

Clinical hypnosis for palliative care in severe chronic diseases: a review and the procedures for relieving physical, psychological and spiritual symptoms

Maria Paola Brugnoli

Department of Surgical Sciences, Anesthesiology, Intensive Care and Pain Therapy Centre, Hospital GB Rossi, University of Verona, Verona, Italy
 Correspondence to: Maria Paola Brugnoli. Department of Surgical Sciences, Anesthesiology, Intensive Care and Pain Therapy Centre, Hospital GB Rossi, University of Verona, Verona, Italy. Email: paola.brugnoli@libero.it.

Abstract: Hypnotic treatment in severe chronic diseases, for pain and symptoms relief, has proven efficacy as adjuvant therapy, and should be offered to any individual, who expresses an interest in this method. While some theorize hypnotizability as a changing attribute of the individual, there is a growing body of literature that indicates hypnotizability may be characterized as a constellation of potentially modifiable attitudes and skills, which are strongly influenced by related factors, as suffering, in severe chronic diseases. In this article, I briefly review representative studies recognizing how clinical hypnosis in medicine is an effective complementary therapy, for pain and symptom's relief in severe chronic diseases and in palliative care. This paper highlights: (I) a scientific review to underline how clinical hypnosis has an important impact on the treatment goals and integration in relieving pain and symptoms; (II) the advanced techniques for effectively relieving pain and symptoms.

Keywords: Palliative care; hypnosis; pain; anxiety; symptoms

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Introduction and background

The use of clinical hypnosis in severe chronic diseases: impact on treatment goals and integration with the World Health Organization (WHO)'s global perspective for palliative care

This work is a review on the use of clinical hypnosis for pain and other distressing symptoms in severe chronic diseases.

The goal of clinical hypnosis in severe chronic diseases and in palliative care is to improve, as an adjuvant, pain and symptoms' relief and quality of life.

The term "palliative care" is increasingly used with regard not only to cancer, but also in cardiac disease such as congestive heart failure (CHF), chronic obstructive pulmonary disease (COPD), kidney failure, HIV/AIDS, the progressive neurological conditions: Parkinson's, Alzheimer's, amyotrophic lateral sclerosis (ALS) and many more severe chronic diseases (1-4).

Palliative medicine is appropriate for patients at all disease stages, including those undergoing treatments for curable illnesses and those living with chronic diseases. Palliative medicine utilizes a multidisciplinary approach in patient care (2-4).

Clinical hypnosis focuses on the WHO's global perspective for palliative care:

- (I) Provides relief from pain and other distressing symptoms;
- (II) Affirms life and regards dying as a normal process;
- (III) Intends neither to hasten or postpone death;
- (IV) Integrates the psychological and spiritual aspects of patient care;
- (V) Offers a support system to help patients live as actively as possible until death;
- (VI) Offers a support system to help the family cope during the patients' illness and in their own bereavement;

- (VII) Uses a team approach to address the needs of patients and their families, including bereavement counseling, if indicated;
- (VIII) Will enhance quality of life, and may also positively influence the course of illness;
- (IX) Is applicable early in the course of illness, in conjunction with other therapies that are intended to prolong life.

Clinical hypnosis focuses on the WHO's global perspective for palliative care on symptoms' relief, such as pain, anxiety, muscular contractures, tremor, rigidity, shortness of breath, fatigue, gastrointestinal complications, swallowing problems, constipation, nausea, loss of appetite, difficulty sleeping and depression (4-8).

Palliative care focuses on providing patients with relief from the physical and psychological symptoms as pain, anxiety, depression, whatever the prognosis (1,2,9-11).

In the past decade, there has been a dramatic increase in the number and quality of research studies examining effects of clinical hypnosis on pain and related symptoms (4,12-18). In recent years, the scientific study of human consciousness and clinical hypnosis has been transformed from a psychological field, into a neuroscientific topic of research. At the level of brain mechanisms, the consciousness science now synthesizes results from a broad range of techniques for the study of clinical hypnosis. They include electrophysiology, functional magnetic resonance imaging (fMRI), magneto/electroencephalography (M/EEG), and computational models (5-8,12,13). Imaging brain studies have shown that hypnosis influences all of the cortical areas and neurophysiological processes that underlie pain and emotions (6,7,13,14).

Two primary effects of the treatment with clinical hypnosis have been noted:

- (I) A reductions in daily background pain and symptoms intensity for many patients (4,15-18);
- (II) An increased quality of life and ability to use self-hypnosis, to experience a state of peace, serenity and wellbeing with the reductions in pain and symptoms that can last for several hours, days or months (4,15-18).

Specifically, clinicians treating patients with pain and other symptoms in severe chronic disease should:

- (I) Include hypnotic suggestions that affect all of the neurophysiological processes that may underlie a patient's pain and suffering (4,14,17,18);
- (II) Include suggestions that impact other key quality of life domains (e.g., sleep quality, relief from nausea

- in chemotherapy and other distressing symptoms);
- (III) Train patients in the use of self-hypnosis to achieve immediate pain relief (4,15-17);
- (IV) Provide audio recordings of treatment sessions to enhance treatment effects (17);
- (V) Provide spiritual relief at the end of life (17).

The goal is to improve quality of life, for both the patient and the family (1,2,4, 11,15-17).

Definition and description of clinical hypnosis

"Hypnosis typically involves an introduction to the procedure during which the subject is told that suggestions for imaginative experiences will be presented. The hypnotic induction is an extended initial suggestion for using one's imagination. When using hypnosis, one person (the subject) is guided by another (the hypnotist) to respond to suggestions for changes in subjective experience, alterations in perception, sensation, emotion, thought or behavior. Persons can also learn self-hypnosis, which is the act of administering hypnotic procedures on one's own." (19).

In the 1950s, the psychiatrist Milton H. Erickson (20) developed a radically new approach to hypnotism, which has subsequently become known as "Ericksonian hypnotherapy". Erickson made use of an informal conversational approach with many clients and complex language patterns, and therapeutic strategies (17,20,21).

In 1974, Theodore Barber and colleagues (22) published an influential review of the research which argued, following the earlier social psychology of Theodore R. Sarbin, that hypnotism was better understood not as a "special state" but as the result of normal psychological variables, such as active imagination, expectation, appropriate attitudes, and motivation (14,17,18,22).

Barber introduced the term "cognitive-behavioral" to describe the non-state theory of hypnotism, and discussed its application to behavior therapy.

Cognitive behavioural hypnotherapy (CBH) is an integrated psychological therapy employing clinical hypnosis and cognitive behavioural therapy (CBT) (23).

The use of CBT in conjunction with hypnotherapy may result in greater treatment effectiveness. A meta-analysis of eight different researchers revealed "a 70% greater improvement" for patients undergoing an integrated treatment to those using CBT only (23,24).

In 1995, the US National Institutes of Health (NIH) established a Technology Assessment Conference that compiled an official statement entitled "Integration of behavioral & relaxation approaches into the treatment of

chronic pain & insomnia". This is an extensive report that includes a statement on the existing research in relation to hypnotherapy for chronic pain.

It concludes that: "*The evidence supporting the effectiveness of hypnosis in alleviating chronic pain associated with cancer seems strong. In addition, the panel was presented with other data suggesting the effectiveness of hypnosis in other chronic pain conditions, which include irritable bowel syndrome, oral mucositis (pain and swelling of the mucus membrane), temporomandibular disorders (jaw pain), and tension headaches.*" (25).

In 2001, the Professional Affairs Board of the British Psychological Society (BPS) commissioned a working party of expert psychologists to publish a report entitled "The Nature of Hypnosis" (26).

Its remit was "*to provide a considered statement about hypnosis and important issues concerning its application and practice in a range of contexts, notably for clinical purposes, forensic investigation, academic research, entertainment and training.*" The report provides a concise (c. 20 pages) summary of the current scientific research on hypnosis. It opens with the following introductory remark: "*Hypnosis is a valid subject for scientific study and research.*" With regard to the therapeutic uses of hypnosis, the report said: "*Enough studies have now accumulated to suggest that the inclusion of hypnotic procedures may be beneficial in the management and treatment of a wide range of conditions and problems encountered in the practice of medicine, psychiatry and psychotherapy.*" (17,18,20-22,26).

In 2007, a meta-analysis of the efficacy of hypnotherapy was published by Flammer E. and Alladin A. (27), they discovered that hypnotherapy is claimed to be effective in treatment of psychosomatic disorders. A meta-analysis was conducted with 21 randomized, controlled clinical studies to evaluate efficacy of hypnosis in psychosomatic disorders. Studies compared patients exclusively treated with hypnotherapy to untreated controls. Hypnotherapy was categorized into classic (n=9), mixed form (n=5), and modern (n=3). Results showed the weighted mean effect size for 21 studies was $d (+) = 0.61$ ($P=0.0000$). The meta-analysis clearly indicates hypnotherapy is highly effective in treatment of psychosomatic disorders (27).

Results of scientific studies demonstrate that hypnosis is an effective and efficient means of developing the resources of people suffering from severe chronic illness (14,17,26,28-31).

After an average of few hypnotherapy sessions in severe chronic diseases, patients are able to locate previously unexploited resources within themselves and are able to

become autonomous in the use of self-hypnosis. The major benefits reported concerned the reduction in pain, anxiety and distressing symptoms (4,14-18,20-23,32).

Clinical hypnosis in palliative care is indicated for all the patients with any serious illness and who have physical, psychological, social, or spiritual distress (4,15-17,26-32).

Discussion

The goals of clinical hypnosis in severe chronic disease and the advanced techniques for effectively relieving pain and symptoms

We perceive pain and suffering as separate entities. The physical, anatomic, and neurochemical expression of pain is treated by medicines, antidepressants, benzodiazepines, opioids, anesthesiological nerve blocks, electric stimulators, surgery and physical therapy.

The multiple physical and psychological symptoms, the dramatic alteration in support needs and in personal relationships, all may constitute pathways to psychological distress in this population.

Physical, psychological, social and spiritual suffering components involve the patient's:

- (I) No acceptance;
- (II) Pain and anxiety;
- (III) Fear of the unknown, of the suffering and death;
- (IV) Pessimistic evaluation of the meaning of pain and depression;
- (V) Feeling of no time limit to suffering;
- (VI) Often self-destructive feelings of guilt and resentment;
- (VII) Psychosocial suffering;
- (VIII) Spiritual suffering.

These emotions are called the "total pain".

Cicely Saunders defined the concept of total pain as the suffering that encompasses all of a person's physical, psychological, social and spiritual (33).

These emotions and the pain are quite responsive to a good hypnotherapy as adjuvant to the other therapies. Each patient must be treated with the knowledge that physical, psychological, social and spiritual suffering, cannot be treated in separation. When suffering is removed, pain tends to become tolerable or may even disappear (17,18,27,28,31,33-35).

The goals of clinical hypnosis, as an adjuvant therapy, in palliative care for the severe chronic diseases, are the same focused on the guidelines for palliative care of WHO (1).

Clinical hypnosis focuses on the WHO's global perspective for palliative care; that is the following view:

- (I) Provides relief from pain and other distressing symptoms;
- (II) Affirms life and regards dying as a normal process;
- (III) Intends neither to hasten or postpone death;
- (IV) Integrates the psychological and spiritual aspects of patient care;
- (V) Offers a support system to help patients live as actively as possible until death;
- (VI) Offers a support system to help the family cope during the patients illness and in their own bereavement;
- (VII) Uses a team approach to address the needs of patients and their families, including bereavement counseling, if indicated;
- (VIII) Will enhance quality of life, and may also positively influence the course of illness;
- (IX) Is applicable early in the course of illness, in conjunction with other therapies that are intended to prolong life.

In this paper, we discuss all of them with a scientific review and describe some practical hypnosis' techniques.

Clinical hypnosis provides relief from pain and other distressing symptoms

Several reviews and systematic research studies confirm that psychological interventions and clinical hypnosis are effective in the treatment of acute and chronic pain (15-18, 33-36) in disability, cancer-related pain, and in severe chronic diseases (17,28-31,37-40). For both chronic and acute pain conditions:

- (I) Hypnotic analgesia consistently results in greater decreases in a variety of pain outcomes compared to no treatment/standard care (17,18,22-24);
- (II) Hypnosis frequently surpasses non-hypnotic interventions (20-22) (e.g., education, supportive therapy) in terms of reductions in pain-related outcomes;
- (III) Hypnosis performs similarly or further to treatments that contain hypnotic elements (such as progressive muscle relaxation), but is not surpassed in efficacy by these alternative treatments (17,31,32,34-36,41,42).

The brain imaging studies are demonstrating the neurophysiological changes that can and do occur because of hypnotic analgesia treatment. Studies using fMRI

and PET scan technology have revealed that a number of brain structures involved in the perception of pain (e.g., somatosensory cortex, anterior cingulate cortex, insula) are demonstrably affected through hypnotic suggestion (14,43-45).

A method for the assessment of symptoms in patients (and their relief with hypnosis), admitted to pain therapy and palliative care, is the Edmonton Symptoms Assessment Scale (ESAS), in which there are eight visual analog scales (VAS). VAS from 0 to 10, indicating the levels of pain, activity, nausea, depression, anxiety, drowsiness, appetite and sensation of well-being (46), sometimes with the addition of shortness of breath (47). On the scales, 0 means that the symptom is absent and 10 that it is of worst possible severity (46,47). Suffering from uncontrolled pain and symptoms, is a significant fear of those with severe chronic illnesses (9,10,17,28-30,48).

The analgesic ladder was designed by the WHO (49) to assist the healthcare prescriber in the recommendation of analgesic drugs by suggesting a logical strategy for managing pain in a multitude of pain situations.

The ladder advocates a stepped approach to the use of painkillers from these analgesic groups:

- (I) Simple analgesics (NSAIDs);
- (II) Weak opioids;
- (III) Strong opioids;
- (IV) Adjuvants.

We can consider clinical hypnosis as a non-pharmacological and noninvasive adjuvant in pain therapy and related symptoms, in severe chronic diseases and in palliative care (15-18,22,28-32,34-38,41,42).

Clinical hypnosis is efficacious for managing chronic pain and symptoms, and hypnosis interventions consistently produce significant decreases in pain associated with a variety of chronic-pain problems. In addition, hypnosis is generally found to be more effective than non-hypnotic interventions such as attention, physical therapy, and education (17,18,41,42,50-52).

The hypnotic intervention for pain and anxiety relief typically begins with an induction and suggestions for deepening the trance state. These are followed by various suggestions for reduced pain, anxiety and other distressing symptoms. For chronic pain management, posthypnotic suggestions are almost always given that any pain reduction achieved will last beyond the session, and/or for the patient to recreate a sense of comfort and inner relaxation.

Hypnotic analgesia and symptoms' interventions also

frequently make use of self-hypnosis training, and patients are provided with a CD by the therapist, so they can practice the skills they have learned at home (16-18,39).

Anxiety is addressed as a special form of mind/body problem involving deep interaction between mental and physical distress in chronic illnesses.

The scientific researchers suggest that for those who experience significantly impairing and/or distressing anxiety, it often goes undertreated. The existing literature suggests that although benzodiazepines effectively reduce anxiety symptoms in the short term, at this time, there is not sufficient evidence to determine the long-term benefits of these medications. Benzodiazepines can function as “safety behaviors” in suffering situations (53).

Hypnosis and self-hypnosis training represents a rapid, cost-effective, and safe adjuvant or alternative to medication for the treatment of anxiety-related conditions (17,20,28-31,34-36,54,55).

Cognitive hypnotherapy (CH) is applied to the treatment of anxiety disorders (17,20,34,35,38,56).

Rapid and sustained relief of severe anxiety is necessary to achieve comfort at the end of life: skilled additions of psychological therapies as clinical hypnosis with breathing exercises, and combined pharmacotherapy, led to control of anxiety (17,57).

Depression in chronic illnesses is a state of low mood and aversion to activity that can affect a person's thoughts, behavior, feelings and sense of well-being (30-32,35,58).

Depressed people feel sad, anxious, empty, hopeless, worried, helpless, worthless, guilty, irritable, hurt, or restless. They may lose interest in activities that once were pleasurable, experience loss of appetite or overeating, have problems concentrating, remembering details, or making decisions, and may contemplate, attempt, or commit suicide.

Insomnia, excessive sleeping, fatigue, loss of energy, or aches, pains, or digestive problems that are resistant to treatment may also be present (30,58,59).

Screening for depression in terminally ill patients can optimize their physical comfort at the end of life (60). The core issue regarding antidepressants for many clinicians is whether they perform significantly better than placebos. However, the enhanced effects of psychotherapy utilizing hypnosis offer a means of avoiding most, if not all, of the problems associated with the use of antidepressants as a primary form of treatment (17,30,61-63).

Alladin A. and Alibhai A. (64), investigated the effectiveness of CH, combined with CBT, on depression.

They studied 84 patients with depression: they were randomly assigned to 16 weeks of treatment of either CH or CBT alone. At the end of treatment, patients from both groups significantly improved compared to baseline scores. However, the CH group produced significantly larger changes in Beck Depression Inventory, Beck Anxiety Inventory, and Beck Hopelessness Scale. The effect size was maintained at 6-month and 12-month follow-ups. This study represents the first controlled comparison of hypnotherapy with a well-established psychotherapy for depression (64). Evidence-based strategies, including hypnosis, are studied in the context of CH for depression, to illustrate how expectancy effect can be maximized in psychotherapy and clinical hypnosis (30,64,65).

During the final months and days of the life, pain, anxiety, depression, fatigue, loss of appetite, dependency and feeling, unwell are the most prevalent symptoms.

Physical symptoms are more often treated than psychosocial symptoms (17,30,64,66).

Relief of cancer-related symptoms is essential in the supportive and palliative care.

Nausea and vomiting are portrayed in the specialist palliative care literature as common and distressing symptoms affecting the majority of the patients.

Nausea is a non-specific symptom, which means that it has many possible causes. Some common causes of nausea are motion sickness, dizziness, headache, fainting, gastroenteritis (stomach infection), or the side effects of many medications including cancer chemotherapy. Nausea may also be caused by anxiety, and depression. Typically, it is controlled using antihistamine drugs or anti-emetics. In addition to nausea and vomiting following chemotherapy treatment, cancer patients can experience these side effects prior to a treatment session, the so-called anticipatory nausea and vomiting.

Richardson, Smith, McCall, Richardson, Pilkington, and Kirsch (67), systematically reviewed the research evidence on the effectiveness of hypnosis for cancer chemotherapy-induced nausea and vomiting (CINV). A comprehensive search of major biomedical databases including Medline, Embase, CINAHL, PsycINFO and the Cochrane Library was conducted. Specialist complementary and alternative medicine databases were searched and efforts were made to identify unpublished and ongoing research. Citations were included from the databases' inception to March 2005. Randomized controlled trials (RCTs) were appraised and meta-analysis undertaken. Clinical commentaries were obtained. Six RCTs evaluating the effectiveness of

hypnosis in CINV were found. In five of these studies the participants were children. Studies report positive results including statistically significant reductions in anticipatory and CINV. Meta-analysis revealed a large effect size of hypnotic treatment when compared with treatment as usual, and the effect was at least as large as that of CBT (67,68).

The scientific experience highlights the potential value of hypnosis in the management of anticipatory nausea and vomiting in chemotherapy and in severe chronic diseases (17,27-31,38,68).

Relevant studies published in peer-reviewed journals between 1980 and August 2007 was conducted to identify self-care strategies for reducing nausea/vomiting, constipation, diarrhea, fatigue, dyspnea in severe chronic diseases. They recognized reasonable quality of nonpharmacologic strategies for managing common chemotherapy adverse effects, as cognitive distraction, exercise, hypnosis, relaxation, and systematic desensitization to reduce symptoms in cancer (35,37-39,66-70).

Dyspnea is frequently encountered in the palliative care setting. The American Thoracic Society defines dyspnea as: "A subjective experience of breathing discomfort that consists of qualitatively distinct sensations that vary in intensity" (which may be either acute or chronic). In 85% of cases of severe chronic diseases in Palliative care, it is due to either asthma, pneumonia, cardiac ischemia, interstitial lung disease, CHF, COPD, or psychogenic causes (71).

Dyspnea is treated (with or without invasive or noninvasive mechanical ventilation) by optimizing the underlying etiological condition, patient positioning and, sometimes, supplemental oxygen. Systematized improvement efforts addressing symptom management and assessment, as clinical hypnosis, can be implemented (17,18,72).

Hypnotherapy in severe chronic diseases can be useful in the management of anxiety, discomfort, physical and psychosomatic symptoms, all of which may contribute to a complaint of dyspnea (17,18,26-31,35,37-39,73).

Symptoms like dyspnea, sometimes serve as solutions for patients' psychological dilemmas. A case study on the treatment of shortness of breath with hypnosis, demonstrates how an 11-year-old's complaint of shortness of breath becomes an opportunity for an appropriately trained physician to provide treatment by helping the patient to engage his inner resources. The case illustrates the strength of hypnosis for accessing resources outside of conscious awareness and use of dissociative language to both support and alter the patient's defenses (73).

The focus of the hypnotherapy in severe chronic diseases

is to ameliorate not only the effects of pain, anxiety, but also other distressing symptoms as dyspnea, to restore a level of psychological and physical wellbeing (17,18,74).

Hypnosis techniques to be used as pain and symptoms relief, suitable for patients in severe chronic diseases

The technique of the different interpretation of symptoms

When a state of a lighter or deeper relaxation is achieved, through different techniques of hypnotical induction, the patient is trained to interpret the feeling of chronic pain, or tremor, or rigidity, coming from a specific place in the body, and to transform it, slowly from an unpleasant feeling, to a sensation of different nature. For example, he can feel pleasant slight, moderate pressure, beneficial warmth or cold sensation of anesthetizing nature.

Example of anesthetic to one hand: "... *While in a state of relaxation you can imagine to immerse your hand in a container of melting ice cubes... and from the wrist up to the tip of your fingers the ice acts on your hand like a very powerful anesthetic... making it feel more and more insensitive... You will feel your hand becoming more and more insensitive... and the anesthetic will increase.*" You will also know that the anesthetic will last until you will repeat to yourself for 3 times "*Everything is normal*".

The technique of the transport of the symptoms

After achieving relatively strong analgesia in a certain part of the body with the techniques described above, you aim to mentally transfer the analgesia to another part of the body (for instance from the hands to the abdomen or to the back) obtaining this way a gradual and progressive reduction of the global suffering.

The technique of the switching of attention

This method can be very useful for chronic pain by training the patient to move his attention to those parts of the body, which are not affected by pain. Using gratifying visualizations, you train the patient to move his attention to other pleasant sensation of his body, which are past or present. This method is also useful in chronic pains, which are not too strong and the patient must participate actively to the visualizations.

The technique of self-hypnosis for the treatment of acute pain

With this exercise, you will be under hypnosis for different lengths of time measured in minutes or seconds:

"Now I will sleep for X minutes meanwhile my pain will decrease..." then begin to count down from 20 to 1.

While you are practicing this experiment, you must use

the following suggestion: “every time faster and deeper”.

This means of course that every time you will go into hypnosis, your eyes will close faster and you will “sleep” more deeply.

Try this exercise for different length of time.

Try to do self-inductions that last only 10, 15, 20 seconds.

This technique can be used in the acute pain relief.

The technique of the activation of a type of conditioned reflex

This technique is called the “non painful pain”. During a physical and mental state of relaxation/hypnosis, it is possible to activate a conditioned reflex through images and/or the music preferred by the patient so that the suffering is reduced.

This is an example of an exercise based on the “chosen image”:

You train yourself to accept pain with your favorite image for 5 minutes...

Then you look at the image for 4 minutes...

3 minutes of your favorite image...

2 minutes of your favorite image...

1 minute of your favorite image....

Obviously, this exercise will last around 15 minutes.

Every “entrance” of the favorite image will be preceded by a count down from 20 to 1. Think that by counting down also your pain decreases progressively.

The patient can train himself to do this exercise.

The technique of the self-hypnosis in anxiety therapy and for symptoms relief

This is one of the most efficient techniques and is carried out in three phases of suggestions during a light physical relaxation or a medium hypnosis:

- (I) You are living a pleasant feeling in deep relaxation;
- (II) You connect this feeling mentally to your symptoms;
- (III) You are using the beautiful feelings, mentally to cancel your symptoms;
- (IV) The most efficient way to achieve this feeling is to repeat this technique until you achieve your goal.

The technique of the “deep breathing”

A technique that is usually taught in both meditation’s techniques and hypnosis, classes alike that can instantly reduce stress and breathing distress, is called “inner breathing”.

Anytime during the day or evening, if you feel overwhelmed, anxious or stressed in any way, it would be extremely beneficial to just stop for a moment, and take very slowly, five to ten deep, relaxing breaths.

We all started out our life doing deep breathing but as

we got older, some, because of certain factors, in their life switch over to shallow breathing.

So, if you want to look at it as relearning the type of breathing you did when first born, then do so, because as an unknowledgeable newborn baby, at the subconscious level or soul level, you came into this world knowing what was best for your survival in it.

If you have difficulty in doing your inner slow breathing, try it while lying down in a relaxed and comfortable position.

The more slowly you do it, the more it will become automatic and the need to consciously think about it will eventually be gone.

The meditative self-introspective-hypnosis “the seven minute practice”

The passive/introspective concentration state, needs particularly the long-term memory, in addition to the short-term memory. This kind of memory is fixed on groups of cortical and sub-cortical neurons or some programs active in our brain since the first 2 or 3 years of life.

First minute: connecting ourselves to our inner self, through the awareness of our breathing... Putting our attention on it... attention... or passive/introspective concentration for 5 minutes...

Five minutes: let’s stay like this... slowly breathing... paying attention to it... without effort... naturally. When something distracts us, a thought, a sound, a voice far away, without effort... naturally we return our attention on our slowly breathing.

Observing it... inhaling... and exhaling each time we distance ourselves.

We gently return to it, so the saying goes: “*Hundred times I fall and one hundred and one times I get up*” (in the meditative states, 101 are the number of repetition of the Mantras).

Seven minutes: let’s widen our awareness of ourselves... and the universe... so our breathing is the breathing of the whole world... So our meditation benefits all other human beings.

Clinical hypnosis affirms life and regards dying as a normal process

We are very afraid consciously and unconsciously of death, because we do not know what death is. We have learnt to be afraid of death.

During our life span, we have a lot to learn, for instance how to feel, how to love, how to respect the others, and

ourselves how to be compassionate towards others, how to understand the awakening of our consciousness and the most important thing to know, the fact that we will leave our body here on this world.

Death is the event that changes us most, but it is also the event, which is less important in our lives obsessed by time. Dying is something that happens to everyone. It is very important to be able to die with serenity and awareness.

The more advanced a severe chronic illness has become, the more hospital staff should focus on holistic treatment, as hypnosis, encompassing body, mind and soul of the patient.

Clinical hypnosis is a treatment that activates available resources; it is not only an effective way of alleviating pain, but it also can ease psychological problems at the same time (17,20,28-31,34-36,54,55,75).

When we allow death and awareness of life to occupy their natural position in our life, we are presented with many opportunities to open ourselves to the beauty of life, and we will never fear the unexpected, but gain the strength, love and compassion when we understand that all this is a natural part of our life.

Hypnosis and self-hypnosis, affirms life, regards dying as a normal process and helps (17,20,27-31,34-36,38,54,55, 61-65,68):

- ❖ To have a good relaxation of body and mind;
- ❖ To facilitate breathing;
- ❖ To reduce anxiety;
- ❖ To reduce fear and panic;
- ❖ To have a good pain relief;
- ❖ To facilitate new patterns of thoughts, feelings and inner consciousness;
- ❖ To reduce depression;
- ❖ To reduce sleep disturbances;
- ❖ To reduce pre-operative anxiety in the surgery for cancer;
- ❖ To redefine a problem or situation;
- ❖ To bypass normal ego defenses;
- ❖ To suggest solutions and new psychological options;
- ❖ To provide a gateway between the conscious and the unconscious mind;
- ❖ To increase communication;
- ❖ To facilitate retrieval of resource experiences;
- ❖ To improve mind-body relationship;
- ❖ To improve rehabilitation during the palliative care;
- ❖ To improve psychology of self and self-realization;
- ❖ To understand the higher self in dying patients;
- ❖ To affirms life and regards dying as a normal process.

The hypnosis method to be used to support life and serenity, suitable for patients in severe chronic diseases **The technique of the positive visualizations**

When the patient is always in state of relaxation or in medium hypnosis state, you can introduce particular visualizations that will origin, after a certain time, major handsome feeling visualizations that are capable to modify the stressful information in the central nervous system, and therefore reduce pain and the total suffering to the patient (17,18).

Clinical hypnosis intends neither to hasten nor postpone death

Clinical hypnosis respects life and death. Clinical hypnosis can be useful for patients at the end of life, not only for pain and suffering relief, but also to relief psychological and spiritual suffering, with the activation of spiritual consciousness, like a near-death experience (NDE) (17). Clinical hypnosis at the end of life represents the optimism of the human spirit, or maybe it ensures that the experience is subject to recall and recounting. It may also emphasize one of the most quoted biblical phrases from Psalm 23: “*Yea, though I walk through the shadow of the valley of death, I will fear no evil*”.

A NDE refers to personal experiences associated with impending death, encompassing multiple possible sensations including detachment from the body, feelings of levitation, total serenity, security, warmth, the experience of absolute dissolution, and the presence of a light. These phenomena are usually reported after an individual has been pronounced clinically dead or has been very close to death. With recent developments in cardiac resuscitation techniques, the number of reported NDEs has increased. The experiences have been described in medical journals as having the characteristics of modified states of consciousness, while religious believers and a number of scientists have pointed to them as evidence of an afterlife and mind-body dualism (17,76-81).

At the end of life it is a rewarding feeling to be able to sit with your dying friend-patient to make him or her to understand the mystery of compassion and love in our heart.

It is rewarding to be able to make him or her relax in the face of death with peace and spirituality and to feel that this love is growing in his or her heart.

It is rewarding to communicate that death is not the end but is “the natural way of life” and is something much

bigger and more divine than will never be possible in our physical life (17,76-81).

Clinical hypnosis integrates the psychological and spiritual aspects of patient care

Clinically significant anxiety depressive symptoms may be frequent in patients with advanced severe chronic neurological diseases and can be understood as a final common pathway of distress, emerging in response to the interaction of multiple disease-related, individual and psychosocial factors (17,20,28-31,34-36,38,54-57).

The most prominent of these are the physical burden of disease, attachment insecurity, lower self-esteem, feelings of hopelessness and impaired spiritual well-being.

Death can give us the key of our consciousness to life.

Clinical hypnosis, and the states of deep-introspective hypnosis, like the meditative states, are modified state of consciousness, and at the end of life, we can integrate the meditative states of many religions, with the introspective states of hypnosis, to help the patient in a way of wellbeing and serenity (17,81,82).

Consciousness is the state of being aware of an external object or something within oneself (83-87). It has been defined as: awareness, the ability to inner experience or to feel, wakefulness, having a sense of selfhood, self-knowledge and the executive control system of the mind (83,84,86,87).

The meditative states in many religions, give us the way to use the same stages with clinical hypnosis, to help the patients to activate the spiritual consciousness: the patient can experiment feelings of deepest peace as if all the love is expanding from his heart much more than ever happened in his lifetime (17,76-81).

The same feelings, that we can have by deep self-introspective hypnosis, have been described in the "Tibetan book of living and dying" an ancient Buddhist Tibetan Bardo (the inner way to death), which was translated by Sogyal Rinpoche (88).

This very ancient Tibetan text is like a map that runs through the levels of the transition from the death of the physical body, until the rebirth or the dissolving in the universal conscience.

This text describes all the steps done by the conscience during the death process.

Some people that have had near death experiences, and then have come back to life, have lived the first part of the Bardo. They describe they have seen bright colors and strong light, and they have felt a state of complete

gratification, which corresponds to the first part, described in the Bard too. However has tried this feeling and has eventually come back to life describes this state of great ecstasies and gratification and the majority did not want to come back to life because they discovered a dimension which was much better that the one they had in life.

This is the first part of the Bardo and the Tibetan monks have described it in the same way as people describe it nowadays. This is a proof that that conscience is universal. In the deepest states of introspective hypnosis, we can enter in a mystical state, like a near death experience (17,81,88).

All non-ordinary activities of consciousness, in states of brain dysfunction, psychotic disorders, hypnosis, meditation, ecstatic and mystical states, and those induced by psychotropic drugs, have been gathered under the umbrella term of "altered state of consciousness" (ASC) in the science of psychobiology (89). This term ASC is questionable, however, at least to some degree because it suggests a priori the idea of a dysfunction, while some of the states it is meant to describe (e.g., meditation and hypnosis) imply no such abnormality (17,80,81,88).

A variety of spiritual experiences correlates with the activation of a large fronto-parieto-temporal network where the activity of the left and right parietal systems seems to play a crucial part in transcendence (90). Religious thinking seems to be associated with brain regions relating to emotion, self-representation, and cognitive conflict, while thinking about ordinary things is more closely related to memory networks (91,92). The emerging neuropsychology of spirituality and religion thus promises to improve our knowledge of its neurocorrelates and their link with other experiences, such as those induced by hypnosis and meditation, helping us to go beyond the conventional approach biased by context and a prejudicial idea of dysfunction (17,80,81,92).

A review of scientific studies, identified relaxation, hypnosis, concentration and meditation, altered states of awareness, a suspension of logical thought and the maintenance of a self-observing attitude as the behavioral components of meditation (17,80,93-95).

Prayer, hypnosis and meditation are accompanied by a host of biochemical and physical changes in the body that change metabolism, heart rate, respiration, blood pressure and brain chemistry (96).

At the end of life, we can use various techniques of meditation and self-hypnosis, for the activation of the spiritual and the higher consciousness. Hypnosis and self-hypnosis are particular methods that can be applied to

human being to ease the sadness and desperation for letting go, not only of the material things but also especially of the people we love.

Through prayers and hypnosis, we can guide the patient in a conscious hypnotic state through the experience of death, up until the moment before death and until the very moment of death.

The serene images and the sensations of death become less fearful, because if you are mentally relaxed you can realize that it is possible to go through death and feel that a part of us will continue to live (17,76-81).

The technique of self-introspective hypnosis, for psychological and spiritual relief (15,17)

- ❖ We are immersing ourselves in a sea of tranquillity..... of relaxation.....of calm.....calm.....
- ❖ Of pleasant feelings.....at all levels....
- ❖ At physical level.... at physical level...
- ❖ At mental level...at mental level.....
- ❖ At spiritual level..... at spiritual level...
- ❖ We immerse ourselves again in a sea of tranquillity..... of tranquillity....of relaxation....of relaxation.... of calm....of calm..
- ❖ Of pleasant feeling..... of pleasant feeling....
- ❖ At all levels..... at all levels...
- ❖ Physical level..... physical level...
- ❖ Mental level..... mental level.....
- ❖ Spiritual level...spiritual level.....
- ❖ In this welcoming sea of tranquillity.....
- ❖ Slowly we go towards the sea of light....
- ❖ Towards the light of our conscience.....
- ❖ The light of our deepest self....
- ❖ The light of the cosmos.....
- ❖ The light that never goes out.....
- ❖ And now that we are immersed in this welcoming sea of tranquillity.....
- ❖ Slowly we go towards the light....
- ❖ The light of our conscience.....
- ❖ The light of our higher self....
- ❖ The light that never goes out.....
- ❖ Every moment is a step forward towards the light...
- ❖ A step forward towards the light....
- ❖ A very important step towards the light of the infinite....
- ❖ Towards the light that shows us the way.....the way of our spirit, the way of our higher self...where our soul is resting cradling in the light...
- ❖ Where our souls cradle us in this sea of light... of light.... of light that never goes out.....

- ❖ And the spirit is enjoying the infinite.....
- ❖ Like in the welcoming sea of tranquillity....
- ❖ In the same way in this great sea of light, great sea of light, which is bringing a great physical...mental....and spiritual wellbeing....
- ❖ A wellbeing all over our body....
- ❖ A great wellbeing in the soul and in the spirit.....

Clinical hypnosis offers a support system to help patients live as actively as possible until death

Everyone facing life-threatening illness will need some degree of supportive care in addition to treatment for his or her condition. Hypnotherapy as a supportive care helps the patient and their family to cope with their condition and treatment of it, from pre-diagnosis, through the process of diagnosis and treatment, to cure, continuing illness or death and into bereavement. It helps the patient to maximize the benefits of treatment and rehabilitation, to live as well as possible with the effects of the disease. It is given equal priority alongside diagnosis and treatment.

Hypnotherapy can reduce anxiety in palliative care patients and the severity of psychological and physical symptoms, as well as improving sleep and other physical, psychological, social and spiritual benefits (3,17,24,33,39,52,56,81,82,97-99).

Hypnosis method to be used as a support system to help patients live as actively as possible until death

The technique of the partial or total hypnotic amnesia

Also for this technique, you need the patient to be in a medium or deep hypnotic state (17). It is possible to achieve a better result by following this procedure:

- (I) Taking the patient back to the time during the well-being and healthy status, before the illness started;
- (II) In this way, the patient will eventually forget, by suggestions in hypnosis, the memories of the bad experiences, which are related to his pain;
- (III) And in some cases forget the memories of the physical pain and anxiety, which is related to the chronic disease.

Clinical hypnosis offers a support system to help the family cope during the patients' illness and in their own bereavement

Clinical hypnosis in palliative care assess the care needs of each patient and their families across the domains of

physical, psychological, social spiritual and information needs. Hypnosis is a form of education that encourages patients and their families to express and deal with strong emotions and focuses on clarifying doctor-patient communication (17,61,64,65,81,100). Independent of whether they are believers, agnostics, or atheists, all of the family persons have a dream or a vision about how their family member leaves this world guided by someone, spouses who have already died, anonymous beings or angels, and with a clear sensation of peace and love.

Death is inevitable, yet the loss of a close friend or family member always showers us with a range of emotions. One day we might desperately try to avoid the pain, anxiety and feelings of helplessness we feel when a loved one dies. Other days, we feel like life has returned to normal, at least until we realize that our life has changed irrevocably.

Despite the range of emotions we feel, hypnosis helps grieving for a loved one and helps us cope and heal (9,17,101-105).

Clinical hypnosis in severe chronic diseases offers a support system to help the family cope during the patients' illness and dying. The hypnosis techniques of body and mind relaxation, communicate to the patient and to all the family, a deep empathic relationship (17,103).

Clinical hypnosis uses a team approach to address the needs of patients and their families, including bereavement counseling, if indicated

An early form of hypnosis has been discovered by in ancient history that perpetuate several myths: many authors began to hear reports concerning the practices of various oriental meditation techniques (106). Although hypnosis was accepted in 1958 by the American Medical Association as an adjunct treatment, it remains an underused modality for alleviation of clients' suffering. This hesitancy to apply established practices that show efficacy in patient care may be due to a general lack of cognizance about the therapeutic benefits of hypnosis or a reluctance to learn skills based on preconceptions about hypnosis itself. Scientific evidence of the efficacy of hypnosis is studied as an adjunct treatment in the healing professions and explains hypnosis in a manner consistent with the core values of nursing as defined by the American Nurses Association (107,108).

Today, as form of psychotherapy and counseling, clinical hypnosis can be used in group settings, to create

unconscious change in the patient in the form of new responses, thoughts, attitudes, behaviors or feelings (108,109). Clinical hypnosis uses a team approach to address the needs of patients and their families, including bereavement counseling (103,109-111).

The use of complementary methods (CMs) is widespread and increasing in the United States. Most literature on CM and hypnosis use, among symptom relief in severe chronic diseases and cancer survivors, focuses on the treatment period (98,112-116).

Today many therapists use hypnosis, which is a promising adjuvant therapy, alongside many other mind-body disciplines.

Even as the evidence for hypnosis has developed, its acceptance has waxed and waned, and despite over a century of hypnosis practice and research, hypnosis is not yet typically offered as part of standard medical care in a palliative care team. The support for the widespread diffusion of hypnosis in the medical settings, requires a new frame of research that extends beyond efficacy, and that considers both individual and a team approach for the organizational level' variables.

Clinical hypnosis will enhance quality of life, and may also positively influence the course of illness

Even if we cannot cure the pathology, we can give the patients a better quality of life (17,20,35,37,47,65,81,107).

Clinical hypnosis as supportive care should be early fully integrated, with diagnosis and treatment.

Instruction in self-hypnosis-induced relaxation techniques that included favorite place imagery and progressive relaxation might benefit symptoms (headache, back pain, inability to walk, musculoskeletal pain, nausea, and emesis). The patients, while are in hypnosis their "subconscious" might be able to characterize psychological issues that underlay their symptoms through the medium of automatic word processing (AWP). The information identified through AWP helped guide their subsequent therapy and well-being (100,109).

Hypnosis may also positively influence the course of illness, from the psychological, social and spiritual point of view.

Hypnotherapy encompasses:

- ❖ Self help and support;
- ❖ Psychological support;
- ❖ Pain and symptom control;

- ❖ Social support;
- ❖ Hypnotherapy is useful in rehabilitation, when it is possible;
- ❖ Spiritual support;
- ❖ End of life and bereavement care (110).

Two scientific studies that focused on wound healing, by hypnosis, are worthy of mention: Ginandes and Rosenthal (99) and Ginandes *et al.* (112). Certainly, there is speculation that reducing acute pain can facilitate wound healing in chronic diseases, but physiological responses to acute pain, such as activation of the sympathetic nervous system, may impede wound healing via increased cardiovascular stress and the release of stress hormones and suppression of the immune response (117,118). Managing pain with hypnosis, therefore, may play an important role in supporting the body's natural ability to heal and recover from chronic diseases (17,20,28-31,34-36,41,54,55).

Clinical hypnosis is applicable early in the course of illness, in conjunction with other therapies that are intended to prolong life

Clinical hypnosis in severe chronic diseases is applicable early in the course of illness (16-18,28,31,54,60,61,64,65,74, 82,97,100,101,119). Evidence of psychological treatment efficacy is strongly needed in chronic illnesses as in ALS, particularly regarding long-term effects (4,17,24). Family or nursing support (103,109) often manages medications at home.

The key to clinical hypnosis in palliative care is: it is applicable early in the course of illness and to provide a safe way for the individual to address their physical and psychological distress, that is to say their "total suffering" (17,33,48).

The advantages of clinical hypnosis in palliative care include:

- (I) Is applicable early in the course of illness as adjuvant in conjunction with other therapies and it is safety from side effects (17,28,31);
- (II) Simplicity, as adjuvant analgesic and symptoms relief (40,120-137);
- (III) A spiritual approach embracing life (17,76-79, 81,138-140);
- (IV) A powerful psychological therapy, and approach for the patient and the family (17,61-63,103,109-111,141-157).

Because palliative care sees an increasingly wide range

of conditions in patients at varying stages of their illness, it follows that clinical hypnosis in palliative care offers a range of symptom management. This may choice from managing the physical symptoms in patients receiving treatment for cancer, to treating anxiety and depression in patients with advanced disease, to the care of patients in their last days and hours. Much of the effort involves helping patients with complex or severe physical, psychological, social and spiritual problems.

Conclusions

The development of guidelines for the treatment of pain, suffering and related symptoms in palliative care is important, because they will ensure that evidence-based methodology is used to establish national consensus protocols. Such guidelines also promote equity among the population by providing a basis upon which minimum essential therapeutic services can be provided to patients (2,109,119). There is growing scientific evidence to support the use of hypnosis interventions for pain and suffering management in severe chronic diseases.

What are the conscious and unconscious sensations, and the modified states of consciousness that accompany neural activities of the brain, in healthy people and in chronic illnesses? Even if our neurophysiological knowledge should one day enable us, to identify the exact neurochemical correlation of a psychic phenomenon, we must not forget that neurochemical knowledge is not sufficient to explain all the subjective experiences in people. In the past, the Californian philosopher John Searle wrote that "*to study the brain without studying consciousness is like studying the stomach without studying digestion*" (85-87).

Clinical hypnosis in palliative care increases comfort by lessening pain, controlling symptoms (physical, psychological and spiritual), and lessening stress for the patient and family, and should not be delayed when it is indicated (17,28,29,31,37-40,76-79,81,82,97,100,101, 144-146,149,152-154,157).

Clinical hypnosis in palliative care, is not reserved only for patients in end-of-life care, but also in severe chronic illnesses, and can increase quality of life and get better the patient's life (158-161).

In conclusion, pain and symptoms' relief and mind-body and spiritual positive effects of hypnosis, permit us to identify important benefits for patients suffering from advanced and chronic illnesses. Further studies are needed,

to explore whether the observed benefits are a direct result of the hypnotherapy and how the intervention could most benefit these patients.

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Footnote

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