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# Palliative care, impact of cognitive behavioral therapy to cancer patients

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### Abstract

It has not been possible to control the advance of oncological diseases in developing countries, few are early detected and most of them go through debilitating treatments that at the end of the disease refers patients to the palliative care area. Nowadays, that is the place where most of the psychologist work. The aim of this study was to analyze the impact of psychological intervention to patients at palliative care unit (National Cancer Institute Mexico). The analysis was performed with a sample collected in the period 2011-2013, integrated of 2472 patients; taking into account their diagnosis and the hospital area where they came from. It was found that the intervention of psychologists in the area of palliative care is limited, very short and late effectiveness. Patients who went to psychological consultation, 90% no longer presented to the fourth session and about 30% comes from the area of pre consultation with advanced stages of the disease. Cognitive behavioral therapy is a health tool that could benefit cancer patients, if that intervention was regulated throughout the entire treatment and not just by the end of it, as a support to patients.

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## 1. Introduction

Cancer is a group of diseases that have afflicted humans since ancient times, it develops when normal cells begin to grow out of control. There are records of bone cancer in Egyptian mummies from 1600 BC (Sudhakar, 2009).

Cancer represents one of the most feared diseases by people, because at some point in their lives have been in contact or have heard of someone who has suffered cancer and, therefore, know some of its features such as: pain, invasion, the imminence of death, or the most common side effects caused by medical treatments, all this knowledge will form beliefs to guide their behavior. Thus, one would expect that any person new diagnosed with cancer, present a series of emotional responses that may be affected by the characteristics of the specific treatment

indicated, whichever invasive treatment is going to be taken: chemotherapy, radiation or surgery. (Ehrenzweig, 2007).

Currently, cancer is one of the leading causes of death worldwide; in 2012 caused 8.2 million deaths, with the expectation that number of cases detected is going to increase from 14 million annually reported worldwide in 2012, to 22 million per year over the next two decades. The types of cancer that causes more deaths each year are lung, stomach, liver, colon and breast; the most common are different in men and women. Approximately 30% of cancer deaths are due to five behavioral and dietary risks factors: higher body mass index, low fruit and vegetable intake, physical inactivity, consumption of tobacco and alcohol. (WHO, 2014)

Mexican data showed that in 2009 (INEGI), women breast cancer was the leading cause of hospital morbidity (22.0%); followed by tumors in hematopoietic organs (14.1%); and the female genital organs (13.5%). In contrast, lowest rates were observed for lip cancers, oral cavity and pharynx (1.2%); eye and adnexa (0.5%); and the (primary) malignancies multiple independent sites (0.1 percent). Among men, the leading causes of hospital morbidity occurred in hematopoietic organs (22.8%); digestive organs (17.5%); and lymphatic tissue and which includes related Kaposi's sarcoma and lymphoma T, peripheral and cutaneous cells (9.8%). Those reporting fewer cases were tumors of the eye and adnexa (0.6%); breast (0.4%); and the (primary) malignancies multiple independent sites (0.1 percent).

The end-stage of cancer refers to cancer at an advanced stage in which curative treatments are no longer useful, considered incurable disease and patient's condition deteriorates progressively. The treatment assigned to fight against the disease decreases as it advances, meanwhile the attention of palliative care increases as the person approaches to death. Palliative care also offers support to the family during this period, after the death of the patient, attending family and friends at the time of mourning is an important element (WHO 2007).

Palliative care is a treatment to relieve, rather than cure, the symptoms caused by cancer; they can help people to live more comfortably, that means preserving quality of life and allow patients to die with dignity. Palliative care is also an urgent humanitarian need for people around the world with cancer and other deadly chronic diseases. In particular, it is necessary in areas with a high proportion of patients in advanced stages where there is little chance to be cured. With palliative care it is possible to relieve physical, psychosocial and spiritual problems in over 90% of patients with advanced. Effective public health strategies that include community and home care are essential to provide pain relief and palliative care for patients and their families in low resource settings. (WHO, 2014)

Oncological diseases are still seen as incurable diseases or with a very little chance of cure, which leads to the patient and family to a shock, resulting in emotional distress where the patient makes use of several resources to cope with the disease, but in many cases the level and nature of suffering is too much, so it can be relieved with psychological support that exists within the interdisciplinary teams (Almanza-Muñoz & Holland, 2000).

That is why psycho-oncology has become important because is the best complement to drug treatment used to decrease physical pain, but does not control it at all (Newell Sanson-Fisher, & Savolainen, 2002), understanding that cancer is a disease that affects the person also cognitively and emotionally (Burón, 2008), generating a significant fatigue in people with the disease. The National Comprehensive Cancer Network defined this fatigue in (2011) as a sense of grief and persistent, subjective distress, which generates extreme tiredness whether physical, emotional or cognitive level associated with cancer and its treatments.

In the case of patients with advanced cancer, psychosocial interventions produce beneficial effects, such as decreased sadness and depression among others, and improve coping mechanisms. (Burón, 2008)

Portenoy, (2001), mentions "for some patients, knowing that the disease is incurable pushes them to talk about the end of life, express their fears, think about religious or existential questions or how to help the family or something that will help them when they die", at this point is when the clinical and health psychologist faces different emotional reactions of terminally ill patients, is the right time to show the potential of their work.

Bayes (2001), presents a model of palliative intervention including as the first factor the identification of either biological, environmental or cognitive symptoms that are perceived as threats. Next step is to try to eliminate, offset or mitigate the symptoms, increasing attention on those symptoms that worry the patient and cause suffering. When the symptoms are not alleviated, it is necessary to help the patient to increase the resources and perceptions of control. The next step involves discovering and enhance the resources of the patient and, if necessary provide others that allow to reduce or eradicate helplessness. Finally, we must increase serenity feelings providing patient satisfactors.

Cognitive behavioral therapy seems to be an intervention that provides more consistent results in the medium and long term treatments. There are basically three stages that made possible cognitive behavioral therapy. The first in 1950 with the stimulus-response model of behavioral therapy. Second stage was marked when cognitive therapies emerged, evidence was found that cognitive processes influence behavior and learning. Around 70's, the third and final stage was presented, same that was marked by the first publications on cognitive behavioral therapies, by that moment merging models allows to see human being globally; where instrumental behavior or manifested, thought and emotion are part of the definition of conduct. This led to clinical psychologist to expand its field of intervention, community, mental health, health psychology, childhood, old age, among others (Kendall & Hollon, 1979, Mahoney, 1974; Meichenbaum, 1977, Sanchez Sosa, 2002).

Thus cognitive behavioral therapy is an integration of two theories that initially were born separately to respond to psychological disorders: behavioral theory and cognitive theory. Behavioral theory in its strictest form, focuses solely on observable and measurable behavior and ignores all mental events. This theory sees the mind as a "black box" that can not be easily understood and for this reason is not important for an attempt to change their attitude, also this therapy focuses on the interactions between the environment and behavior. Meanwhile, cognitive therapy focuses on the role they play and how these cognitions determine feelings and behaviors (Ledley, Marx & Heimberg, 2010). That is why cognitive behavioral approach aims to understand all knowledge, skills and psychological techniques capable to solve all those psychological or organic complications that arise in the course and treatment of the disease (Prieto, 2004). Cognitive behavioral therapy intends to encourage thinking focused on positivism and hope in how patients perceive their disease process until the end of their lives.

Barthe (1997) mentions an experimental procedure where Ph D. Sandra Levi saw how a group of thirty patients in remission, with whom he had practiced relaxation and invited them to participate in a cognitive therapy, increased activity of cells NK. Relaxation, visualization and cognitive therapy, along with the cancer treatments are useful because many times stress response and subsequent psychological disorders depend almost always on the inadequate interpretation of the everyday events in life.

Uitterhoeve, Vernooy, Litjens, Potting, Bensing, De Milder & van Achterberg (2004) showed that the most frequent psychosocial intervention in patients with advanced cancer is the use of cognitive behavioral techniques and is also a tool used for behavior change, helping patient to acquire strategies for handling the disease. Treating cancer patients using cognitive behavioral psychotherapy Luszczanowski (sf), highlighted the following benefits: It is effective in "reducing emotional burden" that characterizes patients and their families at different stages of the disease, intervention can occur in a short period of time and used to treat problems related to the control of symptoms and types of participation of the patient and his family; it emphasizes self-control and self-efficacy, which allows greater adherence to treatment, increase effectiveness and decrease their side effects, also improves mental regulation, on the other hand cancer patients require a short-term psychotherapy, and for this reason is common intervention models used in crisis.

Pyne (2002) and Massie (1999) also raise intervention strategies within a framework cognitive behavioral, psychoeducational intervention is used in patients who have difficulty understanding medical information and given the opportunity to ask questions that lead to the reduction of anxiety and the depression. Such techniques are also used in order to change misconceptions and exaggerated fears, cognitive behavioral intervention in anxiety include relaxation training, imagery or hypnotic therapy. Other suitable instrument that has great utility with end-stage cancer patients is "counseling (Arranz and Bayés, 1996), a tool that becomes more effective communication with the

patient helping in decision-making and facilitating the expression of fears and changes behavior. This tool by using the question and not the assertion, makes the subject answers give himself more stable causing both cognitive and behavioral level changes. In short, the "counseling" is the art of making a person think through questions, so you can get to take it deems appropriate for him and his health (Barreto, Arranz and Molero, 1997) decisions.

# Method

The study was conducted with patients at the National Cancer Institute Mexico (Incan) at the palliative care area in the period of time from January 2011 to January 2013, with a sample of 2472 patients (1426 women and 1036 men). A longitudinal quantitative study was performed with frequency analysis.

# Results

Almost 90% of the patients included in this sample who were attended in the palliative care unit came from center zone of the country (Mexico City, Estado de México, Hidalgo, Morelos, Puebla, Tlaxcala), as shown in Table 1. It is important to emphasize that other areas such as north and south have their own hospitals with a fewer proportion of people in comparison to center zone.

Table 1. Patient's residence in the country

Zone		
	#	%
Center	2189	88.5
North	59	2.1
South	224	9.4

The largest amount of patients referred to palliative care unit were: medical oncology service (893 patients), followed by pre-consultation (707 patients), gastroenterology (280 patients) and gynecology (160) Fig. 1. So it is possible to say that around 33% of patients that went for the first time to cancer consultation because a probable cancer diagnosis arrived with reserved prognosis, which is from the area of pre-consultation with advanced stages of cancer; those patients are only provided with palliation of the disease.

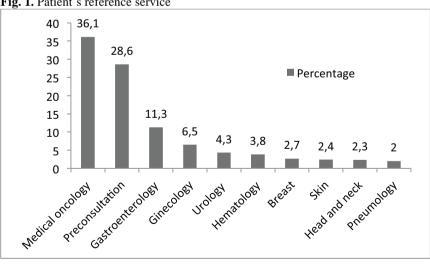
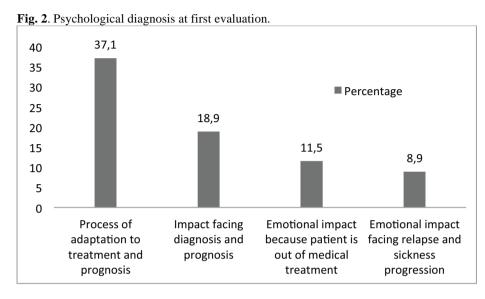


Fig. 1. Patient's reference service

It is very important to emphasize that almost 30% of the patients who arrived the palliative care service came

from the area of pre-consultation Fig. 1. it is with reserved prognosis for the disease, making it less effective psychological intervention, so that works in cancer prevention are likely to be limited to the national level, taking into account the local situation.

Derived from the psychological evaluation of the patient, diagnoses are mainly concentrated in four determinations, such are related to emotional reactions coupled to the oncology opinion of the doctor in the different stages of the disease (primary, recurrent or off cancer treatment) Fig. 2.



During the process of adaptation to palliative care and to the prognosis of disease, it is when cognitive behavioral techniques become more important because allows patients to promote expression of emotions, also to talk to the psychologist about their concerns, fears, among others, facing their imminent conclusion Fig. 3.

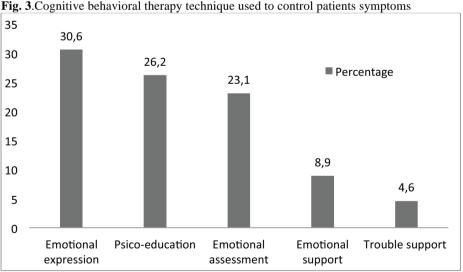
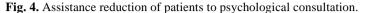
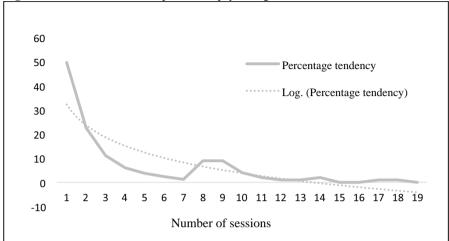


Fig. 3. Cognitive behavioral therapy technique used to control patients symptoms

Also, the number of patients who continued with the psychological intervention in the palliative care area

decreases significantly reaching just over 90% from the fourth session; which indicates that a relatively low number of occasions to be involved in cognitive behavioral therapy to cancer patients **Fig. 4**.





#### Discussion

The main findings of this research showed evidence that times are there psychologist to intervene effectively with cancer patients are not sufficient because they involve a greater number of sessions in order to achieve a reduction of disorders diagnosed, which are present throughout the disease process, the above is consistent with that reported by Landa-Ramirez et al (2014)

Same that can become difficult to diagnose by physical symptoms presented by the patient before the permanent and continuous deterioration of the disease.

Otherwise highlight the role of psychologists intervening CBT and show that at least CP found that speaking time should be increased. This a justification of why the psychologist must participate throughout the disease process with each of the patients, and a comprehensive, multidisciplinary care focused on the patient to raise their quality of life along be provided their condition.

### Conclusion

Psychological intervention is a highly relevant treatment that affects emotional health of sickness, so that cancer becomes a disease that in recent years has affected the biopsychosocial structure of individuals in modern societies, so data found suggested that psychological intervention must begin when the patient is diagnosed, and continue throughout treatment to provide comprehensive care to all cancer patients. So that they can combat stress levels, anxiety, depression and other comorbidities that could reduce effectiveness of treatments, only with this kind of intervention will be possible to reach a level of multidisciplinary care with more arguments to fight the disease.

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