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**RESILIENCE IN CANCER PATIENTS: A SYSTEMATIC  
REVIEW OF THE LITERATURE**

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*Abstract*

Any oncological disease puts people in a situation in which they have to deal with deep pain and the way in which they will be able to respond to this situation will affect their life. Hence, the important question to ask is if oncological diseases put people in a situation of suffering. Does the way they respond to this situation have any influence on their condition of life? The objective of our study was to verify how cancer patients' level of resilience can affect the situation they find themselves in and the way they will accept treatments which contribute to the development of resilience by promoting a greater use of the patients' protective factors. The patients' efforts to resist the disease process and the physical and emotional turmoil that their condition causes allows us to confirm the presence or the absence of this inner strength and to find ways to increase the patients' resilience, a positive state of mind that will help them face their condition. The findings suggest that resilience increases as time goes by and in response to the prescribed treatments. This is significantly associated with a lower sense of hopelessness and higher levels of supportive and social perception. Patients experiencing experiential and attitudinal values during the treatment process can find a meaning in the fact that they have fallen ill and will tend to better accept the way their own lives had been turned upside down, a perspective that will help favour resilience. The ability to overcome adverse situations gives new meaning to life and resilience. A more spiritual way of life and a higher resilience level help the patients to adapt more easily to the oncological treatments they will have to go through.

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**Keywords:** Resilience, cancer patient.



## 1. Introduction

Experiencing an oncological disease and having to endure different stages of treatment entails physical, psychological and social repercussions to which the patients will have to find ways to adapt and with which they will have to cope. Some patients can exhibit an ability to adapt to such a distressful condition and to overcome any stressful situation that will affect their life during the treatments, while others will face such period with intense suffering (Elmesany, 2010, p. 21). Oncological diseases affect each and every part of a person's body and mind, since it presents "a diverse aetiology and involves peculiar therapeutic resources, which will cause various psychological reactions and will influence this person's history, the way he/she will choose to live and the kind of relationships he/she will be able to develop with the surrounding world and with himself/herself"(Elmesany, 2010, p. 22).

According to the same author, "a significant number of patients only seek treatment when the disease is already at an advanced stage and when the prognosis is clearly pessimistic. They will therefore suffer from psychological problems as cancer will cause pain-related distress, the fear of death and the destruction of the patients' social lives because of all the transformations that will affect their daily routine" (Elmesany, 2010, p. 22). In the face of these changes, the patient will have to go through different stages until he is able to accept the disease and to willingly adhere to the prescribed treatment. These steps are part of the so-called confrontation process; each and every behavioural and cognitive effort that will enable a patient to face and deal with a stressful event and will make him aware of the factors that will come to influence the final outcome of such process (Elmesany, 2010, p. 22).

According to this author, this process of confrontation with the disease will not, single-handedly, solve the problem. To achieve this goal, the patient has to be resilient, since resilience involves actions that will lead a patient to confront and to overcome a certain state of adversity. In cancer patients, resilience is defined as the ability to overcome and to deal positively with adverse situations, face the disease and the prescribed treatment over a certain period of time (Rodrigues & Polidori, 2012, p.619). These authors also mention that "knowing the resilience level of oncology patients enables the development of actions that involve health education and may influence the level of adherence to treatment, so that each factor, positively involved in the treatment process, can be addressed by a multiprofessional team" (Rodrigues & Polidori, 2012, p.620).

Based on these considerations, it becomes clear that the medical community needs to define a wide range of general actions aimed at supporting and guiding cancer patients; actions that will help value their quality of life and help them maintain their autonomy, their self-care capacity and a healthy familial and social interaction.

Resilience is a relatively new term in the field of healthcare. This concept has been studied for about thirty years now, but only over the past seven years has it been discussed within a theoretical and methodological perspective.

In the United States, Canada and in different European countries, the word resilience is used much more often than in Portugal (Oliveira, 2010). According to the same author, unexpected and unseen situations are more and more likely to happen nowadays; situations that seem to follow random patterns of action and in which there is evidence of new and progressively bigger demands. In such contexts,

unless one understands what he has to do to survive and find the right balance in an unstable environment, he will surely give in to any mishap or misfortunes that life throws at him.

Resilience comes from the Latin term *resilientia* (Anaut, 2005), and the origin of the concept dates back to early nineteenth century. Originally, it was mostly applied to physics and engineering. Thomas Young, one of its precursors, introduced for the first time in 1807 the notion of modulus of elasticity. The scientist described experiments conducted on a bar undergoing tension and compression in only one direction and established a relationship between the strain applied to a body and the deformation that took place as a result of such strain (Oliveira, 2010).

The term was adopted by social sciences and used to characterize people who can resist and overcome adversity, even though they are exposed to adverse environments. According to Tavares (2001, p. 46) "To be resilient is to develop the physical or physiological capacities which will favour certain levels of physical or psychological endurance and will keep on doing so until a certain immunity enables him/her to acquire new skills of action, allowing this person to adapt better to an unpredictable reality and act appropriately and quickly in order to solve the problems raised".

The concept of resilience, in terms of psychology, was acquired "through exact sciences, yet brought something new", according to Amaro (2013, p. 149): "resilience does not correspond to a situation in which one returns to a previous state, as it does in physics for instance, but rather stands for a kind of behaviour that will allow people to overcome any stressful or traumatic situations, a feature that distinguishes resilience from resistance, since the former has been used to define the ability to go through adverse situations in a positive manner. "

Barlach (2005) states that resilience depends greatly on the kind of relationship that a person has with his surrounding environment. This relationship will influence that person's behaviour depending on the kind of situation he will have to deal with, leading him to act adequately or inadequately. According to Chequini (2007, p. 94), resilience is "a process that considers multiple factors, a personal dynamics which results in the overcoming of adverse situations, in which one expects not only the individual's positive adaptation to an adverse situation, but also his own transformation and the transformation of his surroundings." This way, and according to the authors, the way in which resilience manifests in a person depends on the way in which that person deals with adversity.

According to Pereira (2001), cited in Belancier, Beluc, Silva & Gasparelo (2010, p. 228), resilience is the universal capacity that allows an individual, a group or a community to prevent, minimise or overcome the scars left by or the effects of adversity. Resilience is like a rubber band that can be stretched almost to its point of rupture and, once released, is able to get back to its original form (Oliveira, 2010).

Resilience is a person's ability to adapt to the situations which he/she has to face and with which he/she has to deal in order to achieve an internal and external harmony (Simão and Saldanha, 2012). The same authors contend that this person, throughout his/her life cycle, may have to face stressful situations that can have negative repercussions in his/her life affecting both his/her physical or mental health. Lifelong experiences can vary according to the person's age, to time, to his/her educational and sociocultural level (Simão & Saldanha, 2012).

## 2. Problem Statement

This work aims to carry out a meticulous analysis of the existing scientific bibliography in the field of resilience in cancer patients.

## 3. Research Questions

How can resilience help cancer patients to experience and deal with the disease process and with the prescribed treatments?

## 4. Research Methods

A study was conducted based on the methodological assumptions made possible by a systematic review of the literature, following the different stages presented by Ramalho (2008). The systematic reviews of the literature allow us to identify, select and critically assess a set of studies, allowing us to extract the best scientific evidence and therefore be able to respond to a certain research question and/or to meet the objectives that had previously been defined. Thus, table 1 was designed to frame the research question according to the chosen methodology.

**Table 1.** Inclusion and exclusion criteria

Selection Criteria	Inclusion Criteria	Exclusion Criteria
Participants	Cancer patients aged $\geq 18$ years ; Cancer patients who are currently undergoing treatment (radiotherapy and chemotherapy).	Studies with children with an oncological disease; Studies that do not describe or contemplate resilience in cancer patients.
Intervention	Resilience as a way for cancer patients to experience the disease process and treatments	All studies relating to oncological patients but which do not involve resilience; Resilience in non-oncological patients.
Objectives	Exploring resilience in oncological patients; Identifying strategies that make it easy for them to face cancer and its treatments.	All studies that do not analyse the inclusion variables.
Method	Studies with a quantitative and qualitative methodology; Systematic reviews of literature with or without meta-analysis	Any other methods that do not include the inclusion methods.

In order to identify relevant studies conducted within the defined criteria, surveys which included studies conducted between January 2010 and October 2017 were carried out. The analysis covered studies in Portuguese and English and made use of the following electronic Database platforms: Google Scholar, Scielo, PUBMED; Cochrane Central Register of Controlled Trials Database of Abstracts of Reviews of Effects, Business Source Complete, ERIC, Regional Business News NHS Economic Evaluation Database, Academic Search Complete, MedicLatina, Health Technology Assessments, Nursing & Allied Health Collection: Comprehensive, Library, Information Science & Technology

Abstracts, Cochrane Methodology Register, and the Cochrane Database of Systematic Reviews (via EBSCO).

Taking into account the abovementioned guidelines, the next step was to find the main Randomised Controlled Trials (RCT) that would allow for achieving the stated objectives. The search was based on the following keywords: "Resilience" AND "Cancer Patient "or" radiotherapy "or" chemotherapy ". Once this phase was completed, the keywords that could constitute the Medical Subject Headings (MeSH) descriptors were confirmed, using the National Center for Biotechnology Information platform.

From the collected studies, 6387 studies gathered through the application of the relevance test I were excluded as they were not in accordance with the research question. Thus, following the application of the relevance test I, 13 studies were deemed suitable. Three of them were omitted because they had already been selected in other databases. 10 studies were selected to become part of the relevance test II.

After the application of the relevance test II, only 7 studies among the 10 previously approved were deemed appropriate enough to be part of the project. Those 7 studies had then to go through a thorough assessment procedure carried out by 2 researchers and that was conducted independently as far as the inclusion decision was concerned. We went on with our process of selection in order to find more studies that would meet the requirements of the relevance test II through the application of similar criteria.

Therefore, new questions were then designed to be used as guidelines during the inclusion process and that were taken into account when we had to decide which studies would be part of the sample. These questions were constructed in a way that would only allow affirmative or negative answers, for example, does the study fit the subject matter?

As with the relevance test I, whenever the answer to a question was negative, the study would be excluded from the review (Pereira & Bachion, 2006). After this procedure was carried out, 7 studies were accepted for critical assessment.

## **5. Findings**

After the studies that were identified through the types of research selected and the use of the methodology mentioned above, through which it was located, selected studies and performed a critical evaluation based on the selection criteria adopted, we selected 7 studies for the corpus of study which is shown in Table 2 .

60 patients, randomly selected among the patients of the radiotherapy service of a highly regarded hospital situated in a mid-west region of Brazil, took part in Junior and Zanini's study (2011– Study 1), whose objective was to analyse stress conditions, coping strategies, resilience and subjective wellbeing in cancer patients undergoing radiotherapy treatment. The study took place between February and October 2008 and the participants had already undergone several sessions of their radiotherapy treatment (between four and thirty-five).

66.70% of the participants were female and 33.3% male. Their age ranged between 26 and 82 years (M = 52; SD = 13.25), 51.7% of them hadn't completed their basic education, 60% were married, 96.6% had children, 88.3% were living with other family members and 58.3% were Catholics. As far as

diagnosis is concerned, 31.7% of the patients were diagnosed with breast neoplasia, 16.7% of them with prostate neoplasia, 23.3% with uterus neoplasia, 11.7% with head and neck cancer, 5% with brain cancer, 3,3 % with skin and bowel cancer 3.3% and 1.7% of them had been diagnosed with lung ,colorectal and oesophageal cancer.

The results of the Resilience Inventory show that the scale factors with the most significant results were hyperemotionality ( $z = -3.49$  and  $P = 0.00$ ) and empathy ( $z = -2.30$  and  $P = 0.02$ ), while on the subjective wellbeing scale, negative affection ( $Z = -2.24$  and  $P = 0.02$ ), life satisfaction ( $z = -2.21$  and  $P = 0.03$ ) and life dissatisfaction ( $z = -2.24$  and  $P = 0.02$ ) were the most significant factors. There was also evidence that women are the participants who show higher signs of negative affection and dissatisfaction with life, while men show a higher satisfaction with life (Junior & Zanini, 2011).

In the same study, it was also possible to witness that the more these patients use the Logical Analysis coping strategy, the more negative affection ( $r = 0.390$ ;  $p = 0.002$ ), dissatisfaction with life ( $r = 0.348$ ;  $p = 0.006$ ) they exhibit and the more psychological symptoms ( $r = 0.449$ ;  $p = 0.001$ ) they manifest. The use of these logical analysis-type coping strategies suggests the triggering of a greater discomfort concerning the patients' subjective wellbeing and the presence of more psychological stress symptoms.

The more the patients resort to support strategies, the greater their satisfaction at work ( $r = 0.381$ ;  $p = 0.003$ ) and the positive affection they exhibit ( $r = 0.350$ ;  $p = 0.007$ ). The problem-solving coping strategy is closely related with positive affection ( $r = 0.492$ ;  $p < 0.000$ ); while cognitive avoidance is closely related with negative affection ( $r = 0.329$ ;  $p = 0.010$ ) and with psychological symptoms ( $r = 0.281$ ;  $p = 0.036$ ).

The more the patients turn to an acceptance/resignation strategy, the less they feel positive affection ( $r = 0.307$ ;  $p = 0.019$ ), the less they feel satisfied with life ( $R = -0.272$ ;  $p = 0.039$ ) and the more they suffer from negative affection ( $r = 0.271$ ;  $p = 0.040$ ), dissatisfaction with life ( $R = 0.421$ ;  $p = 0.001$ ) and the more strongly they feel the effect of psychological symptoms ( $r = 0.367$ ,  $p = 0.006$ ).

The gratification-focused coping strategies are closely and positively related to positive affection ( $r = 0.371$ ;  $p = 0.003$ ) and have a negative effect on the participants' physical symptoms ( $r = -0.266$ ;  $p = 0.043$ ).

The Emotional Discharge coping strategy shows a significant direct relationship with such factors as hyperemotionality ( $r = 0.327$ ,  $p = 0.011$ ), negative affection ( $r = 0.404$ ;  $p = 0.01$ ), life dissatisfaction ( $r = 0.407$ ;  $p = 0.001$ ) and with psychological symptoms ( $r = 0.387$ ;  $p = 0.003$ ), and seems to have an inverse relationship with the life satisfaction factor ( $r = -0.261$ ;  $p = 0.044$ ).

Acceptance/Resignation and Emotional Discharge are also coping strategies that will lead to more intense negative affections and a lower life satisfaction that will, in turn, give rise to psychological stress symptoms. Innovation and tenacity, empathy and emotional competence represent factors of resilience that will help patients face the disease process and the radiotherapy treatment they have to endure.

The qualitative study conducted by Rodrigues and Polidori (2012 – Study 2) aims to understand the process of coping with the disease and the level of resilience of cancer patients who have to undergo chemo treatments and to analyse their families' resilience.

The participants were 3 cancer patients - together with their families - who had been admitted to a private hospital, in which they received the medical treatment they were prescribed between October 2009 and March 2010. The data collection instruments used were semi-structured questionnaires and the patients' records.

The results of the study show that the disease itself is an agent that will trigger the patient's resilience. The incentive and the strength they get from health professionals, from their family and friends make them more willing to live and to adhere to the treatment they were prescribed. The patients and their families claimed that they use their optimism, courage, trust, faith, and positive thinking when they have to overcome all the difficulties and adversities caused by chemotherapy. The study shows that the resilience process is dynamic and is supported by the interaction of the patient's protection factors in the process of overcoming adversity. Therefore, they should use the "*I have, I am and I can*" resource to better face difficulties and learn with the same difficulties. In the patients' perspective, the treatment they had to undergo brought about a greater union among all family members and they declared that they became the centre of the family's attention and concerns and those were clearly positive aspects (Rodrigues & Polidori, 2012, p.619).

Amaro (2013 – Study 3) conducted a qualitative study to investigate the factors that promote resilience in women who were diagnosed with breast cancer, taking into account their individual experiences. 5 women whose age ranged between 49 and 60 years agreed to take part in the study. These women were Catholic and Protestant and were in the final stage of their treatment.

The life history method was used to collect the data and a content analysis was subsequently carried out. The results show that women, by using experiential and attitudinal values during the treatment process, were able to find a meaning for their illness and for their lives. This approach is crucial to favour resilient behaviours.

It was also demonstrated that women, when they are diagnosed with breast cancer, experienced feelings that make them aware of the finitude of their existence and undermine their self-esteem.

During this process in which they have to become aware of the pathology and to go through several treatments, all the women involved in the study referred the importance of the same factors: the role played by their families, their faith in God and the presence of humour as a way to keep the pain away from their minds. Their attitudinal values include the acceptance of the disease, the acceptance of the prescribed treatment and the need to maintain their dignity while they endure pain. Generally speaking, women chose not to complain about their fate; instead they choose to laugh at their problem, accepting that they were suffering from cancer and that their lives were, nonetheless, meaningful. Despite all the risks and adversity caused by the disease, they began to realize the importance of following certain attitudinal values. This way, resilience has favoured a psychological action that was more focused on reducing risk mechanisms and on preserving protection mechanisms.

Galvan, Kaufmann, Brustolin and Ascari (2013 – Study 4) chose to investigate the kind of perception that an adult patient diagnosed with leukaemia attaches to the hospitalization process and the way he faces the disease and the subsequent treatments. This study was based on the data collected from a sample of 7 patients with leukaemia who had been admitted in a cancer clinic. The results of their qualitative study reveal that the main negative feelings reported by patients and that were directly caused

by the disease and by the subsequent process of hospitalization were sadness, pain, social pain, the fear of death, the fear of the unknown, insecurity, despair, denial and the desire that they could get away from this situation. After their hospitalization and once the treatments started, the patients began to exhibit feelings of hope influenced by their response to therapy. They started believing that it was possible for them to heal and began, therefore, to feel a greater sense of optimism and acceptance. According to the patients, their family support, the confidence in the multiprofessional team that was carrying out the treatments and their spirituality and faith were the factors that made it possible for them to face the disease, the hospitalization and the painful treatment they had to undergo. This ability to overcome adverse situations and to give a new meaning to life triggered their resilience. The patients' beliefs and those they shared with their families help increase resilience, because these influence how they act when faced with the difficulties inherent to the disease and how well they will accept the treatments.

Through an integrative review of the literature, Tomaz, Junior and Carvalho (2015 – Study 5) found out that the studies included unanimously claim that chemotherapy, in addition to physical discomfort, also cause psychological stress and emotional distress in the patients. According to the authors, spirituality and religiosity help mitigate the adversities caused by the illness and its treatment, acting as a source of balance, as they increase the patients' will to live. These factors are, undoubtedly, important to increase cancer patients' resilience. Praying and clinging to one's faith and waiting for a miracle are key factors that will help patients face cancer and its treatment. Spirituality and religiosity help face this painful experience, acting as a source of balance and giving the patients a higher motivation to fight for their lives and will help them overcome the most difficult situations (Tomaz, Junior & Carvalho (2015).

Somasundaram (2016 – Study 6) compared the relationship that exists between resilience, social support and despair in 60 cancer patients who were between 18 and 65 years old. Those patients, randomly selected, were divided into two groups based on the kind of treatment they were undergoing: curative care (n = 30) or palliative care (n = 30).

The results show that the participants who were receiving palliative care had lower resilience, lower levels of perceived social support and exhibited more moderate levels of hopelessness than those who were receiving curative care. The results showed that there is a deep correlation between resilience and the perception they have of the social support they are provided with and that there is a negative correlation between resilience and hopelessness.

In the group of patients in curative care, there was a negative correlation between perceived social support and the feeling of hopelessness. A similar correlation pattern was observed in patients who were receiving palliative care. There was a positive correlation between resilience and the perception that patients who were receiving palliative care had about the social support they were granted ( $r = 0.51$ ,  $p < 0.01$ ) and a negative correlation between resilience and the feeling of hopelessness ( $r = 0,70$ ,  $p < 0.01$ ).

Similarly, there was a negative correlation between perceived social support and hopelessness ( $R = -0.63$ ,  $p < 0.01$ ). Resilience was significantly associated with a lower sense of hopelessness and with a strong social support among patients who were receiving curative care. This evidence indicates that patients in curative care have a higher sense of hope and higher perception of the social support they are being provided with. It is reported that the social support provided by the family influences the process of

positive adaptation. In patients who are in palliative care, social support is also seen as a factor that increases resilience they need to face psychological suffering.

Soratto, Silva, Zugno and Daniel (2016 – study 7), based on a field research that followed a descriptive qualitative approach, studied the importance of spirituality in the resilience of 10 cancer patients admitted to a hospital oncology unit. 4 of those patients were female and 6 were male and they were between 35 and 77 years old.

The results of the study reveal that there is a relationship between spirituality and cancer; a relationship which can be summarized in the expression "cancer frightens and spirituality renews". Spirituality increases the patients' resilience in situations in which they have to deal with the disease and its treatment. This relationship will bring the satisfaction and comfort which are essential to be able to face stressful and difficult situations. The influence that spirituality has on resilience is evident and crucial to help patients face the process of illness and the subsequent treatment and that is why these patients perceived that "faith moves mountains", that it gives them strength and support when they feel too powerless to keep on fighting.

**Table 02.** Summary of evidence found

Articles	Identification of the study	Method	Participants / Sample	Objectives
Article 1	Júnior, W.P., & Zanini, D.S. (2011). Coping Strategies of Oncology Patients in Radiation Therapy. <i>Psychology: Theory and Research</i> , 27(4), 491-497.	Cross-sectional, descriptive and correlational study	60 cancer patients, aged 26-82 years (20 men and 40 women)	To analyze stress, coping strategies, resilience and subjective well-being in cancer patients undergoing radiotherapy
Key Findings	The results show that the use of the direct coping strategy is associated with a higher level of resilience and positive affect, while the use of the avoidance strategy increases the perception of negative affect and decreases the positive affect. Coping strategies may interfere with subjective well-being and may establish a significant relationship with resilience factors in cancer patients undergoing radiation therapy.			
Critical review of quality	6 positive and 2 unclear answers			
Article 2	Rodrigues, F.S.S. de, & Polidori, M.M. (2012). Confrontation and resilience of patients undergoing chemotherapy and their relatives. <i>Brazilian Journal of Cancerology</i> ; 58 (4), 619-627.	Qualitative study	3 patients admitted to a hospital in the period from October 2009 to March 2010, and 3 family members	Understand the process of coping with the disease and the resilience of cancer patients undergoing chemotherapy and their relatives.
Key Findings	Patients have demonstrated that the hospitalization process and the side effects of treatment interfere with their family and social relationships. Participants use two strategies to address the problem: focusing on the problem and focusing on emotion. The information obtained suggests that chemotherapeutic treatment interferes with the way patients and their families face the disease and the process of resilience. It was found that the treatment contributes to the development of resilience, promoting greater use of the protective factors of the participants.			
Critical review of quality	8 affirmative questions			
Article 3	Amaro, L.S. (2013). Resilience in breast cancer patients: the meaning of life as a protection mechanism. <i>Logos &amp; Existence. Journal of the Brazilian Association of Logotherapy and Existential Analysis</i> , 2 (2), 147-161.	Qualitative study	5 women with breast neoplasia in the 49-60 age group.	Investigate the factors which promote resilience in patients with breast cancer, according to the experience of each woman.
Key Findings	Women, using experiential and attitudinal values during the treatment process, were able to find meaning in the fact that they became ill and in their own lives, favoring resilient behaviors			
Critical review of quality	9 questões afirmativas			

Article 4	Galvan, D.C., Kaufmann, G., Brustolin, A.M., & Ascari, R.A. (2013). Perception of leukemia patients before hospitalization. <i>Rev Enferm UFSM</i> ; 3 (Eng.), 647-657.	Qualitative study	7 adult patients aged 18-60 years of both sexes with leukemia admitted to an oncology clinic.	Investigate the perception that the adult patient with leukemia attributes to the hospitalization process and how to face the disease and treatments
Critical review of quality	9 affirmative questions			
Key Findings	The patient seeks to resist the disease process and the physical and emotional upheavals that the disease brings, allowing him to rethink his existence and find ways of resilience to face this condition. The ability to overcome adverse situations and give new meaning to life has resulted in resilience. Patient beliefs and those shared with the family contribute to increased resilience because they influence how they deal with the difficulties inherent in the disease and its treatment.			
Article 5-	Tomaz, L.A., Junior, E.F.V., & Carvalho, P.M.G. (2015). Confrontation and resilience of cancer patients undergoing chemotherapy. <i>R. Interd</i> ; v. 8, 2, 195-201.	Integrative literature review	Primary Studies	To identify aspects related to the way of facing the disease and resilience of cancer patients undergoing chemotherapy.
Critical review of quality	Score of 95%			
Key Findings	The ways patients use to cope with illness are religious worship, seeking spiritual comfort, followed by seeking the support of family and friends. The patient who discovers that he has cancer demonstrates a series of feelings, but he tries to overcome these feelings by seeking support in God, getting away from the problem or even looking for information about the illness and the treatment. Some patients avoid the problem, others approach the problem. Resilience increases as time goes by and before treatments.			
Article 6	Somasundaram, R.O. (2016). A Comparative Study on Resilience, Perceived Social Support and Hopelessness Among Cancer Patients Treated with Curative and Palliative Care. <i>Indian Journal of Palliative Care</i> , Vol. 22, 2, 135-140.	Study controlled randomized	60 cancer patients aged 18-65 years, randomly selected and divided in two treatment-based groups, namely curative care (n = 30) and palliative care (n = 30).	To study the relationship between resilience, social support and hopelessness in cancer patients undergoing treatment.
Critical review of quality	Score of 92.5%			
Key Findings	Resilience was significantly associated with less hopelessness and higher levels of supportive and social perception. Cancer patients are resilient.			
Article 7	Soratto, M.T., Silva, D.M., Zugno, P.I., & Daniel, R. (2016). Spirituality and resilience in cancer patients. <i>Revista Saúde e Pesquisa</i> , v. 9, 1, 53-63	Field research with qualitative descriptive approach	10 cancer patients being treated at an oncology clinic	Identify the importance of spirituality in resilience to cancer patients admitted to a hospital oncology unit
Critical review of quality	9 affirmative questions			
Key Findings	The patients highlighted the difficulties faced by the illness process, reporting on the changes that have occurred in the family routine, in the activities of daily living and in the faith in God. They consider that there is influence of spirituality in the resilience to face the process of illness and treatment.			

## 6. Conclusion

It has been clearly established that any oncological disease has a significant influence on the patients' lives, but, according to Lopes (2014, p. 11), it is "essential that they do not accept their fate, that they never give up their fight." The patients who show a higher sense of resilience end up showing a greater capacity to adapt to their new reality, "managing their emotions, controlling their impulses, developing positive feelings". When the patients analyse the whole situation, resilience allows them to have a greater self-efficacy and the capacity to build new bonds, always focusing on the meaning of life. Cancer and its treatments, logically seen as situations of adversity, will transform the patients' lives, causing them to feel a certain sense of loss and confusion.

Resilience is then a very important factor for achieving a good mental health "(Lopes, 2014, p. 11). It is therefore extremely important for the cancer patient to be resilient or to try and develop resilience when he doesn't have it. Any oncological disease affects different dimensions of the human being and brings with itself a negative aura that will influence the majority of cancer patients and therefore requires a good coping process, requires the patient to be able to adapt to a new reality and, consequently, will require an effective process to build resilience.

There is evidence that resilience goes way beyond the mere adaption to bad or distressful situations, since it can lead the patient to adapt even more effectively to the situation of adversity that he is experiencing. Cancer, due to its high mortality rate, will cause deep fear and every negative consideration we can think of. This negative perspective will condition negatively the way in which patients will live through the disease and how they will accept and deal with its treatment.

The results of the review show that the use of the direct coping strategy is closely related with the highest levels of resilience and positive affection, while the use of the avoidance coping strategy increases the perception of negative affection and reduces positive affection.

Coping strategies can interfere with the patients' subjective wellbeing and can establish meaningful relationships with resilience factors in cancer patients who are undergoing radiotherapy. There are patients who use two strategies to confront the problem: they focus on the problem and they also focus on emotion. Chemotherapy interferes with the way patients and their families face the disease and the resilience process. Evidence shows that the treatment contributes to the development of resilience, promoting a greater use of the participants' protective factors. Patients, by using experiential and attitudinal values during the treatment process, are able to understand the fact that they have fallen ill and find a meaning in such a painful situation and are capable of looking at their current lives and find objectives to keep on living it and fighting for it. These expectations will, in the end, favour resilient behaviours.

When they try to fight the disease process and the physical and emotional shocks that the disease brings, the patients will have the chance to rethink their existence and to find the resilience to face this condition. The ability to overcome adverse situations and give a new meaning to life leads to resilience. This review found that the patients' beliefs and those they share with their families contribute to the increase of resilience, because they influence the way they act when they have to face the difficulties caused by the disease and the treatments they will have to endure.

The findings from this review highlighted that the different strategies the patients used to face the disease are their religious devotion, looking for some spiritual comfort, and the support of their families and friends. Resilience tends to increase as time goes by and with the development of the treatments. Resilience is strongly associated with a lower sense of hopelessness and with higher levels of the patients' perception of the importance of the social support they are receiving.

According to the review findings, the role of the nurse has to be highlighted, as nurses are the health workers who spends more time with the patients and who can provide them with the psychosocial support they need and deserve so they can have a better social support and develop coping strategies and locus of control that will help them cope in a more positive way with the disease and its treatment and with the effects it will have on their lives.

The results obtained in this study show how important it is to give special attention to these moderators and to the psychological comorbidity inherent to any oncological disease (depression and anxiety symptoms, non-adaptive coping mechanisms) which, as a result, will lead to a decrease in the patients' wellbeing and, eventually, to a lower resilience. This evidence is useful to demonstrate that care givers will have to be much more aware, in their upcoming professional career, of the importance of providing cancer patients with better medical care and that this better medical practice will have to be based on a regular assessment of their wellbeing and on the provision of an appropriate psychosocial support so they may become more resilient.

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