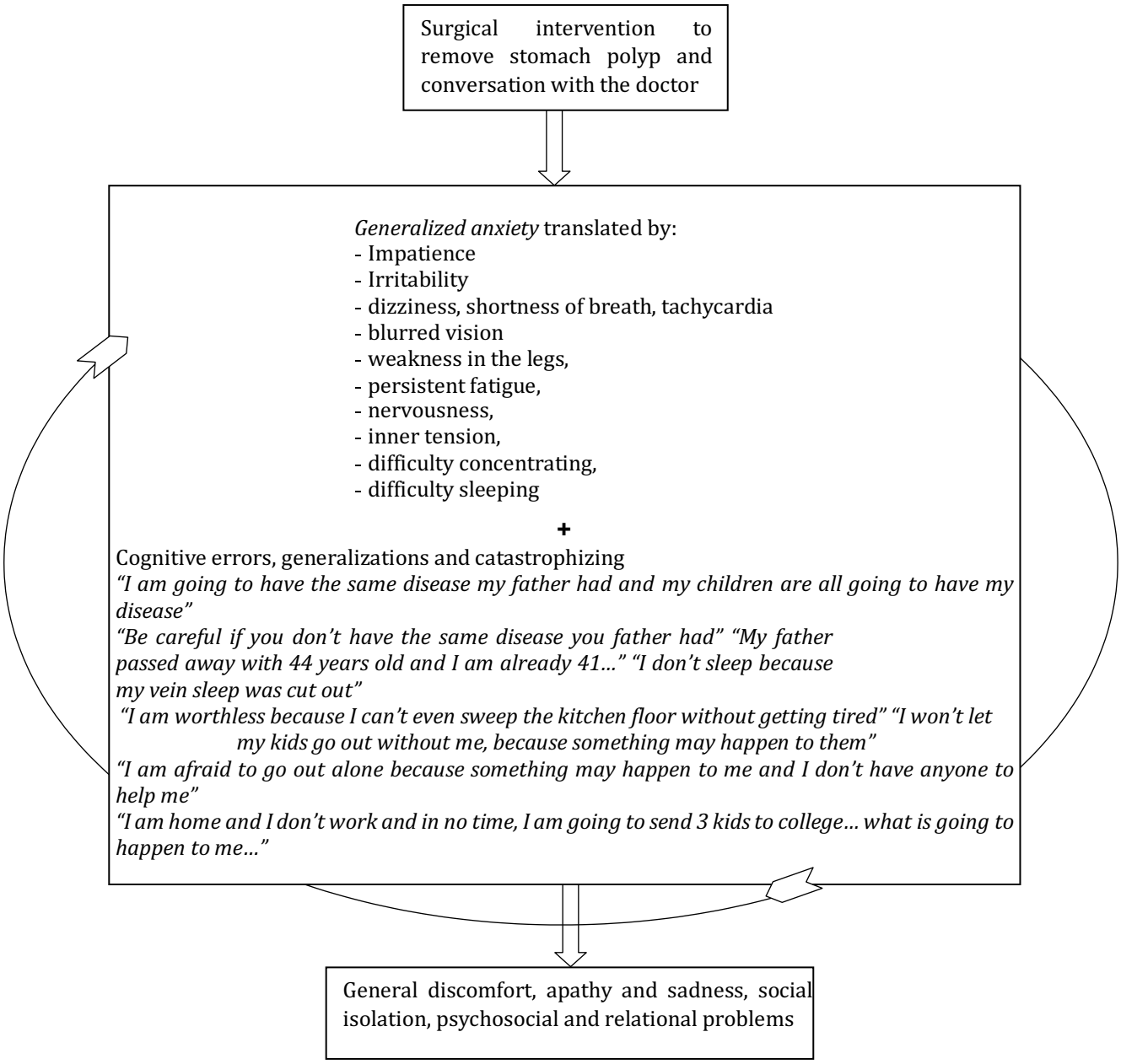

Figure 1; Methodological Intervention and Therapeutic Evolution

The primary goal of this therapeutic intervention is to reduce anxious symptoms by changing the irrational beliefs of "C.C.", which distort reality and prevent the subject's satisfaction. We intend to achieve this goal through the implementation of several techniques based on the HBM Psychotherapeutic Model.

The therapeutic intervention started with the establishment of a safe, authentic and collaborative therapeutic relationship, explaining in detail the anxiety disorder based on the HBM model (Figure 2).

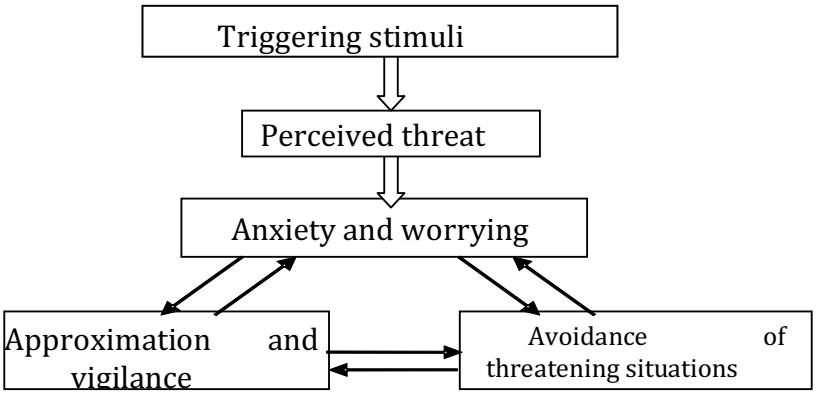

Figure 2; Methodological Intervention and Therapeutic Evolution

The psychotherapeutic intervention took place over 15 sessions, following the HMB Psychotherapeutic Model and it was divided in two specific phases.

In the first phase, designated intensive phase of treatment, "C.C." had weekly psychotherapy sessions in order to reduce/stop all the anxiety symptoms presented, such as irritability, impatience, intolerance, emotional lability, tachycardia, shortness of breath, tremors and insomnia.

The psychotherapeutic work arises in order to modify the negative emotional state in which the person is, helping her to reach the psychological and emotional balance she wants.

The states of emotional imbalance are caused by disturbing mental representations, so the necessary psychotherapeutic path involves the modification of these mental representations. This change is accomplished through the resignification of memories, in other words, by giving them a meaning that is accepted by the individual and that it does not disturb him/her.

There are two psychotherapeutic techniques used in the HBM Psychotherapeutic Model: Athenese® and Morfese®. Their function is to work on the individual's emotional system so that he/she can set himself/herself free from emotions such as fear, excessive worrying, sadness, irritability, anxiety, among others. This will allow the modification of his/her anxiety state.

Therefore, Athenese® is formed by a set of psychotherapeutic exercises, which consists of using conscious thinking as a means of resignification, helping the individual to articulate new strategies of thinking and understanding of the reality.

Morfese® is a technique of emotional release through the induction of a dream guided by the psychotherapist, during which the subject reaches an intermediate state between sleep and wakefulness. As such, it resorts to unconscious thinking allowing the dissociation of experiences that disturbed the individual in the past and, consequently, allows him/her to associate with positive emotions. Both techniques combined together cause an effective change of state, with a clear change in mental representations that previously disturbed the individual. In the first session, we began the process of emotional dissociation, using the Morfese therapeutic

intervention technique and gradually we started introducing resignification exercises, using Atheneses.

In the end of the intensive treatment phase, after 8 sessions, "C.C." repeated the psychometric tests of psychological assessment performed in the evaluation and diagnosis appointment and it was found that she had considerably reduced the anxiety and depressive symptoms, with the absence of clinically significant symptoms: BDI-II: 9-absence of depression; BAI: 15- mild anxiety and the Pittsburgh Sleep Quality Index: 4-good sleep quality. After the intensive phase completed, there was a substantial improvement in the symptoms initially presented. Therefore, we entered the consolidation phase (7 sessions over 6 months), with the goal to consolidate the therapeutic changes achieved, to restructure the functionality, to prevent relapse processes and to encourage "C.C." engaging in pleasurable activities of her personal and professional fulfilment (her will was to rejoin the world of work).

DISCUSSION

C.C. deals in a more realistic way with the stomach pathology that she has, and we verified a marked decrease in anxious symptoms and, subsequently, in the sadness and apathy, derived from catastrophic thoughts about the disease and the excessive worrying that she could be able to develop malignant neoplasia, just like her father.

In the last session, C.C. exhibited a calm and balanced posture, revealing insight about the current and past emotional state. She was very satisfied with the results obtained and, in her words, with her "peaceful way of living the day… one day at a time".

With the HBM Therapy, C.C. was able to free herself from old and dysfunctional emotional patterns, which conditioned her life, at all levels. This therapy also allowed C.C. to develop new strategies of thinking and understanding of the reality.

References

American Psychiatric Association (2014). Manual diagnóstico e estatística das perturbações mentais – DSM-5. Quinta Edição. Lisboa: Climepsi.

Beck, A.T., Epstein, N., Brown, G., & Steer, R.A. (1988). An inventory for measuring clinical anxiety: Psychometric properties. Journal of Consulting and Clinical Psychology, 56, 893 897

Beck, A., Steer, R., & Brown, G. (1996). BDI-II manual. The psychological corporation. San Antonio, TX.

Brás, P. (2010). Manual HBM. Documento não publicado. London: Master HBM Research. Brás, P. (2018). Feliz para sempre. Lisboa: Planeta Manuscrito.

Buela-Casal, G. & Sanchez, A. (2002). Transtornos del sueño. Editorial Síntesis: Madrid. Direção-Geral da Saúde (2016). Portugal Saúde Mental em Números, 2015. Lisboa Documento

Governamental. Disponível em: https://www.dgs.pt/estatisticas-de-saude/estatisticas-de saude/publicacoes/portugal-saude-mental-em-numeros-2015-pdf.aspx

Certal, C., Ferreira, C., Domingues, C., Oliveira, J. & Clemente, M. (2016). O Modelo Psicoterapêutico HBM na Perturbação Depressiva. Porto: Clínica da Mente.

Christensen, M. C., Loft, H., Florea, I., & McIntyre, R. S. (2019). Efficacy of vortioxetine in working patients with generalized anxiety disorder. CNS spectrums, 24(2), 275-275.

Ministério da Saúde (2018). Retrato da Saúde, 2018. Lisboa: Documento Governamental. Disponível em: https://www.sns.gov.pt/wp-content/uploads/2018/04/RETRATO-DA SAUDE_2018_compressed.pdf

Newman, M. G., Crits-Christoph, P., Gibbons, M. B. C. & Erikson, T. M. (2006). Participant Factors in Treating Anxiety Disorders. Principles of Terapeutic Change that Work, 6, 121-153. Oxford: University Press.

Nordahl, H. M., Borkovec, T. D., Hagen, R., Kennair, L. E., Hjemdal, O., Solem, S., ... & Wells,

A. (2018). Metacognitive therapy versus cognitive–behavioural therapy in adults with generalised anxiety disorder. BJPsych open, 4(5), 393-400.

Rama, C., Certal, C., Domingues, C., Oliveira, J., Morgado, L., Coelho, L. & Calado, M. (2016). Impacto do Modelo Psicoterapêutico HBM no Transtorno de Ansiedade Generalizada. Porto: Clínica da Mente. Disponível em: https://www.clinicadamente.com/wp content/uploads/2018/06/Impacto-do-Modelo-HBM no-TAG_20161128.pdf

Zhao, X. R., Chen, Z. F., Kang, C. Y., Liu, R. X., Bai, J. Y., Cao, Y. P., ... & Zhang, Y. L.

(2019). Mindfulness-based cognitive therapy is associated with distinct resting-state neural patterns in patients with generalized anxiety disorder. Asia-Pacific Psychiatry, e12368.