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MANAGING CANCER AND LIVING MEANINGFULLY (CALM): APPLICATION IN ITALY OF AN INNOVATIVE MEANING-CENTERED INTERVENTION FOR ADVANCED CANCER PATIENTS

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INTRODUCTION

Over the last decades, both medical and psychological discourse on advanced illness and end-of-life care has steadily moved from focusing essentially on symptom and pain management to integrating a more person-centered approach. Such modification originated from a more aware attitude toward the dimensions of spirituality and meaning-making as important resources for coping with emotional and existential suffering inevitably connected with severe illness and mortality.

In this work the themes of existential suffering and meaning will be explored, in the perspective of introducing the foundations and rationale of a randomized study on a psychotherapeutic intervention aimed at alleviating the various expressions of existential distress connected with facing a severe and advanced illness.

The work will be articulated as follows: in the first chapter the concept of existential distress will be examined, and the main psychological and clinical conditions contributing to it will be considered and described. Furthermore the construct of post-traumatic growth will be presented, as a possible evolution of a traumatizing and frightening experience, including having an advanced or terminal cancer.

The second chapter will be focused on the historical foundations of meaningcentered psychotherapies. The constitutive postulates of existentialism and existential therapies will be illustrated, included the ones that most distinguished the existential approach from psychoanalysis, introducing a different conception of man. In particular, Viktor Frankl's *logotherapy* principles will be analyzed, as they largely inspired the philosophic bases on these innovative approach to cancer patient.

Subsequently, the most important meaning-centered interventions will be described: Meaning-Centered Group Therapy, Dignity Therapy and CaLM therapy.

In the third chapter the experimental design of the study, the expected outcomes, assessment scales and final results will be illustrated.

The forth chapter will be dedicated to an in-depth analysis of the research findings and of their possible implications in clinical practice as well as in further research. The limitations of the study will be disclosed.

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The V chapter is the conclusive one, where the final considerations on the entire work will be drawn.

Chapter I

THE MANIFOLD DIMENSIONS OF EXISTENTIAL SUFFERING

What is existential distress?

Patients with a life-threatening disease are inevitably called to confront the existential issue of mortality. While the modalities and mechanisms adopted in this complex event depend on the social, cultural, psychological and even physical factors which characterize the individual in that particular moment of life and his/her whole story, the traumatizing potentiality and the overwhelming reach of this circumstance is something pertinent to every human being.

This confrontation with one's own ultimate fears and concerns (as Yalom -1980 - puts it) constitutes an unavoidable challenge to psychosocial health, augmented by the intense distress which the disease carries with itself. These patients are in fact simultaneously exposed to manifold causes of loss, including physical pain and impairment, profound changes in family and social roles and relationships, complex decisions on treatment and the threat of death and dying. This problematic condition has been referred to as "existential distress" (Yalom 1980; Kirk et al. 2010; Shuman-Olivier et al. 2008).

However, although the term sounds quite explicative of the dimensions involved once death has been made personal and real, it has been argued that a clear definition of what this indicates and of which its components are, is currently lacking (Portnoy et al. 2015).

The necessity of a clearer definition

In reviewing the use of the definition "existential distress" or "existential suffering", Portnoy and Colleagues (2015) highlight that the term has most often been used in the palliative care literature to imply the loss of hope and meaning in people facing impending mortality. For example, The National Hospice and Palliative Care Organization (NHPCO) defined existential suffering as a loss of meaning, purpose, or hope in life (Kirk et al. 2010); and Schuman-Olivier and Colleagues (2008) considered that the presence of a confrontation with the dying process is an essential condition for posing the diagnosis of existential suffering. The same authors suggested that existential distress may be categorized as acute, when the threat of imminent death may trigger fear and panic; subacute, which occurs when death would be imminent only if treatment were withdrawn or withheld; and chronic, when prognosis is greater than two weeks.

Some, such as Rousseau (2001), have included a wide range of psychological symptoms in the definition of existential distress, such as hopelessness, disappointment, loss of self-esteem, remorse, meaninglessness, and a sense of loss of personal identity. Another author (Morita 2004) found that existential suffering included not only intractable feelings of meaninglessness or worthlessness, but also a sense of burden, dependency, death anxiety, fear, panic, the wish to control the time of death, and social isolation. From this analysis it is possible to gather that existential distress may come to include almost all psychological disturbances that can occur near the end of life.

On the other hand, some have questioned whether existential suffering at the end of life, far from being a construct which requires interventions oriented at addressing and reducing it, is simply the expression of a physiological and structural part of the human condition (Hauser and Walsh 2009).

This variability of conclusions and positions is comprehensible – as Portenoy (2015) points out - "since there are no widely accepted measures or clinical criteria to define existential suffering, nor any agreed upon thresholds for its refractoriness". Yet, a clearer clinical conceptualization would be necessary if, in spite of the ambiguity about its definition, existential suffering has been accepted as an indication for palliative sedation by many governing bodies, such as the Royal Dutch Medical Association (2009), the European Association of Palliative Care (Cherny et al. 2009), the NHPCO (Kirk et al. 2010), and by an international consensus panel (de Graeff and Dean 2007).

Clinical conditions which can overlap with or contribute to existential distress

Despite the absence of a universally accepted definition or measure of existential distress, it appears evident that this term overlaps substantively with other clinical constructs, particularly the ones of demoralization and impaired spiritual well-being.

Furthermore, although existential suffering has been distinguished from other psychological disturbances by its relationship with the end of life by Schuman-Olivier et al. (2008), other authors (Lo et al. 2010) highlighted that both the cognitive-affective and somatic symptoms of depression grow near the end of life in patients with advanced cancer. In this perspective, the proximity to death may not be a valid discriminating circumstance between depression and existential distress and the condition of imminent mortality may instead be an ineluctable contextual factor for all psychological disturbances. Many psychosocial and psychiatric conditions may thus occur at the end of life which are profoundly connected with existential suffering. Based on a cross-sectional and longitudinal evidence, some authors proposed that existential suffering aspects, such as depression, hopelessness, and the desire for a hastened death may arise from a final common pathway of distress, emerging in response to the interaction of multiple diseaserelated, individual and psychosocial factors (Rodin et al. 2007/2009; Braun et al. 2007; Lo et al. 2010; Nissim et al. 2009). The most prominent of these have been identified in the physical burden of disease, attachment anxiety (i.e. worry about the availability of supportive relationships and the capacity to make use of them for emotional support), lower self-esteem, hopelessness and impaired spiritual wellbeing (Rodin et al. 2009; Lo et al. 2010).

The following subsections will be focused on framing the clinical conditions merging together into the construct of existential distress within the context of palliative care.

Demoralization

Demoralization was initially defined by Jerome Frank (1974) as a psychological condition characterized by a persistent inability to cope, together with associated feelings of helplessness, hopelessness, meaninglessness, subjective incompetence

and diminished self-esteem: "...the chief problem of all patients who come to psychotherapy is demoralization...the effectiveness of all psychotherapeutic schools lies in their ability to restore patient morale".

This conceptualization appeared congruent with the psychodynamic approach of the Diagnostic and Statistical Manual of Mental Disorders, Second Edition (DSM II) (APA 1968) which considered all disorders as a reaction to the environment.

Initially Frank regarded symptoms of depression and anxiety as expressions of demoralization (Frank 1974), nonetheless, in 1975 Schildrkraut and Klein redefined demoralization as a construct separate from depression, outlining that whereas depressed patients experienced anhaedonia, the demoralized lost their sense of efficacy. Subsequently, Frank and De Figueredo further refined the definition of demoralization (Shader 2005) and distinguished this from depression by pointing out that the first was characterized by the two conditions of distress and sense of incompetence, as a consequence of uncertainty about what direction to take. Differently, depressed subjects cannot act, even if they know the proper choice to take.

For De Figueiredo, who proposed to conceptualize Axis IV as the demoralization axis, demoralization is always abnormal, considered the severe impact that it has on functioning. (2000).

Conversely, Slavney (1999) argued that demoralization – far from being a psychiatric disorder – was a normal response to adverse events, just like grief which is a non-pathologic reaction to distress but which may be worth clinical attention. For this reason he proposed to assign demoralization a V code.

Eventually, research has shown that subgroups of patients with high demoralization did not meet DSM-IV criteria for major depression and vice versa (Rafanelli et al. 2005; Clarke et al. 2000), indicating that demoralization is a clinical syndrome distinct from major depression.

In a factor analysis Kissane (2004) identified 5 distinct dimensions of demoralization in 100 cancer patients:

- loss of meaning;
- dysphoria;
- disheartenment;

- helplessness;
- sense of failure.

Since demoralization in the medically ill refers to the series of thought and emotions experienced by patients when they feel unable to cope with distress, treatment should address these painful affects, behaviours and cognitions. As demoralized patient frequently adopts an existential position which dissociate him/herself from the challenges of illness, help for the demoralized patient should be aimed at the alleviation of suffering and the promotion of his or her resilience resources. Understandably then, an effective approach should be predominantly represented by psychosocial support and psychotherapy where a "safe" and respectful exploration of the existential postures adopted by patient is made possible. In the meantime, however, timely identification and treatment of symptoms –when possible – is crucial.

Spiritual well-being

Spiritual well-being represents a multidimensional clinical construct that refers to the comfort derived from adherence to one's values and beliefs, a sense of inner peace and of meaning and worth about life (Canada et al. 2008). It has been shown that spiritual well-being is linked not only to religiosity, but also to self-esteem, social relatedness, and to the absence of physical suffering (Lo et al. 2011). However, the boundaries between impaired spiritual well-being and demoralization are not clear and they both are indistinguishable from existential suffering.

It is universally comprehended that individuals can find meaning in life at a variety of levels (Eckersley 2005). In their everyday lives, there are things like jobs, family, friends, interests and desires. Many people today find meaning in the pursuit of individual goals. Transcending the very personal sphere of meaning, however, there is also the level of identity which is profoundly rooted in nation or ethnic belonging, and in the characteristic features of a community. At the most fundamental, transcendent level, there is spiritual meaning. So that it is possible to state, with Eckersley (2007), that *Spirituality represents the broadest and deepest form of connectedness*.

As the same author described it, spirituality is indeed *a most powerful form of connectedness and meaning* (ibidem), whose primary feature is the capacity to transcend personal circumstances and material situations, so that it can represent a ultimate fortification against the assaults of human concerns.

A measure of both balance and stability in meaning in life is crucial to personal wellbeing, and this seems to apply particularly to advanced cancer patients, as it has been suggested that a sense of meaning and a spiritual wellbeing are negative predictors of symptoms such as fatigue (Lewis et al. 2014), while evoking in patients the sources to find the necessary inner strengths, including perspective thinking, rituals for transcending immediate physical condition and modalities of coping with their illnesses.

Unfortunately, as a recent systematic review points out, spiritual needs remain among the unmet needs for cancer population (Paterson et al. 2015)

Depression

There is a considerable similarity between the clinical features of depression and the broader definitions of existential suffering, to the point that the two conditions may be considered to be overlapping and mutually reinforcing states. For instance, it has been shown that patients with an advanced disease who have been diagnosed as depressed report problems and concerns related with existential issues at a prevalence 3-5 times higher than non-depressed patients (Wilson et al. 2007a/b) Indeed, Rodin and Zimmerman (2008) argue that some of the symptoms of existential distress can be found in the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV-TR) criteria for major depression (American Psychiatric Association 2000). These include the presence, for at least two weeks, of either depressed mood or anhedonia, and at least four additional symptoms, among which are present:

- feelings of worthlessness or guilt;
- difficulty in thinking, concentrating, or making decisions;
- recurrent thoughts of death or suicide.

Evidence indicates that depression is also the most common mental health disorder in the palliative care settings. Lo and Colleagues (2010) identified in a study of patients with metastatic cancer, with an expected survival of 12-18 months, the prevalence, course and predictors of depression and demoralization, showing that clinically significant depressive symptoms were present in 27% of the baseline sample. Furthermore, in separate reviews of the literature Shakin and Holland (1988), Green and Austin (1993) and Passik and Breitbart (1996) indicated that depressive symptoms are present in 30-40% of patients. Grabsch et al. (2006) in a study on 227 advanced breast cancer patients reported that 7% had major depression, and 24% met the criteria of an adjustment disorder with depressed mood or mixed emotional features.

Nonetheless, several reasons often lead clinicians to be reluctant in diagnosing a depressive disorder in patients with advanced cancer (Maguire 1985). First, the specific clinical meaning of the term "depression" indicating a defined condition, is often made unclear by the ubiquitous use of this term in the colloquial settings. Moreover, such vagueness may be reinforced by the very nature of this disorder: depression hardly occurs in a clear categorical presentation, separating "depressed" from "non-depressed", more plausibly occurring on a continuum of severity. Furthermore it is frequently believed that depression, even if severe, is a normal and adequate reaction when facing the end of life. As a consequence clinicians may minimize the significance of depression and think that almost all dying patients are depressed, as a result of their confrontation with the sadness and the sense of loss that this process brings about.

This evidence is important, as long as it carries with itself consequences on treatment and clinical management and these barriers to the recognition and treatment of depression in palliative care don't remain without consequences. In fact, while it is proven that not all patients with a terminal illness are depressed, those who are, but don't receive an effective treatment show an increased risk to have difficulty in the management of physical symptoms and in their social and existential concerns (Wilson et al. 2007a; Chen and Chang 2004; Grassi et al. 1996). Also it has been indicated that for some this can end up in early admission to hospital or hospice (Christakis 1994 Hinton 1994). Moreover shorter survival has been associated with untreated clinical depression, potentially mediated by poorer adherence to anti-cancer treatments (Kissane, 2009).

Depression in cancer patients with advanced disease is optimally managed utilizing a combination of supportive psychotherapy, cognitive behavioral techniques and antidepressant medication. Psychotherapy, both individual and group, have been shown to effectively reduce existential distress and depression in this population (Kissane 2009; Henry et al. 2010).

Desire for a hastened death

In 1991, when the first English language account of euthanasia and assisted suicides in the Netherlands was published, it became apparent that the reasons given by the responsible physicians indicated forms of emotional, spiritual or psychosocial suffering at the basis of it. More specifically these reasons were: loss of Dignity, 57%; pain, 46% (which shrinked to 5% when only nociceptive pain was considered); unworthy dying, 46%; dependence of others, 33%; and feeling tired of life (23%) (Chochinov and Breitbart 2009; Ruijis et al. 2014). Moreover, depression was common among patients requiring a hastened death, and was often untreated (O'Mahony et al. 2005). This clearly and dramatically illustrates how profound existential distress can be for a dying person. It has been demonstrated that the desire for a hastened death originates in the presence of multiple risk factors, including physical suffering, feeling like a burden to others, lowered self-esteem, loss of meaning, depression and demoralization (Hudson et al. 2006). The construct of hopelessness, moreover, has been found to be independently associated with the desire for hastened death and the will to live and to be a stronger predictor than severity of depression (Chochinov et al. 1998). Suicidal ideation or desire for a hastened death can be considered among the most complicated and controversial topics in palliative care and although the legalization of euthanasia and assisted suicide is taking place in several countries, in many others it still constitutes a source of great debate and divide.

Posttraumatic growth: an opportunity elicited by existential distress

It is universally believed that trauma carries with itself – at least in some cases - the possibility of achieving growth in personal and interpersonal dimensions. For

thousands of years philosophy and religion have recognized that suffering can make man wiser, stronger, and even closer to the "truth".

In the last two decades, mostly as a consequence of positive psychology, an area of research has developed, aimed at scientifically inquiring the positive outcomes of traumatic experiences (Tedeschi et al. 1998).

In scientific literature, a rich gamut of terms has been used to indicate positive changes occurring after a traumatic experience (Linley and Joseph 2004). In the present work, we choose to use the term post-traumatic growth for its strong theoretical and empirical basis, and its clear correlation to events which are *sensu stricto* traumatic, and not simply distressing.

Tedeschi and collegues (1998) defined post-traumatic growth as the tendency, after a trauma, to show positive changes in three principal areas, including perception of self, interpersonal relationships and philosophy of life. As a result of a highly challenging experience, thus, some report more meaningful relationships, a higher appreciation for life, and an increased sense of connectedness with existential and spiritual sources of meaning.

Posttraumatic growth has been showed in association with several variables, among which: time past the event (Cordova et al. 2001; Manne et al. 2004), age (Davis et al. 1998; Evers et al. 2001; Manne et al., 2004; Widows et al. 2005), gender (Park et al. 1996; Tedeschi e Calhoun 1996), social support (O'Leary et al. 1998), positive emotions (Fredrickson et al. 2003; Evers et al. 2001) and coping strategies (Armeli et al. 2001; Cordova et al., 2001; Frazier et al. 2004; Park et al. 1996).

Initially, the experience of posttraumatic growth was studied in survivors of war or natural disasters; more recently, a review by Linley and Joseph (2004) has documented the possibility of positive changes as a result of a wide range of negative events, such as grief, life-threatening diseases (cancer, HIV, heart attack), and sexual abuse.

Cancer is then rightly considered a traumatic event, and in many cancer patients, the symptoms of post-traumatic stress disorder are clear (Moye and Rouse 2014): intrusive thoughts, the sense of reliving the traumatic event, avoidance of memories, and a state of hyper-arousal and hyper-activity (American Psychiatric Association 1994).

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However, data supporting the presence and the importance of a posttraumatic growth in cancer are controversial: while a recent prospective study on 60 head and neck cancer patients indicated that baseline levels of PTG decreased significantly within a year, and no correlation was shown between PTG and depression and anxiety (Leong Abdullah 2015); a systematic review (Kolokotroni et al. 2014) appeared to confirm the validity of the conceptual bases of PTG as formulated by Tedeschi and Calhoun (1998) for cancer patients.

Considerations

In this chapter the different declinations of existential distress in patients with advanced illness have been focused and the substantial lack of a generally accepted definition of this term and construct has been accounted for as well as the absence of a universal, clear-cut, comprehensive system of categorization of existential suffering (Kleinman 1988; Kissane 2012). Furthermore, it has been highlighted how although the frequently employed categorization in physical, psychological, social and existential suffering (Kissane 2012; Wilson et al. 2007a; Boston et al. 2011; Block et al. 2001; Strang et al. 2004) might suggest that existential suffering is a separate entity, however physical, psychological and social suffering may result in existential distress, and existential distress may be part of various categories of suffering (Morita et al. 2004).

For this reason the different clinical manifestation typically occurring in advanced stages of cancer, overlapping or contributing to existential uffering should be always taken into consideration, assessed and treated in the care of these patients.

Over the years, a number of psychological interventions have been developed with the aim to address such dimensions.

The following chapter will illustrate interventions specifically directed at alleviating existential distress in patients with an advanced disease, with a particular focus on the ones rooted in existentialism and in existential psychotherapy, whose deepest common feature is the consideration of individual as a self-determining agent with personal responsibility for authenticity and meaning in life (Craig 2005).

Chapter II

END OF LIFE PSYCHOTHERAPIES: FROM THE HUMAN IMPOSSIBILITY TO CONCEIVE DEATH TO THE MAN'S SEARCH FOR MEANING

As soon as an individual wakes he does not merely want to live out the day, but wants to live for something in his life (Karl Jaspers 1963)

In the last decades, a number of manualized interventions aimed at treating existential distress in patients with advanced disease have thriven. These include Supportive-Expressive Group Therapy (SEGT) (Spiegel and Spira 1991), the Healing Journey (Cunningham 2002), the Life Threatening Illness Supportive-Affective Group Experience (LTI-SAGE) (Miller et al. 2005), Family Focused Grief Therapy (Kissane et al. 2003) Cognitive Existential Group Therapy (CEGT) (Kissane et al. 2003; 2004).

In the present work, we will focus on the family of interventions referred to as "Meaning-centered psychotherapies", which draw upon shared philosophic bases inquiring the issue of meaning in individuals' life and that will be the object of an in-depth analysis in the next sections.

These interventions include: Meaning Centered Group Psychotherapy (Breitbart 2002), Meaning Making Intervention (MMI) (Lee et al. 2006), Dignity Therapy (Chochinov et al. 2005), and CaLM therapy (Nissim et al. 2012). Table 2.1 shows the constitutive aspects common to all meaning-centered interventions.

Meaning approaches appear particularly interesting for the multifaceted features of existential distress they take into account in the treatment of advanced cancer patients, and for the inspiring principle that all stages of life can be creative source of meaning for the person, even in the face of death. A recent meta-analysis (Vos et al. 2015) on a total of 1,792 patients, comparing different types of existential therapy, showed that, in the studies examined, meaning centered approaches

resulted more effective than supportive-expressive, cognitive existential and experiential-existential psychotherapies in almost all the outcomes explored. In particular, they evidenced large effects on positive meaning in life, while had moderate effects on depression, anxiety and self-efficacy; instead they did not have significant effects on self-reported physical well-being.

Mortality in the history of psychotherapy: an unconceivable threat or a source of meaning?

The shared philosophy constituting the foundation of these meaning approaches lays in the observation that the dramatic alteration in the life course of individuals who are facing a serious existential threat may also inspire a search for meaning, resulting in unique opportunities for emotional growth. In this light, the condition of suffering and disability and the shadow of mortality may exalt the meaning and the poignancy of the present experience and promote a profound positive change even at the end of life.

This process may be seen as mirroring Stern's (2004) observation that change in the psychoanalytic setting tends to occur when the intersubjective field is challenged and a renegotiation of the preexisting relationship becomes possible. Similarly, serious illness or a terminal condition, with the potentiality of stimulating major existential issues in the individual, can offer a unique opportunity for a meaningful engagement and a constructive transformation (Rodin and Zimmerman 2008).

Despite the opportunity of emotional growth offered to receptive individuals by the condition of reflecting about death, this area has been often overlooked in psychotherapy, to the point that even the otherwise prolific psychoanalytic thinking has had a minimal influence on this ambit. Yalom (1980) and Rodin and Zimmerman (2008) identified the reason for this phenomenon in the fact that – historically - psychoanalytic approaches have sustained the universal human need to deny death. According to these authors this view has derived to a large extent from a conflict–based metapsychology and from the analysis of physically healthy patients who suffered from death anxiety. Thus psychoanalytic position was for some time oriented toward the idea described by Freud in his paper *Thoughts for the Times on War and Death*, that it is "impossible to imagine our own death" and that

the unconscious senses itself as immortal because it "knows nothing that is negative... For that reason it does not know its own death, for to that we can only give negative content" (Freud 1957).

Currently, however, this concept sustaining the intolerability of death awareness is being challenged by a growing evidence that nowadays the seriously ill and their families tend to prefer honest and open communication of diagnosis and prognosis and frank preparation for the end of life (Kirk et al. 2004). This social and cultural milieu, which incentivized in the last three decades a profound transformation in the doctor-patient relationship, has lead to the development of a different psychotherapeutic approach to the dying, whose theoretical bases are to be found in existential philosophy and existential psychotherapies.

Existentialism: the core concepts inspiring the search for meaning in psychotherapy

To fully understand the meaning-centered approaches, an examination of the philosophic humus in which they are rooted is essential.

Existentialism is a philosophical current developed by nineteenth and twentieth century European philosophers, especially Friedrich Nietzsche, Martin Heidegger, Karl Jaspers and Jean-Paul Sartre, who sustained the conception of the individual as a self-determining agent with personal responsibility for authenticity and meaning in life.

Friedrich Nietzsche introduced for the first time the important existential themes of freedom, choice, responsibility and courage. He also stressed the importance of personal meaning to guide life, enclosed in his famous statement "he who has a 'why' to live can bear almost any how" (1888).

Later on, in 1927, Martin Heidegger formulated in his work Being and Time the important theory that the awareness of our personal death acts as a stimulus to adopt a higher mode of existence. Heidegger believed that there are two possible ways of existing in the world: a state of forgetfulness of being and a state of mindfulness of being. Living in a state of forgetfulness of being means being immersed in everyday world; while in the state of mindfulness of being, the individual is continually aware of being and mindful of his/her own responsibility for being. Since only in this

ontological mode the person is conscious of one's self agency, only here he/she can comprehend the power to change him/herself.

From the start of the 20th century some psychotherapists got inspired by phenomenology and existentialism and its possibilities for working with patients. Otto Rank, an Austrian psychoanalyst who distanced himself from Freud in the mid-1920s, is considered the first existential therapist. Ludwig Binswanger, in Switzerland, also brought existential insights to his work with patients, in the Kreuzlingen sanatorium where he worked as a psychiatrist. Rollo May's writings (1983) kept the existential influence alive in America, contributing to a specific conceptualization of therapy (Yalom 1980). Moreover these concepts ended up with influencing humanistic psychology to a large extent.

In Europe, after Otto Rank, Medard Boss developed a method of existential analysis in close co-operation with Heidegger. In France the ideas of Sartre, Merleau-Ponty and Minkowski, were of great significance.

In Austria, Viktor Frankl developed an existential therapy called logotherapy, which focused particularly on finding meaning. According to Frankl (1963), the leading principle guiding individual's existence was no more the pleasure principle, as Freud had maintained, but the meaning principle. Frankl's approach is considered the method of the Third School of Wien (after Freud's and Adler's).

Viktor Frankl: the precursor of Meaning Centered Psychotherapies

As mentioned above, Viktor Frankl believed that it is meaning that most drives man and differentiate human beings from other forms of life. Meditating on what he defined as an "existential vacuum" he came to the conclusion that "life holds a meaning for each and every individual, and even more, it retains this meaning literally to his last breath." In his view, pain and suffering can be changed into a personal achievement, as – in his words - "Whenever one is confronted with an inescapable, unavoidable situation... e.g., an incurable disease... just then is one given a last chance to actualize the highest value, to fulfill the deepest meaning" (Frankl 2000).

Frankl survived the holocaust and the reclusion in four concentration camps, including Auschwitz. In this tragic event of his life, during which he lost all his

family, he noted that he was "witness to the unexpected extent to which" one "remains capable of resisting and braving even the worst conditions" (Frankl 1988). This capacity to find meaning for himself and for others made him draw the conviction that even in extreme physical and mental suffering there is a possibility to resist and to find inspiration and accomplishment in life.

In Frankl's view the individual who does not feel "meaningful", searches a compensation in artificial sources of gratification (such as drugs or other forms of addiction) or in destroying or self-destroying attitudes which give him an illusion of being in power. This is why the contemporary man – already sexually liberated – feels profoundly frustrated in his system of values: this position differentiates the focus of logotherapy, which lays in meaning, from the original focus of psychoanalytic metapsychology, based on the theory of impulses.

Frankl firmly believed that as a psychotherapist he had the task to show patients that life never ceases to have a meaning, under any conditions. He also postulated that nobody can tell another what the meaning is, as it is subjectively defined and can only be found through a personal process. He had in mind that even the tragic aspects of existence, such as unavoidable suffering, can be turned into a fulfillment by the attitude which a man adopts toward life and himself.

In *Man's Search for Meaning* (1984), Frankl offers an important perspective with which to approach the terminally ill. He wrote: "In spite of all the enforced physical and mental primitiveness of the life in the concentration camp, it was possible for spiritual life to deepen. Sensitive people who were used to a rich intellectual life may have suffered much pain... but the damage done to their inner selves was less".

Frankl refers to a spiritual freedom -which cannot be expropriated- that can preserve dignity and vitality even in the hardest circumstances.

As mentioned before, Frankl can be rightly considered the precursor of all therapies whose aim is to help the patients in an advanced state of illness find meaning and purpose in the face of their dramatic condition, through the promotion of a sense of responsibility and engagement with life.

In the next sections an overview of the three main meaning centered approaches will be given, namely Meaning-Centered Group Psychotherapy, Dignity Therapy and Managing Cancer and Living Meaningfully (CaLM) therapy, with particular attention to the last one, which is the object of the present research.

Shared core concepts	Common features
Attribution of meaning to the terminal phase of life	Brevity
Promotion of self-agency and engagement in life	Flexibility
Legacy (how to leave a trace of oneself)	Modularity

Table 2.1 - Constitutive aspects of meaning-centered interventions

Meaning-Centered Group Psychotherapy

Meaning Centered Psychotherapy (MCGP) has been developed by William Breitbart (2002) and is aimed at providing spiritual support tool to patients who face a terminal disease.

In the course of this group therapy the therapist is called to have in mind and make constant references to the key concepts of the existentialist thought. The concept of spirituality is, in line with the existentialist postulates, different from the one of "religiosity" and is conceived in its broader significance, connected to the need of sources of meaning and purpose present in every human being. Breitbart relates patients' existential distress and the possible desire for a hastened death to profound feelings of demoralization, anxiety, fear and hopelessness that arise when life is no longer given meaning and value. Through the reading of Frankl's writings, MCGT incentivizes and guides the experiential work with patients. The concept of life finiteness, linked to the disease, is used in this perspective to promote the work of identifying the existential values that allow the patient to grasp a personal sense of wholeness, meaning, coherence and legacy. The concept of legacy plays a particularly important role and is seen as building a sense of continuity between the life lived, the life that is being lived and the messages and traces the patient hopes to leave. The aim is to create a bridge connecting past, present and future. The format of sessions is closed and consists of 8 meetings of 90 minutes which take place on a weekly basis. The therapist makes every attempt to find out the sources of meaning through which the patient's history can be explored, by focusing on the use of empathy to create a co-construction of meaning (Breitbart 2002). Participants are

encouraged to compare their experiences. Between sessions, exercises and homework are offered in order to stimulate creativity and the construction of a legacy project that represents the culmination of the therapeutic process. The focus of therapeutic work is aimed to emphasize that, when facing events that transcend the person's choice, the remaining freedom is how one chooses to live these events and this is the only possibility to transcend the limits of life. Exercises are offered that lead the way in which participants would like to be remembered.

The meaning-centered psychotherapy has revealed effective in improving quality of life, spiritual well-being, feelings of hopelessness and generally the coping style of patients with advanced and terminal cancer (Breitbart et al. 2010). The therapeutic strategy is identified with the expansion of the range of possible sources of meaning through the combination of theoretical elements on the philosophy of meaning on which this intervention is based, and group exercises and homework that each participant can do and freely discuss, with possible interpretative comments by the therapist. The limited time structure makes this method particularly suitable for use in hospitals. In 2012 Breitbart and Collegues developed an individual meaning centered psychotherapy, by adapting the group therapy frame to an individual intervention, while maintaining the crucial aspects of structure and themes addressed.

Dignity Therapy

The Dignity Therapy has been developed by Harvey Chochinov (2005) to meet the existential needs of terminal patients in palliative care. It's focus relies on a theme of great importance in the process of medicine humanization, that in fact is dignity. In recent years as a results of the hyper-specialization and technologic transformation of medicine, the theme of dignity has had the purpose of defining the ethical limits of many medical practices, and the need not to lose sight of the person as an entirety. Understandably the issue of dignity is a particularly complex one in the context of end of life care. One controversial theme linked to this issues is the desire for a hastened death, that dying patients can express when they experience the latter part of their life as meaningless, unbearable and no more worth living. Hack and colleagues approach this issue by analyzing the concept of dignity from

the patients' point of view, and coming to the conclusion that the deepest reason for the loss of dignity experienced by patients in a state of terminal illness, is linked to feelings of dependency and demoralization. These results outline that palliative care professional are not only called to provide management of physical symptoms and pain but that addressing existential distress and supporting hope should be as well taken into consideration (Chochinov 2006). In this perspective Chochinov elaborated a method of therapeutic support centered on the issues of dignity (Chochinov et al. 2005). In Chochinov's conception, dignity is profoundly relates to the theme of *generativity*, i.e. the awareness of how some patients' dignity is linked to the feeling that their life has had a reason.

A further aim of this intervention is the maintenance of sense of self and identity in the face of the disease progression; the therapist works on this issue by encouraging the person to disclose and describe the central aspects of his/her personality. Maintenance of roles is another crucial theme, often concerning the possibility to still feel like a mother or a father. During the meetings, the therapist uses questions to help the patients recognize and maintain a sense of identification with the role played in their lives. Pride is protected and encouraged by giving the patient the opportunity to talk about achievements he/she considers important. Hope is supported by the encouragement to maintain a sense of purpose of life and by attributing meaning to life that has been lived and life that is being lived. Finally, the standards of care and the communication with healthcare providers are discussed to identify any issues that can interfere with the maintenance of dignity.

Dignity Therapy has a narrative structure. During the encounters the therapist addresses the themes of dignity also by asking a series of coded questions, such as: "tell me a little of your personal history, the things you remember best, which do you think are most important?". Or "what would you like your family to know about you, are there things that you would like to be remembered for?" (Chochinov 2006). The intervention is composed by four individual sessions which take place at the bedside of patients, either in hospital or at home. Sessions are recorded and then transcribed. In the last encounter the therapist reads the manuscript of the sessions to the patient; this is an emotionally involving moment and gives the therapist the possibility to make corrections before the final document is completed and

delivered to the patient or to whom the patient has identified for this purpose. The aim is to draw up a document which represents the "legacy" of the person, something meaningful that will survive, thus helping to restore a sense of meaning, value and dignity.

Managing Cancer and Living Meaningfully (CaLM) Therapy

Gary Rodin and Collegues (Nissim 2012), in reflecting upon the unique condition faced by patients with a life-threatening illness, described it as one of "double awareness" of engaging with life while facing one's imminent death.

From this point of view, in designing CaLM therapy they considered the specific factors facilitating the psychotherapeutic process in the seriously ill as intimately linked to:

- increased help-seeking and reflective functioning;
- heightened need for authenticity; and
- increased motivation and sense of urgency to address interpersonal and existential issues.

However, they also observed that themes emerging in delivering psychotherapy to patients suffering from advanced and life-threatening disease can be multiple and may contemporarily include practical issues of disease and symptom management, the confrontation with social and relational changes, along with spiritual and existential and mortality-related preoccupations.

Keeping these issues in mind the authors' commitment was to manualize a brief individual psychotherapy specifically developed to address these concerns, which had the potential to mitigate depressive symptoms and other aspects of distress while fostering a psychological growth in this population.

The intervention that resulted from this effort -CaLM therapy- has its foundations in several theoretical traditions, including relational theory, attachment theory, and existential psychotherapy.

Relational theory, informed by interpersonal psychoanalysis, the British school of object-relations theories, and self psychology, focuses on the dialectical nature of the therapeutic situation wherein patient and therapist co-create meaning and understanding of the patient's experience (Mitchell 1988).

Attachment theory (Bowlby 1982), outlines that early relationships with primary caregivers form enduring internal working models that remain stable and persistent patterns of cognition, emotion and behavior in important relationships throughout life. Attachment security, though, along with the inclination of individuals to believe they are worthy of care and that others are trustworthy to provide it, may be threatened by the experience of being seriously ill and psychotherapy may be able to enhance positive attachment and facilitate adjustment to the radical alterations in attachment needs.

Existential psychotherapy (Yalom 1980), rooted in the analytic tradition and humanist psychology - as fully described above – focuses on the conflict arising when individuals confront the givens of existence: death, freedom, isolation, and meaninglessness.

Struggling with mortality takes these conflicts to the extreme and psychotherapy should be directed at helping the person manage and tolerate the existential suffering brought about by this confrontation and encourage the potential psychological growth which can originate from this experience.

In addition to these theoretical bases, CaLM draws upon several manualized psychotherapeutic interventions recently developed to address distress in patients with advanced illness. These include Supportive-expressive group therapy (Spiegel et al. 1981; Spiegel et al. 1999; Classen et al. 2001; Goodwin et al. 2001; Giese-Davis et al. 2002; Bordeleau et al. 2003; Weiss et al. 2003), Cognitive-Existential Group Therapy (Kissane et al. 2003; Kissane et al. 2004), and especially Meaning Centred Group Psychotherapy (Breitbart et al. 2004) and Dignity Therapy (Chochinov et al. 2005).

The CaLM intervention is intended to complement rather than reproduce these approaches. It is in fact designed as an individual therapy aimed at addressing the practical, relational and existential domains of experience, regardless of their level of death acceptance or readiness for death preparation.

The primary goals of this intervention are therefore the reduction of psychological/existential suffering and the prevention of future distress.

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However, although the symptomatic alleviation of distress is an important goal of psychotherapeutic treatment, it seem too limited a purpose when considering the potential effects psychotherapy may produce.

Indeed, in spite of the fact that the potential for continued psychological growth and development at the end of life was not took in consideration by the early psychiatric and psychoanalytic literature, recent research suggested that the final life stage brings with it unique possibilities for individual development, and documented the potential for psychological growth following trauma, including that associated with cancer and other life-threatening illnesses (Sumalla et al. 2009).

In this perspective, CaLM therapists are required to feel comfortable with the existential issues confronted by their patients. The authors believe that awareness of their own sense of meaning and purpose, and challenges in the face of mortality will help therapists to "bracket out" their feelings and beliefs and keep focus on the patient's experience.

The treatment and engagement with patients, however may also elicit distressing reactions in the therapist which need to be understood and managed. Supervision and peer-support, is therefore recommended in CaLM therapy.

In its original format, CaLM therapy consists of 6 individual psychotherapy sessions of 45 minutes delivered on a monthly basis. Session are generally frontal, but, if required for reason concerning the patient's health conditions, it is possible to have telephonic sessions.

The general themes that should be addressed with

all patients at some point during the intervention have been conceptualized in four modules:

- 1) Symptom Management and Communication with Health Care Providers
- 2) Changes in Self and Relations with Close Others
- 3) Spirituality or Sense of Meaning and Purpose
- 4) Thinking of the Future, Hope and Mortality

These modules are not meant necessarily to receive equal time and attention, instead, they are designed as a "framework" for the therapists to keep in mind, although the ultimate goal is to "stay with the patient" in terms of the issues and concerns that they generate as most important. The module themes – in fact - are

profoundly intertwined, and therapists should feel free to move between them as the patient see fit.

An initial patient interview is directed at exploring each of these areas with the aim of delivering an individualized approach, with focus on the most problematic areas.

The intervention is best delivered in the context of a multimodal approach to patient care, where adequate attention is also given to pain and symptom relief, family distress, planning for end of life care, and psychopharmacological treatment when required.

The therapeutic elements can be summarized as follows:

- Supportive Relationship
- Authenticity
- Modulating affect
- Encouraging Reflective Functioning
- Renegotiation of attachment Security
- The Joint Creation of Meaning
- Shifting Frame and Flexibility
- Facing the Limits and Boundaries
- Interpretation
- Termination

By examining these elements, it is possible to conclude that the CaLM process lays in the attitudes and principles of a profoundly collaborative, respectful and authentic therapeutic position which, in combination with the content themes of its four modules constitute the "philosophy" of CaLM.

Chapter III THE RESEARCH

The aims of the study

The experimental part of the present work was aimed to perform, in an Italian context, a randomized controlled trial on a psychological intervention designed for patients with advanced cancer, referred to as Managing Cancer and living meaningfully (CaLM) which has been found in preliminarily research to have substantial benefits for patients with advanced cancer (Nissim et al. 2012; Lo et al. 2014).

As fully illustrated in the previous chapter, this approach is meant to address the practical, relational and existential dimensions of the illness experience, through providing support and offering the opportunity to reflect and process thoughts and emotions evoked by the disease and its consequences. Although CaLM is an individual therapy, participation of the designated primary caregiver in at least one session is encouraged, with the purpose of allowing for more effective assessment and enhancement of family adjustment.

The research specific objectives were:

- assessing the feasibility and acceptability of the proposed approach in an Italian context where concepts including sense of meaning, spirituality, existential growth and attachment might entail connotations different from the original culture where it has been developed;
- exploring CaLM efficacy in alleviating depression and demoralization as compared to non psychological treatment (usual care);
- testing CaLM efficacy in improving other aspects of existential distress, including generalized anxiety and death anxiety;
- measuring psychological growth, satisfaction with care, spiritual well-being and quality of life as a result of this psychotherapeutic intervention;
- evaluating the existence of an influence of post-traumatic growth promoted by psychotherapy on patients' symptoms and on spiritual wellbeing;

• examining the subjective experience of receiving this specific individual psychological intervention.

By carrying out the present study, therefore, the expected primary outcomes were that this tailored individual psychological intervention would result feasible and acceptable for Italian patients and would produce a greater reduction in depression and demoralization symptoms than usual care. Secondarily we hypothesized that this intervention would ameliorate other symptoms of distress, while generating a better spiritual well-being and quality of life, more personal growth and greater satisfaction with care than the untreated population. Furthermore we expected that – given the angle of this approach, specifically aimed at promoting the sense of meaning, awareness and emotional growth of the individual – improvements would result to a large extent from an experience of post-traumatic growth.

Materials and methods

The study has been carried out in the Department of Biomedical and Specialty Surgical Sciences of the University of Ferrara. The psychotherapeutic interventions were performed and supervised respectively by the Researcher (R.C.) and Supervisor (L.G.) directly trained in CaLM by the Authors who developed it at the Princess Margareth Cancer Center in Toronto. Furthermore, peer supervisions with other professionals who were receiving a training in CaLM assured a shared experience.

Experimental group participants received CaLM intervention designed for advanced cancer patients. Control participants received usual care.

CaLM: Participants in the experimental group received a semi-structured psychological intervention embedded within a collaborative care system of case identification, treatment and follow-up. In this Italian adaptation, CaLM was composed by 12 individual sessions (45-60 minutes each), rather than 6 sessions, delivered over 6 months on a 15 day basis and no possibility of telephonic session was considered. Sessions were audio-recorded to ensure treatment fidelity. The encounters covered the four CALM domains: 1) symptom management and communication with health care providers; 2) changes in self and relations with close others; 3) spiritual well-being, sense of meaning and purpose; and 4)

preparing for the future, sustaining hope and facing mortality. All domains were addressed with each patient, but the time devoted to each module varied, based on the concerns most relevant to that particular patient. The participant's caregiver was offered to participate in one or more of the sessions, as deemed appropriate by the therapist.

At any time during the intervention, patients deemed at acute risk for suicide, who would demonstrate significant worsening of depression, or would require treatment for other psychiatric co-morbidities, based on the clinical judgment of the therapists, would have been referred for psychiatric assessment and treatment, including possible pharmacotherapy.

USUAL CARE. Usual care (UC) includes oncology clinic visits, and a psychiatric and psychopharmacologic management.

Inclusion and exclusion criteria

Patients referred to Psycho-oncology service who met the inclusion criteria were offered to take part in the study on a voluntary basis.

Inclusion criteria were: 1) >=18 years of age; 2) fluency in Italian language; 3) no cognitive impairment; 4) confirmed or working diagnosis of "wet" stage IIIB (those not treated with curative intent) or IV lung cancer, any stage of pancreatic or other stage IV GI cancer, stage III or IV ovarian and fallopian tube cancers, or other stage IV gynecological cancer; and stage IV breast, genitourinary, sarcoma, melanoma or endocrine cancers (expected survival of 12-18 months); a score \geq 10 at PHQ9 or \geq 20 at DADDS.

Exclusion criteria were: 1) communication difficulties; 2) inability to commit to the required 3-6 sessions (i.e., too ill to participate, lack of transportation, etc.); 3) a score <20 on the Short Orientation-Memory-Concentration (SOMC) (Katzman R et al. 1983) test, indicating cognitive impairment unless deemed suitable at recruiter's discretion; 4) actively seeing a psychotherapist, and 5) lack of reported distress.

Outcome Measures

All measures (with the exception of the CEQ-UC and CEQ-CaLM, which were not administered at baseline) were completed by participants at baseline, at 3 (T1) and 6 (T2) months of treatment.

The primary outcome measures of the study were the Patient Health Questionnaire-9 (PHQ-9) (Kroenke et al. 2001) and the Demoralization Scale (DS) (Kissane et al. 2004). PHQ-9 is a 9-item measure of depression. Two additional items assessing intent to cause self-harm and rating how difficult these symptoms have made it to do work, take care of things at home, or get along with other people, have been included.

The Demoralization scale is a 24-item self-report measure assessing existential distress in terms of loss of meaning and purpose, disheartenment and helplessness.

By using secondary outcome measures, domains likely to respond directly to the intervention or indirectly were assessed, through CaLM potential impact on communication with health care providers. A portion of the Mood Disorders and Optional Disorders Module of the Structured Clinical Interview for DSM Disorders (SCID) (First et al. 2010) was administered at all data collection points. The SCID complemented the PHQ-9, and allowed us to make the diagnosis of Major Depressive Episode and Minor Depressive Disorder. The Generalized Anxiety Disorders-7 (GAD-7) (Spitzer et al. 2006) is a 7-item self-report measure designed to screen the severity of GAD symptoms. An eighth item rating how difficult these symptoms have made it to do work, take care of things at home, or get along with other people, has been included. The Functional Assessment of Chronic Illness Therapy-Spiritual Well-Being Scale (FACIT-Sp) (Peterman et al. 2002) is a 12-item self-report measure of spiritual well-being, was administered, in order to assess patients' sense of meaning, peace and faith. The Posttraumatic Growth Inventory (PTGI) (Tedeschi and Calhoun 1996) is a 21-item self-report scale that measures positive psychological changes after trauma. The Quality of Life at the End of Life-Cancer Scale (QUAL-EC) (Lo et al. 2010) is a measure of quality of life in patients near the end of life. We did not included the symptom control subscale.

Furthermore we assessed death anxiety using the 15-item Death and Dying Distress Scale (DADDS), recently developed for use in advanced cancer (Lo et al. 2011). We

also assessed attachment security using The Experiences in Close Relationships Inventory Modified Short Form Version (ECR-M-16), a 16-item self-report measure of the attachment style (i.e. style in relationships perceived to be important for felt security), yielding scores on two dimensions: avoidance and anxiety (Lo et al. 2009).

Disease symptom severity was collected using a shortened version of the Memorial Symptom Assessment Scale (MSAS) (Portenoy et al. 1994). It measured the presence and severity of 28 common physical symptoms of cancer. Participants who are married, common-law, or in a long-term relationship were asked to complete the Couple Communication Scale (CCS) (Olson and Larson 2008) taken from the PREPARE/ENRICH Inventory. Intervention and control participants completed respectively CEQ-CaLM and CEQ-UC Questionnaire at 3- and 6-months; it assessed the level of mastery and insight patients have gained in time.

Demographics, medical and psychiatric history, and performance status data (Karnofsky Performance Status Scale) (Karnofsky and Burchenal 1949), were also collected.

Results

Statistical analysis has been carried out by using

Sociodemographics

A total of 50 patients addressed to the Psycho-Oncology Service and meeting the inclusion criteria initially volunteered to participate in the study. The total sample were composed by 38 (76%) women and 12 (24%) men. The mean age was 60 years (SD±11.8). Cancer sites were represented as follows: breast = 40%; colorectal = 16%; prostate = 12%; lung = 10%; gastric = 4%; brain = 4%; ovary = 6%; pancreas = 2%; kidney = 4%; other = 2%. The mean years of education were 13.2 (SD±2.8). Of these patients, 27 were randomized to be allocated in the CaLM group and 23 in the UC.

The number of subjects who completed at least phase T1 was respectively 18 in CaLM group and 19 in UC. Table 3.1 illustrates the drop-out frequencies and motivations.

Marital status, working conditions and possible psychopharmacologic therapies of subjects who completed at least T1 assessment are illustrated in tables 3.2-3.4.

Data Analysis

Analysis of data obtained from patients who completed at least 3 month (T1) intervention are now presented. Statistical analyses have been performed by using SPSS Statistics program.

Primary outcomes - Depression and Demoralization

A significant improvement of PHQ9 was observed in the experimental group, between phases T0 (mean 13.33; SD \pm 5.34) and T1 (mean 8.38; SD \pm 4.38) (p 0.00) and T0 and T2 (mean 7.56; SD \pm 4.50) (p 0.01); while in the UC group, even if a trend of PHQ9 worsening was observed, no statistically significant change occurred.

As far as Demoralization Scale is concerned, a statistically significant decreasing was produced in Loss of Meaning between T0 (mean 4.50; SD \pm 3.62) and T1 (mean 2.30 SD \pm 2.89) (p 0.01); Disheartenment between T0 (mean 2.0; SD \pm 1.32) and T2 (mean 1.1; SD \pm 1.16) (p 0.05), Helplessness between T0 (mean 6.80 SD \pm 2.93) and T1 (mean 3.80 SD \pm 3.93) (p 0.03) and Sense of Failure between T1 (mean 3; SD \pm 1,87) and T2 (mean 1.67; SD \pm 1.73) (p 0.02) subscales. No significant changes were noticed in the UC group, although, again, a trend of general worsening was observable.

Secondary outcomes

Post-traumatic Growth: The CaLM Group showed a significant improvement in the following PTGI subscales: PTGI Compassion, between T0 (mean 5.38; SD ± 2.98) and T1 (mean 7.00; SD ± 1.82) (p 0.06); PTGI New Possibilities, between T0 (mean 10.81 SD ± 2.22) and T1 (mean 15.00 SD ± 3.84) (p 0.02); PTGI Spiritual Change, between T0 (mean 7.54 SD ± 2.69) and T2 (mean 9.54 SD ± 3.07) (p 0.01). No significant changes were detected in UC group.

Spirituality: A better spiritual well-being was documented in the experimental group, in the subscales Inner Peace, between T1 (mean 10.30; SD±3.42) and T2

(mean 12.63; SD \pm 4.10) (p 0.03); Faith and Spirituality between T0 (mean 5.00; SD \pm 3.83) and T1 (mean 7.00; SD \pm 4.87) (p 0.01) and Meaning and Purpose between T0 (mean 10.36; SD \pm 4.56) and T1 (mean 12.00; SD \pm 3.46) (p 0.02), and between T0 (mean 11.22; SD \pm 4.63) and T2 (mean 13.33; SD \pm 3.31) (p 0.02).

UC group reported no statistically significant change.

Anxiety: No statistically significant change have been noticed in patients' death anxiety, as measured by DADDS. However a trend of, respectively, reduction and worsening, has been observed in CaLM and control group.

A significant reduction of general anxiety as measured by the GAD-7 scale, was instead evidenced between T0 (mean 8.83 SD \pm 5.68) and T1 (mean 6.00; SD \pm 4.91) (p 0.03) only in the experimental group.

Quality of life: no statistically significant result has been obtained using QUAL.EC scale.

Satisfaction with care: CaLM patients showed a greater satisfaction with care than UC ones. Average scores at CEQ questionnaire were 19.33 ± 8.22 (T1) and 26.43 ± 1.71 (T2) for CaLM patients and 14.36 ± 9.90 (T1) and 15.75 ± 7.90 (T2) for UC group.

Experimental group patients' satisfaction, moreover, have been further confirmed by the tenor of comments patients have been invited to share in a written form after completing CEQ questionnaire.

Some of these comments are reported below:

- "Coming here helped me think of what is important to me in this very moment: people with cancer can have things out of hospital that are important too"
- "My wife convinced me to ask for help. Before cancer I used to think that men never do, but now here I am. I don't know whether I'm going to get better or not, but coming sometimes is good for my mind and soul"
- "When you are suffering you feel alone with your pain. Then you see how to share it with others..."
- "It has been a difficult, interesting, intense and surprising journey into myself".

Relationship between PTGI and Depression and Demoralization

In order to verify the initial hypothesis that a post-traumatic growth derived from this psychotherapeutic approach would influence patients' symptoms and spiritual wellbeing, correlation analyses first and then linear regression analyses have been performed.

The analyses indicated a strong effect of PTGI (Spiritual Change and Relating to the Others) on the Dysphoria dimension of Demoralization Scale (Adjusted R square 0.73; p 0.03); and an effect of PTGI (Personal Strength and Relating to Others) on PHQ9 (Adjusted R square 0.42; p 0.03).

Furthermore, PTGI (Appreciation of Life) showed to influence FACIT (Faith and Spirituality) (Adjusted R square 0.43; p 0.03). No relationship have been demonstrated in patients who did not receive CaLM therapy (UC group).

Tables 3.5 - 3.7 illustrates more in detail the results of linear regression tests.

	Frequency	Percent
Death of patient	3	23.07%
Voluntary drop-out	2	15.38%
Worsening of clinical conditions	8	53.84%
Total	13	100%

Table 3.1 Motivations of drop out at any time before phase T1

Table 3.2

	Frequency	Percent
Single	1	2.7
Married/Domestic Partnership	26	70.27
Divorced	5	13.51
Widowed	5	13.51
Total	37	100

	Frequency	Percent
Employee	10	27.0
Self-employed	5	13.5
Student	1	2.7
Housewife	5	13.5
Retired	15	40.5
Unemployed	1	2.7
Total	37	100

Table 3.3 Working conditions of patients completing at least T1 phase

Table 3.4 Types and frequencies of prescribed therapies

	Frequency	Percent
No therapy	15	40.54
AD	9	24.32
BDZ	2	5.40
AD + BDZ	11	29.79
Total	37	100%

AD = Antidepressant therapy; BDZ= Benzodiazepine therapy

Table 3.5 - Effect of PTGI (Personal Strenght and Relating to Others) on PHQ9

CaLM_CONTROL Model	Adjusted R Square	Standard Error of the Estimate	Sig.
CaLM 1	0.42	3.22	0.03
Control 1	0.16	6.11	0.19

CaLM_CONTROL Model	Adjusted R Square	Standard Error of the Estimate	Sig.
CaLM 1	0.73	1.14	0.03
Control 1	27	2.82	0.79

Table $3.7 - \text{Effect of PTOT}(A)$	Appreciation of Life) on F	acit (Faith and Spirituality)	
CaLM_CONTROL Model	Adjusted R Square	Standard	S

Table 3.7 – Effect of PTGI (Appreciation of Life) on Facit (Faith and Spirituality)

CaLM_CONTROL Model	Adjusted R Square	Standard	Sig.
		Error of the Estimate	
CaLM 1	0.43	3.85	0.03
Control 1	0.68	4.09	0.28

Chapter IV DISCUSSION

Failure to sustain the "double awareness" of engaging with life while facing one's imminent death has been demonstrated to increase the risk for existential distress. This may complicate the end of life process, potentially anticipating a "psychological death" in patients with an advanced disease (Rodin et al. 2007).

Recent researches highlighted that palliative care intention predicts higher depression and higher demoralization in cancer patients (Vehling et al. 2012; Mitchell AJ et al. 2011).

Depression, in particular, represents an important and debilitating facet of existential distress and one of the most studied areas in advanced cancer care, since it shows prevalence rates of 16% to 25% in this population, compared to an approximate rate of 5% in the general population and is related with severe individual and interpersonal negative consequences (Mitchell AJ et al. 2011).

On the other hand, numerous studies outlined that another possible component of existential distress, namely demoralization, while presenting some similar features to depression, is phenomenologically independent and characterized by hopelessness and helplessness feelings, loss of meaning and purpose, feeling of being trapped and having failed in facing a stressed situation. Differently from depression, demoralization does not present anhedonia, loss of pleasure and interest in life activities.

Demoralization has been found in association with reduction of life quality, higher demand of hastened death, and worsening of the prognosis, independently from the biological variables (Bordeleau et al. 2003).

This evidence constitutes the basis for the development of innovative and specific interventions aimed at reducing depression and demoralization in advanced cancer patients, while promoting meaning making processes and personal growth (Rodin and Zimmermann 2008). Although group psychotherapies in this area have been proven to alleviate existential distress and are considered more cost-effective, individual approaches tend to be preferred by patients and are often more feasible to

deliver in subjects with advanced illness, as sessions can be scheduled with flexibility, taking into account the particular needs of the individual patient (Clark et al. 2003).

The findings of the present study confirm the full acceptability of Italian patients of this innovative approach, as testified by the written comments shared by patients about their satisfaction with care and the general consideration that this therapeutic process "has made a difference" in their life in terms of perception of self and of individual meaning of existence in the face of illness.

Importantly, the outcomes obtained indicated the efficacy of this intervention in alleviating depression, demoralization, anxiety and in improving spiritual wellbeing: all aspects which flow into the construct of existential distress, as already mentioned in Chapter I (Rousseau 2001; Morita 2004; Kirk et al. 2010; Schuman-Olivier et al. 2008; Yalom 1980).

Moreover, several dimensions of post-traumatic growth have been showed to result from this approach, namely a higher sense of compassion, a spiritual change and the feeling of having new possibilities in life.

At a deeper analysis, psychological growth derived from psychotherapy appeared to have influenced improvements in depression and dysphoria symptoms, as well as the achievement of a higher spiritual well-being. This confirms previous literature data suggesting that post-traumatic growth can play a role in mitigating depression symptoms (Kleim and Ehlers 2009; Park and Fenster 2004; Carver and Antoni 2004; Mc Millen et al. 1997), as well as promoting more well-being while lessening distress and anxiety (Park and Fenster 2004).

The originality and the relevance of the present study are linked to different aspects. The first is represented by the lack of data concerning different dimensions of suffering on the spectrum of emotional distress other than depression, in particular the Demoralization Syndrome, in patients affected by advanced cancer. This aspect is even more evident in non-Anglo-Saxon literature. Yet these are extremely important issues in cancer and palliative care and need to be studied in different cultural contexts. This study can represent a step forward to a better comprehension of how a specific model of care – modulated on the basis of the characteristic of the

population it is directed to - can help to assess and manage existential and psychosocial issues.

A second important and innovative aspect is linked to the future possibility to further test and apply in Italy this specific intervention model in different clinical contexts (eg. cancer outpatient and day-hospital clinics, in-patients units, hospices) and different research centers.

Another relevant possibility for future applications is represented by the opportunity of training cancer and palliative healthcare professionals, including nurses, in the CaLM general principles, practical approach and outcome measures, in order to improve clinician-patient relationship, assessment abilities and management of psychosocial aspects of illness, within a perspective of global and integrated care. This could contribute to the aim of developing training guidelines, internationally shared, on the most appropriate and validated psychological treatment in the advanced phases of cancer.

The main limitation of this work is represented by the short number of patients tested: further research is needed in order to expand the sample size and thus obtain more accurate data.

A second limitation which needs to be accounted for is that the study involved only patients who were motivated to take part in a psychotherapy process. However, although this is understandably a possible cause of bias, as these patients could be unrepresentative of the whole advanced cancer patients population, it must be pointed out that it is as well an unavoidable limitation common to all the research on the psychotherapy area.

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Chapter V CONCLUSIONS

Nothing in his life Became him like the leaving it. William Shakespeare. Macbeth, Act I.

The present research demonstrated the feasibility in Italy of CaLM psychotherapy for advanced cancer patient.

The intervention showe effectiveness on reducing existential distress, while promoting spiritual well-being and a post-traumatic psychological growth.

Furthermore, a positive influence of post-traumatic growth on the reduction of depressive symptoms and on the achievement of a better spiritual balance was indicated.

These findings highlight that the goals of CaLM are not to be intended as simply limited to symptom reduction, but include an enhanced integration of memories, emotions and patterns of cognition that enable advanced cancer patients to live more meaningful lives, to find a sense of purpose and explore new ways to become more effective agents in their existence, even while facing the tragic condition of being ill, frail and mortal.

REFERENCES

- American Psychiatric Association. Committee on Nomenclature and Statistics.
 Diagnostic and Statistical Manual of Mental Disorders, Second Edition.
 Washinton DC. 1968.
- American Psychiatric Association. Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition. Washinton, DC. 1994.
- Armeli S., Gunthert K.C., and Cohen L.H. Stressor appraisals, coping, and postevent outcomes: The dimensionality and antecedents of stress-related growth. Journal of Social and Clinical Psychology 2001; 20, 366-395.
- Block S.D. Psychological considerations, growth, and transcendence at the end of life. The art of the possible. JAMA 2001; 285:2898–2905.
- Bordeleau L., Szalai J.P., Ennis M., Leszcz M., Speca M., Sela R., Doll R., Chochinov H.M., Navarro M., Arnold A., Pritchard K., Bezjak A., Llewellyn-Thomas H., Sawka C., and Goodwin P.J. Quality of life in a randomized trial of group psychosocial support in metastatic breast cancer: Overall effects of the intervention and an exploration of missing data. Journal of Clinical Oncology 2003; 21(10), 1944-1951.
- Boston P., Bruce A., Schreiber R. Existential suffering in the palliative care setting: an integrated literature review. J Pain Symptom Manage 2011; 41:604–618.
- Braun M., Mikulincer M., Rydall A., Walsh A., and Rodin G. Hidden morbidity in cancer: Spouse caregivers. Journal of Clinical Oncology 2007; 25, 4829-4834.
- Breitbart W. Reframing hope: meaning-centered care for patients near the end of life. Interview by Karen S. Heller. J Palliat Med 2003; 6: 979-87.

- Breitbart W. Spirituality and meaning in supportive care: spirituality an meaning centered group psychotherapy interventions in advanced cancer. Support Care Cancer 2002; 10: 272-80.
- Breitbart W., Gibson C., Poppito SR, Berg A. Psychotherapeutic interventions at the end of life: a focus on meaning and spirituality. Can J Psychiatry. 2004 Jun;49(6):366-72.
- Breitbart W., Poppito S., Rosenfeld B., Vickers A. J., Li Y. et al. Pilot randomized controlled trial of individual meaning-centered psychotherapy for patients with advanced cancer. Journal of Clinical Oncology 2012; 20;30(12):1304-9.
- Breitbart W., Rosenfeld B., Gibson C. et al. Meaning-centered group psychotherapy for patients with advanced cancer: a pilot randomized controlled trial. Psychooncology 2010; 19: 21-8.
- Canada A.L., Murphy P.E., Fitchett G., Peterman A.H., and Schover L.R.. A 3-factor model for the FACIT-Sp. Psychooncology 2008; 17(9): 908–916.
- Chen M.L., Chang H.K. Physical symptom profiles of depressed and nondepressed patients with cancer. Palliat Med 2004;18:712-718.
- Cherny N.I., Radbruch L. and Board of the European Association for Palliative Care. European Association for Palliative Care (EAPC) recommended framework for the use of sedation in palliative care. Palliative Medicine 2009; 23(7): 581–593.
- Chochinov H.M. Dying, dignity and new horizons in palliative end-of-life care. CA Cancer J Clin 2006; 56: 84-103.
- Chochinov H.M. and Breitbart W. (Ed.) Handbook of Psychiatry in Palliative Medicine. Second Edition. Oxford. 2009.

- Chochinov H.M., Hack T., Hassard L.J. Kristjanson S., McClement, and Harlos M. Dignity therapy: A novel psychotherapeutic intervention for patients near the end of life. Journal of Clinical Oncology 2005; 23(24): 5520–5525.
- Chochinov H.M., Wilson K.G., Enns M., Lander S. Depression, hopelessness and suicidal ideation in the terminally ill. Psychosomatics. July-August 1998; 39 (4):366-370.
- Clark M.M., Bostwick J.M., Rummans T.A. Group and individual treatment strategies for distress in cancer patients. Mayo Clinic Proceedings 2003; 78(12),1538-1543.
- Clarke D.M. Mackinnon A.J. Smith G.C. et al. Dimensions of psychopathology in the medically ill: a latent trait analysis. Psychosomatics 2000;41:418-425.
- Clarke D.M., Mc Leod J.E., Smith G.C. et al. A comparison of psychosocial and physical functioning in patients with motor neurone disease and metastatic cancer. J Palliative Care 2005;21:173-179.
- Cordova M., Cunningham L., Carlson C., and Andrykowski M. Posttraumatic growth following breast cancer: A controlled comparison study. Health Psychology 2001; 20, 176-185.
- Carver C. S., and Antoni M. H. Finding benefit in breast cancer during the year after diagnosis predicts better adjustment 5 to 8 years after diagnosis. Health Psychology 2004; 23, 595–598.
- Craig E. The shorter Routledge encyclopedia of philosophy, 252–260. New York:Routledge. 2005.
- Cunningham A.J. Bringing spirituality into your healing journey. Toronto: Key Porter Books Limited. 2002.
- Davis C., Nolen-Hoeksema S., and Larson J. Making sense of loss and benefiting from the experience: Two construals of meaning. Journal of Personality and Social Psychology 1998; 75, 561-574.

- De Figueiredo J. Diagnosing demoralization in consultation psychiatry. Psychosomatics 2000; 41: 449-450.
- De Graeff A., and Dean M. Palliative sedation therapy in the last weeks of life: A literature review and recommendations for standards. Journal of Palliative Medicine 2007; 10(1): 67–85.
- Eckersley R.M. Culture, spirituality, religion and health: looking at the big picture. MJA 2007; 186: S54–S56.
- Eckersley R.M. Well and good: morality, meaning and happiness. 2nd ed. Melbourne: Text Publishing. 2005.
- Erikson E.H. Childhood and Society, 2nd ed. New York: Norton. 1963.
- Evers A.W.M., Kraaimaat F.W., Van Lankveld W., Jongen P.J.H., Jacobs J.W.G., and Bijlsma J.W.J. Beyond unfavourable thinking: The Illness Cognition Questionnaire for chronic diseases. Journal of Consulting and Clinical Psychology 2001; 69, 1026-1036.
- First M.B. et al. Structured Clinical Interview for DSM-IV-TR Axis I Disorders, Research Version, Non-patient Edition. (SCID-I/NP) New York, NY:Biometrics Research, New York State Psychiatric Institute. 2010.
- Frank JD. Psychotherapy: the restoration of morale. Am J Psychiatry 1974; 131: 271-274.
- Frankl V. Man's search for meaning. Boston: Beacon Press. 1963.
- Frazier P., Tashiro T., Berman M., Steger M. and Long, J. Correlates of levels and patterns of positive life changes following sexual assault. Journal of Consulting and Clinical Psychology 2004; 72, 19-30.
- Freud S. Thoughts for the times on war and death. 1957. In: Rodin G.
 Zimmermann C Psychoanalytic reflections on mortality: a reconsideration. J
 Am Acad Psychoanal Dyn Psychiatry 2008 Spring;36(1):181-96.

- Fredrickson B.L., Tugade M.M., Waugh C.E. and Larkin G.R. What good are positive emotions in crises? A prospective study of resilience and emotions following the terrorist attacks on the United States on September 11th, 2001. Journal of Personality and Social Psychology 2003; 84, 365-376.
- Grabsch B., Clarke D.M., Love A. et al. Psychological morbidity and quality of life in women with advanced breast cancer: a cross-sectional survey. Palliative Support Care. 2006;4:47-56.
- Grassi L., Indelli M., Marzola M., Maestri A., Santini A., Piva E., Boccalon M.
 Depressive symptoms and quality of life in home-care-assisted cancer patients.
 J Pain Symptom Manage. 1996 Nov;12(5):300-7.
- Green A.I., Austin C.P. Psychopathology of pancreatic cancer. Psychosomatics. 1993;34:208-221.
- Greenstein M. The house that's on fire: Meaning-centered psychotherapy pilot group for cancer patients. American Journal of Psychotherapy 2000; 54(4): 501–511.
- Greenstein M., and Breitbart W. Cancer and the experience of meaning: A group psychotherapy program for people with cancer. American Journal of Psychotherapy 2000; 54(4): 486–500.
- Hack T.F., Chochinov H.M., Hassard T., Kristjanson L.J., McClement S., Harlos M. Defining dignity in terminally ill cancer patients: a factor-analytic approach. Psychooncology 2004; 13: 700-8.
- Hauser K., and Walsh D. Palliative sedation: Welcome guidance on a controversial issue. Palliative Medicine 2009; 23(7): 577–579.
- Heidegger M. Being and Time, trans. by John Macquarrie and Edward Robinson London: SCM Press. 1962.
- Henry M., Cohen S.R., Lee V., Sauthier P., Provencher D., Drouin P., Gauthier P., Gotlieb W., Lau S., Drummond N., Gilbert L., Stanimir G., Sturgeon J.,

Chasen M., Mitchell J., Huang L.N., Ferland M.K., Mayo N. The Meaning-Making intervention (MMi) appears to increase meaning in life in advanced ovarian cancer: a randomized controlled pilot study. Psychooncology 2010 Dec;19(12):1340-7.

- Hudson P.L., Kristjanson L.J., Ashby M., et al. Desire for hastened death in patients with advanced disease and the evidence base of clinical guidelines: a systematic review. Palliat Med October 2006; 20(7):693-701.
- Jaspers K. General Psychopathology (Hoenig and M. Hamilton, trans.) Chicago: The University of Chicago Press. 1963.
- Karnofsky D., and Burchenal J.H. The clinical evaluation of chemotherapeutic agents in cancer. 1949. In: Macleod C.M. (Ed.), Evaluation of Chemotherapeutic Agents (pp.191-205). New York, NY:Columbia University.
- Katzman R., Brown T., Fuld P., Peck A, Schechter R., Schimmel H. Validation of a short Orientation-Memory-Concentration Test of cognitive impairment. American Journal of Psychiatry1983; 140, 734-739.
- Kirk T.W., Mahon M.M, and Palliative Sedation Task Force of the National Hospice and Palliative Care Organization Ethics Committee. National Hospice and Palliative Care Organization (NHPCO) position statement and commentary on the use of palliative sedation in imminently dying terminally ill patients. Journal of Pain and Symptom Management 2010; 39(5): 914–923.
- Kirk P., Kirk I., and Kristjanson L.J. What do patients receiving palliative care for cancer and their families want to be told? A Canadian and Australian qualitative study. British Medical Journal 2004; 328, 1343.
- Kissane D.W.: The relief of existential suffering. Arch Intern Med 2012;172:1501–1505.
- Kissane D.W., Bloch S., Smith G.C., Miach P., Clarke D.M., Ikin J., Love A., Ranieri N., and McKenzie D. Cognitive-existential group psychotherapy for

women with primary breast cancer: A randomised controlled trial. Psychooncology 2003; 12(6): 532–546.

- Kissane D.W., Love A., Hatton A., Bloch S., Smith G., Clarke D.M., Miach P., Ikin J., Ranieri N., and Snyder R.D. Effect of cognitive-existential group therapy on survival in early-stage breast cancer. Journal of Clinical Oncology 2004; 22(21): 4255–4260.
- Kissane D.W., McKenzie M., McKenzie D.P., Forbes A., O'Neill I., Bloch S.
 Psychosocial morbidity associated with patterns of family functioning in palliative care: baseline data from the Family Focused Grief Therapy controlled trial. Palliat Med 2003 Sep;17(6):527-37.
- Kissane D.W., Wein S., Love A., Lee X.Q., Kee P.L., Clarke D.M. The Demoralization Scale: a report of its development and preliminary validation. Journal of Palliative Care 2004; 20(4), 269-276
- Kleim B. and Ehlers A. Evidence for a Curvilinear Relationship Between Posttraumatic Growth and Posttrauma Depression and PTSD in Assault Survivors Journal of Traumatic Stress, Vol. 22, No. 1, February 2009; pp. 45– 52.
- Kleinman A.: The Illness Narratives. Suffering, Healing and the Human Condition. USA: Basic Books; 1988.
- Kolokotroni P., Anagnostopoulos F., Tsikkinis A. Psychosocial factors related to posttraumatic growth in breast cancer survivors: a review. Women Health. 2014;54(6):569-92.
- Kroenke K., Spitzer R.L., Williams J.B. The PHQ-9: Validity of a brief depression severity measure. Journal of General Internal Medicine 2001; 16, 606-613.

- Lee V., Cohen S.R., Edgar L., Laizner A., and Gagnon A.J. Meaning-making and psychological adjustment to cancer: Development of an intervention and pilot results. Oncology Nursing Forum 2006; 33(2): 291–302.
- Leong Abdullah M.F., Nik Jaafar N.R., Zakaria H., Rajandram R.K., Mahadevan R., Mohamad Yunus M.R., Shah S.A. Posttraumatic growth, depression and anxiety in head and neck cancer patients: examining their patterns and correlations in a prospective study. Psychooncology 2015 Jan; 21.
- Lewis S., Salins N., Rao M.R., Kadam A. Spiritual well-being and its influence on fatigue in patients undergoing active cancer directed treatment: a correlational study. J Cancer Res Ther. 2014 Jul-Sep;10(3):676-80.
- Li M., Boquiren V., Lo C., and Rodin. G. Depression and anxiety in supportive oncology 2011. In: Supportive oncology, ed. M.P. Davis, P. Feyer, P. Ortner, and C. Zimmermann, 528–540. Philadelphia: Elsevier.
- Linley P.A., and Joseph S. Positive change following trauma and adversity: A review. Journal of Traumatic Stress 2004; 17, 11-21.
- Lo C., Burman D., Swami N., Gagliese L., Rodin G., Zimmermann C.Validation of the QUAL-EC for assessing quality of life in patients with advanced cancer. European Journal of Cancer 2010.
- Lo C., Hales S., Jung J., Chiu A., Panday T., Rydall A., Nissim R., Malfitano C., Petricone-Westwood D., Zimmermann C., Rodin G. Managing Cancer And Living Meaningfully (CaLM): phase 2 trial of a brief individual psychotherapy for patients with advanced cancer. Palliat Med. 2014 Mar;28(3):234-42.
- Lo C., Hales S., Zimmermann C., Gagliese L., Rydall A., Rodin G. Measuring death-related anxiety in advanced cancer: Preliminary psychometrics of the Death and Dying Distress Scale. Journal of Pediatric Hematology and Oncology 2011; 33(Suppl 2) S140-145.

- Lo C., Walsh A., Mikulincer M., Gagliese L., Zimmermann C., Rodin G. Measuring attachment security in patients with advanced cancer: psychometric properties of a modified and brief Experiences in Close Relationships scale. Psycho-Oncology 2009; 18, 490-499.Lo C., Zimmermann C., Rydall A.C., Walsh A., Jones J.M., Moore M.J., Shepherd F.A., Gagliese L., and Rodin G. Longitudinal study of depressive symptoms in patients with metastatic gastrointestinal and lung cancer. Journal of Clinical Oncology 2010; 28(18), 3084-3089.
- López-Sierra H.E., Rodríguez-Sánchez J. The supportive roles of religion and spirituality in end-of-life and palliative care of patients with cancer in a culturally diverse context: a literature review. Curr Opin Support Palliat Care. 2015 Mar;9(1):87-95.
- Maguire P. Barriers to psychological care to the dying. Br. Med. J. 1985;291:1711-1713.
- Manne, S., Ostroff, J., Winkel, G., Goldstein, L.K.F. and Grana, G.
 Posttraumatic growth after breast cancer: Patient, partner, and couple perspectives. Psychosomatic Medicine 2004;66, 442-454.
- Massie M.J., Holland J.C. Depression and cancer patients. J Clin Psychiatry. 1990;51:12-19.
- May R. The Discovery of Being. Writings in Existential Psychology. Rollo May
 W. W. Norton fcf Company. New York. London. Copyright 1983.
- McMillen J. C., Smith E. M., and Fisher R. H. Perceived benefit and mental health after three types of disaster. Journal of Consulting and Clinical Psychology1997; 65, 733–739.
- Mitchell A.J., Chan M., Bhatti H., Halton M., Grassi L., Johansen C., Meader N. Prevalence of depression, anxiety, and adjustment disorder in oncological, haematological, and palliative-care settings: a meta-analysis of 94 interview-based studies. Lancet Oncol 2011; 12(2):160-74.

- Miller D.K., Chibnall J.T., Videen S.D., and Duckro P.N.. Supportive-affective group experience for persons with life-threatening illness: Reducing spiritual, psychological, and death-related distress in dying patients. Journal of Palliative Medicine 2005; 8(2): 333–343.
- Morita T. 2004. Palliative sedation to relieve psycho-existential suffering of terminally ill cancer patients. Journal of Pain and Symptom Management 28(5): 445–450.
- Morita T., Kawa M., Honke Y., Kohara H., Maeyama E., Kizawa Y., Akechi T., Uchitomi Y. Existential concerns of terminally ill cancer patients receiving specialized palliative care in Japan. Support Care Cancer 2004; 12:137–140
- Moye J., Rouse SJ. Posttraumatic stress in older adults: when medical diagnoses or treatments cause traumatic stress. Clin Geriatr Med. 2014 Aug;30(3):577-89.
- Nietzsche, F. Twilight of the Idols (Maxims and Arrows). 1888.
- Nissim R., Freeman E., Lo C., Zimmermann C., Gagliese L., Rydall A., Hales S., Rodin G. Managing Cancer and Living Meaningfully (CaLM): a qualitative study of a brief individual psychotherapy for individuals with advanced cancer. Palliat Med. 2012 Jul;26(5):713-21.
- Nissim R., Gagliese L., and Rodin G. The desire for hastened death in individuals with advanced cancer: A longitudinal qualitative study. Social Science and Medicine 2009;69, 165-171.
- O'leary V., Alday C., and Ickovics J. Models of life change and posttraumatic growth. 1998. In R. Tedeschi, C. Park, and L. Calhoun (a cura di), Posttraumatic growth:Positive changes in the aftermath of crisis (pp. 127-151). Mahwah, NJ: Erlbaum.
- Olson D.H. and Larson P.J. PREPARE/ENRICH: Customized Version. Life Innovations, Minneapolis. 2008.

- O'Mahony S., Goulet J., Kornblith A., Abbatiello G., Clarke B., Kless-Siegel S., Breitbart W., Payne R. Desire for hastened death, cancer pain and depression: report of a longitudinal observational study. J Pain Symptom Manage. 2005 May;29(5):446-57.
- Park C.L., Cohen L.H., and Murch R.L. Assessment and prediction of stress related growth. Journal of Personality1996; 64, 71-105.
- Park C. L., Fenster J. R. Stress-related growth: Predictors of occurrence and correlates with psychological adjustment. Journal of Social and Clinical Psychology 2004; 23, 195–215.
- Passik S.D., Breitbart W.S. Depression in patients with pancreatic carcinoma: diagnostic and treatment issues. Cancer. 1996; 78(suppl 3):615-626.
- Paterson C., Robertson A., Smith A., Nabi G. Identifying the unmet supportive care needs of men living with and beyond prostate cancer: A systematic review.
 Eur J Oncol Nurs. 2015 Jan; 19.
- Peterman A.H., Fitchett G., Brady M.J., Hernandez L., Cella D. Measuring spiritual well-being in people with cancer: The functional assessment of chronic illness therapy - spiritual well-being scale (FACIT-Sp). Annals of Behavioral Medicine 2002; 24(1), 49-58.
- Portenoy R.K. et al, The Memorial Symptom Assessment Scale: An instrument for the evaluation of symptom prevalence, characteristics and distress. European Journal of Cancer 1994; 30, 1326-1336.
- Portnoy R.K., Rana P., Zimmermann C., Rodin G. The Use of Palliative Sedation to Treat Existential Suffering: A Reconsideration. In: Sedation at the End-of-life: An Interdisciplinary Approach Philosophy and Medicine 2015; pp 41-54.
- Rafanelli C., Roncuzzi R., Milaneschi Y., Tomba E., Colistro M.C., Pancaldi L.G., Di Pasquale G. Stressful life events, depression and demoralization as risk

factors for acute coronary heart disease. Psychotherapy and Psychosomatics 2005; 74: 179-184.

- Rodin G., Lo C., Mikulincer M., Donner A., Gagliese L., and Zimmermann C.
 Pathways to distress: The multiple determinants of depression, hopelessness and the desire for hastened death in metastatic cancer patients. Social Science and Medicine 2009; 68, 562-569.
- Rodin G., Walsh A., Zimmermann C., Gagliese L., Jones J., Shepherd F.A., Moore M., Braun M., Donner A., and Mikulincer M. The contribution of attachment security and social support to depressive symptoms in patients with metastatic cancer. Psycho-Oncology 2007; 16(12), 1080-1091.
- Rodin G., Yuen D., Mischitelle A., Minden M.D., Brandwein J., Schimmer A., Marmar C., Gagliese L., Lo C., Rydall A., and Zimmermann, C. 2011. Traumatic stress in acute leukemia. Psychooncology 2011.
- Rodin G., Zimmermann C. Psychoanalytic reflections on mortality: A reconsideration. The Journal of the American Academy of Psychoanalysis and Dynamic Psychiatry 2008; 36(1), 181-196.
- Rousseau P. Existential suffering and palliative sedation: A brief commentary with a proposal for clinical guidelines. American Journal of Hospice and Palliative Care 2001; 18(3):151–153.
- Royal Dutch Medical Association (KNMG) Committee on National Guideline for Palliative Sedation. Guideline for Palliative Sedation. January 2009.
- Ruijs C.D., van der Wal G., Kerkhof A.J., Onwuteaka-Philipsen B.D.
 Unbearable suffering and requests for euthanasia prospectively studied in endof-life cancer patients in primary care. BMC Palliat Care 2014; Dec 23;13(1):62.

- Schildkraut J.J., Klein F.D. The classification and treatment of depressive states.
 In: Shader RI, ed Manual of Psychiatric Therapeutics. Boston, Mass: Little, Brown and CO. 1975.
- Schuman-Olivier Z., Brendel D.H., Forstein M., and Price B.H. The use of palliative sedation for existential distress: A psychiatric perspective. Harvard Review of Psychiatry 2008; 16(6): 339–351.
- Shader RI. Demoralization revised. J Clin Psychopharmacol 2005; 25: 291-292.
- Shakin E.J., Holland J.C. Depression and pancreatic cancer. JPain Symptom Manage. 1988;3:194-198.
- Singer P. et al. Euthanasia and End of Life Care. JAMA 1999;281(2), p. 163-168.
- SiqVeland J., Ninaard E. et al. Posttraumatic growth, depression and posttraumatic stress in relation to quality of life in tsunami survivors: a longitudinal study.Health and Quality of Life Outcomes 2015; 13:18
- Slavney P.R. Diagnosing demoralization in consultation psychiatry. Psychosomatics 1999; 40:325-329.
- Spiegel D., and Spira J. Supportive-Expressive Group Therapy: A treatment manual of psychosocial intervention for women with recurrent breast cancer. Stanford: Stanford University School of Medicine. 1991.
- Spitzer RL et al. A brief measure for assessing generalized anxiety disorder: the GAD-7. Archives of Internal Medicine 2006; 166(10), 1092-1097.
- Steinhauser K., Clipp E.C., NcNeilly M., Christakis N.A., McIntyre L.M. and Tulsky J.A. In search of a good death: Observations of patients, families and providers. Annals of Internal Medicine2000; 132(10), 825-832.
- Stern, D.N. The present moment in psychotherapy and everyday life. New York:W.W. Norton and Co. 2004. In: Rodin G, Zimmermann C Psychoanalytic

reflections on mortality: a reconsideration. J Am Acad Psychoanal Dyn Psychiatry 2008 Spring;36(1):181-96.

- Strang P., Strang S., Hultborn R., Arnér S. Existential pain—an entity, a provocation, or a challenge? J Pain Symptom Manage 2004; 27:241–250.
- Sumalla E.C., Ochoa C., Blanco I. Posttraumatic growth in cancer: reality or illusion?Clin Psychol Rev. 2009 Feb;29(1):24-33.
- Tedeschi R.G., and Calhoun L.G. The Posttraumatic Growth Inventory: Measuring the positive legacy of trauma. Journal of Traumatic Stress 1996; 9, 455-471.
- Tedeschi R.G., and Calhoun L.G. Trauma and transformation: Growing in the aftermath of suffering. Thousand Oaks, CA: Sage. 1995.
- Tedeschi R.G., Park C.L., and Calhoun L.G. (a cura di) (1998). Posttraumatic growth:Positive changes in the aftermath of crisis. Mahwah, NJ: Erlbaum.
- UNESCO. International Bioethics Committee. Elaboration of the Declaration on Universal Norms of Bioethics: Second Outline of a Text. Paris. 2004.
- Van der Mass P.J., van Delden J.J.M., Pijnebort L., Looman C.W.N. Euthanasia and other meical decisions concerning the end of life. Lancet. 1992; 338:669-674. Vehling S., Lehmann C., Oechsle K., Bokemeyer C., Krüll A., Koch U., Mehnert A. Is advanced cancer associated with demoralization and lower global meaning? The role of tumor stage and physical problems in explaining existential distress in cancer patients. Psychooncology 2012; 21(1):54-63.
- Vos J., Craig M., Cooper M. Existential therapies: A meta-analysis of their effects on psychological outcomes. J Consult Clin Psychol 2015 Feb;83(1):115-28.
- Widows M.R., Jacobsen P.B., Booth-Jones M., and Fields, K.K. Predictors of posttraumatic growth following bone marrow transplantation for cancer. Health Psychology 2005; 24, 266-273.

- Wilson K.G., Chochinov H.M., McPherson C.J., LeMay K., Allard P., Chary S., Gagnon P.R., Macmillan K., De Luca M., O'Shea F., Kuhl D., Fainsinger R.L. Suffering with advanced cancer. J Clin Oncol 2007a; 25:1691–1697.
- Wilson K.J., Chochinov H.M., Skirko M.G., et al. Depression and anxiety disorders in palliative cancer care. J Pain Symptom Manage. 2007b;33:1118-129.
- Yalom, I.D. Existential psychotherapy. New York: Basic. 1980.