

# CBT - PSYCHOLOGICAL INTERVENTION: A PROPOSAL TREATMENT PLAN WITH POETRY FOR PEOPLE DIAGNOSED WITH KIDNEY CANCER

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**Abstract:** Goal: this work presents a proposal – an intervention plan based on cognitive-behavioral therapy CBT using poetry. CBT has shown favorable, positive and significant results in relation to the various difficulties that cancer patients face, aiming to improve quality of life. Method: The following proposal intervention will be carried out in a group setting. Consists of six weekly group sessions lasting two hours. The group will be homogeneous, composed of eight male smokers aged between 60 and 65 with kidney cancer, whose treatment is done through medication. One of the main sessions will be dedicated to reflect on a poem by HAEMZ.

**Keywords:** Liver Cancer; CBT; Health Psychology; Poem.

## INTRODUCTION

Kidney cancer is one of the most common cancers of the urinary system. It regularly develops in people over 40 years of age, mainly between 60 and 70 years of age, and is more common in men than in women. It is represented by 90% of renal cell carcinoma, divided into 3 types: clear-type renal cell carcinoma (the most common), papillary renal cell carcinoma and chromophobic renal cell carcinoma. It is a cancer that is usually asymptomatic at first and, therefore, is usually only diagnosed at a more advanced stage, which affects the prognosis and the likelihood of survival. Only 30% of patients are diagnosed based on symptoms, and the rest usually find out through routine tests. It can be detected through ultrasound, magnetic resonance imaging, urine analysis, CT scan, ultrasound and biopsy (Capitonio & Montorsi, 2016; Liga Portuguesa Contra o Cancro, 2024; Soares & Caires, 2024).

## STAGES AND SYMPTOMS

Regarding the progression in stages, this depends on the size of the tumor, the areas of the organ affected and its spread. There are four stadiums. Stage I and II are early stages of cancer, in which the tumour is confined to the kidney; that is, only tumour cells are found. In stage III, the tumour extends beyond the kidney, but there is no

lymph node involvement or metastases. In stage IV, there is tumour invasion beyond Gerota's Fascia (a key structure in the kidney's support system that provides protection and stability) with or without lymph node involvement or tumours that have metastasized (Liga Portuguesa Contra o Cancro, 2024).

Symptoms usually include fatigue, blood in the urine, side pain that does not go away, a lump or mass in the side or abdomen, unexplained weight loss, anaemia, and fever (Liga Portuguesa Contra o Cancro, 2024, CUF, 2024, Soares & Caires, 2024).

One of the main risk factors for this cancer is smoking. It is due to exposure to carcinogens present in cigarettes, such as nitrosamines, which can induce mutations in the DNA of kidney cells, promoting carcinogenesis. The presence of this cancer in first-degree relatives is also one of the main risk factors (Calzada et al., 2024; Soares & Caires, 2024) Another factor to consider is obesity. It can predispose to a chronic inflammatory state and the development of tumours, as it increases the levels of growth factors such as insulin and IGF-1, which have an expansive effect on kidney cells. Arterial hypertension can also be considered as another factor since this condition can lead to tissue hypoxia and oxidative stress in the kidneys, promoting cellular changes that enable the development of neoplasms (Calzada et al., 2024; Soares & Caires, 2024).

Exposure to chemical compounds such as cadmium, benzene and herbicides stands out. This exposure occurs mainly among workers in industries such as metallurgy, chemicals, plastics and agriculture. These chemical compounds are metabolized in the body into substances that can cause DNA damage, which results in the neoplastic transformation of kidney cells (Calzada et al., 2024; Soares & Caires, 2024).

Individuals with kidney cancer experience intense physiological, psychological, social and interpersonal challenges after diagnosis, which leads to a deterioration in quality of life and a greater likelihood of developing psychopathologies such as depression, anxiety and post-traumatic stress. Psychopathologies can play a detrimental role in the patient's decision-making and judgment, which are essential aspects of treatment. They can also result in a decreased immune response, difficulties in controlling symptoms, poor adherence to treatment, longer recovery and reduced survival time (Draeger et al., 2018; Soares & Caires, 2024).

One of the main psychological and interpersonal challenges is being distanced from friends and family, as these patients are afraid of being abandoned because of their medical condition. Often, they do not know how to ask for help due to the embarrassment and shame they feel and, consequently, do not receive enough support. There may still be great difficulty in communicating emotions. All of this promotes social isolation, which leads to a greater likelihood of developing depression and anxiety (Soares & Caires, 2024).

Other challenges include fear of death, side effects of treatment, unpredictability of treatment results, difficulty sleeping, abandonment of important functions in their life, feeling of uncertainty, difficulty maintaining a positive attitude, feeling helpless, missing out on control by depending on medical treatments and others (Draeger et al., 2018; Fonseca, 2016; Liu et al., 2018).

## PROTECTION FACTORS

According to Liu et al. (2018) optimism, resilience and hope are three positive psychological constructs that are recognized as coping strategies

and protective factors against kidney cancer. These authors conducted a study that demonstrated that these aspects as a whole, alleviated cancer-related symptoms and had unique effects on quality of life. It has been shown that hope helps patients adapt and make sense of the disease, maintain a high level of wellbeing and give a reason for their existence, as it provides positive thoughts. Resilience has shown to be favorable for patients to face the disease and treatment actively, adjusting their response in a positive way, as it helps to minimize the negative effects of treatment on somatic functions. Therefore, support should be directed to these patients through psychological interventions or psychological counselling.

Other protective factors are self-efficacy and self-confidence. These aspects increase the ability to find solutions to problems, including those caused by cancer. If the patient believes that they can carry out their daily and self-care activities, we can see an improvement in psychological suffering (Soares & Caires, 2024).

Medical treatments depend on the stage of the disease, the type of kidney cancer and individual characteristics. However, in general, the most common and effective are surgical treatments, namely radical nephrectomy and partial nephrectomy. Radical nephrectomy is the complete removal of the affected kidney and, in some cases, adjacent structures. It is performed for larger tumours or when the tumour is located in areas that are difficult to access. Partial nephrectomy removes only the tumour, preserving healthy kidney tissue. It is more indicated for patients with small tumors, with a higher risk of loss of kidney function or when preserving the kidney is a priority. Next, we have systemic therapies, namely targeted therapies and immunotherapy. Targeted therapies are treatments that target specific molecular pathways involved in the development of kidney cancer, such as blocking growth factor receptors. Immunotherapy uses medications that help the immune system fight cancer (Capitanio & Montorsi, 2016). The psychological look: CBT intervention plan proposal with poetry

A psychological intervention plan is important in the oncological context, as it presents significant results, improving the general state of health and leading to better tolerance to the adverse effects of treatments. It helps many patients regain their enjoyment of life by working through their

anxieties, strengthening their confidence that the treatment is effective. Most psychological interventions in the oncological context are aimed at reconstructing representations about the disease, which can help in managing anxiety and depression, coping with the problem in a clear, organized and adaptive way, working on the feelings related to cancer. It contributes to deconstruction of inadequate beliefs and confrontation of existing conflicts, which makes it easier for the patient to have a clear perception of themselves. Consequently, it might provide a better quality of life (Fonseca, 2016).

The proposed intervention plan includes cognitive-behavioral therapy introducing a poem to stimulate some reflection and insight. Created by Aaron Beck, it is a cognitive model that focuses on the present. It starts from the perspective that thought influences feelings, which in turn influences and changes behaviours. It is aimed at solving problems and modifying dysfunctional thoughts, promoting lasting emotional and behavioural change. Its application is done through cognitive and behavioural techniques that make it possible to recognize dysfunctional thoughts and develop more adaptive alternatives, implying the collaboration and active participation of the patient. Of these techniques, cognitive restructuring, coping and relaxation techniques are the most used in cancer patients (Andrade & Azevedo, 2018; Ferreira et al., 2021).

Over the years and with multiple studies, CBT has shown favourable, positive and significant results in relation to the various difficulties that cancer patients face. It has proven to be quite effective in managing anxiety, depression and stress, presenting a long-lasting response and protective effects. It helps the patient to develop greater adaptation, providing understanding and emotional support in the face of the diagnosis, facilitating adherence to treatment, and identifying and reinforcing coping strategies. It increases quality of life and promotes emotional and functional wellbeing, reducing the psychological impact of the diagnosis (Andrade & Azevedo, 2018; Ferreira et al., 2021; Freitas & Soares, 2024; Santo & Soares, 2024). When it comes to group intervention, CBT offers the opportunity to share information and experiences with others who are facing the same problems and challenges, reducing the perception of isolation (Ferreira et al., 2021).

## METHODOLOGY

The following proposal intervention treatment plan will be carried out in a group, aiming to improve quality of life of liver cancer patients. It is based on Cognitive-Behavioral Therapy, consisting of an individual zero session lasting one hour and six more weekly group sessions lasting two hours. The group will be homogeneous, composed of eight male smokers aged between 60 and 65 with kidney cancer, whose treatment is done through medication.

The age range chosen is founded-based on the health statistics of the Autonomous Region of Madeira from 2020 (Regional Directorate of Statistics of Madeira, 2022), situated in south Europe in Portugal. In this context, a small Portuguese island, kidney cancer had a total of 11 deaths, 7 of which were men and 4 were women. Two of those deaths were people aged between 45 and 49, two were aged between 50 and 59, four were aged between 65 and 74 and three were aged between 75 and 89. Thus, the generations most affected by this cancer are Generation X (44 and 59 years old) and the Baby Boom Generation (60 to 78 years old).

Therefore, the generation chosen to work with was the Baby Boomers. Baby boomers refer to people born between 1945 and 1964 which was a period of economic growth and a period in which the Great Depression and World War II occurred. They are considered motivated, optimistic and workaholic people. It is a generation that was taught to compete with discipline, order and respect for others. The job represented a way of affirming their identity. However, quality of life was not largely preserved, as the anxiety generated by the need to transform society ended up intensifying the pace of work, as this was seen as the main element of that time. Baby boomers are a generation prone to medical conditions such as high blood pressure, cancer, heart problems, and obesity, as well as being a generation with high levels of depression, psychological distress and drug use. They are one of the generations most at risk of mental health problems, particularly due to frequent marital dissolution and a more unstable job market (Balon, 2023; Santos et al., 2011). Post-traumatic stress is common in this generation, as many have served in the military and participated in wars. They also

grew up in a time when mental health was not addressed, with much stigma and the idea that mental problems are something shameful, which contributed to the inhibition of this subject (Bogenberger, 2024). Session 0: Psychological assessment goals.

The goals of this session are to gather psychological, physical and emotional information, carry out an initial assessment of the emotional and psychological state, create the therapeutic group and establish a therapeutic relationship with each patient.

Initially, a semi-structured interview will be carried out; that is, in addition to questions of demographic nature and based on the patient's history, some will be mandatory and involve emotional, physical and physiological aspects, such as:

- what type of medical treatment are you performing?
- Have you experienced side effects related to the treatment?
- Are you well-informed about your health and treatment?
- How do you feel about the idea of sharing your experiences and feelings with other people who are also going through the same situation?
- What is your weekly availability?
- What have been your biggest emotional difficulties since your diagnosis?
- How have you been dealing with daily worries?
- Do you often find it difficult to relax?
- Do you currently smoke?
- How would you describe the impact the diagnosis has had on your life?
- Do you have any emotional support?
- How do you assess your ability to face and overcome the challenges that arose with diagnosis and treatment?
- What do you usually do to distract yourself or feel better?

After this initial interview, two psychological instruments will be applied to assess the patient's emotional and psychological state. The 21-item Depression, Anxiety and Stress Scale, followed by the Warwick Edinburgh Mental Wellbeing Scale. The objective is to assess the patient's wellbeing and analyze whether they have depressive and

anxiety symptoms. Both instruments are short form so that the patient feels safe and motivated (Figueiredo, 2020; Younas et al., 2022).

The EADS-21 is the shortened version of the EADS-42, assessing depression, anxiety and stress. It consists of 21 items, organized into 3 subscales (depression, anxiety and stress). The depression subscale incorporates the concepts of dysphoria, discouragement, devaluation of life, self-deprecation, lack of interest or involvement, anhedonia, and inertia. The anxiety subscale incorporates autonomic system arousal, musculoskeletal effects, situational anxiety, subjective experiences of anxiety, and finally, the stress subscale incorporates difficulty relaxing, nervous arousal, being easily agitated/upset, irritable/overreacting, and impatience (Ribeiro et al., 2004).

The Warwick Edinburgh Mental Wellbeing Scale is a scale composed of 14 items. It was recently translated and adapted for the Brazilian population. It aims to capture psychological functioning and cognitive-evaluative dimensions, including affective and emotional aspects that encompass a broad conception of wellbeing. It allows an integrative assessment of well-being in the subjective and psychological domain since it incorporates the hedonistic and eudaemonistic aspects of well-being and includes positive affects, satisfactory interpersonal relationships, self-acceptance, personal development and autonomy (Figueiredo et al. al., 2022; Younas et al., 2022). These two psychological instruments serve as assessment tools to assess the patient's emotional and psychological state (pre and after intervention).

## **SESSION 1: PSYCHOEDUCATION ABOUT THE IMPACT OF CANCER**

The objectives of this session are to explain to patients the psychological impact of cancer, its symptoms and the side effects of treatment in order to develop a better understanding of the medical condition; provide an insight into how group therapy can help improve wellbeing and quality of life; provide information about how the intervention works and its objectives and teach relaxation strategies to deal with stress and anxiety.

The acquisition of knowledge about cancer and its respective treatments by patients is important for effective coping, creating a feeling of greater control over the situation (Fonseca, 2016).

Psychoeducation aims to guide patients in various aspects, namely in the construction of beliefs, values, and feelings, as well as regarding the consequences of behaviour. It also includes guiding patients (and/or family) regarding the existence of an illness, whether physical, genetic or psychological. From this perspective, it is used in the health area and individual treatment or therapeutic groups, guiding and informing patients about their illness, respective symptoms and treatments (Conceição & Eichinger, 2020).

It should be noted that there is poor mental health literacy, especially among the older population, which makes greater dissemination urgent. There is a great deal of stigma surrounding mental health, as many people have a very negative attitude towards it. Many communities do not discuss mental health or share information about issues related to it. Stigma reduces individual and collective awareness and is very present in the Baby Boomer generation. Therefore, informing patients about mental health and making them understand it reduces the existing stigma and contributes to an increase in help-seeking behaviours, in addition to enabling people to recognize and act on the signs of psychological suffering that they can feel. Psychoeducation plays a major role in this issue, as it helps promote mental health literacy (Neto et al., 2021).

In this sequence, we propose that the session begin with a brief presentation by the psychologist and a brief presentation by each member of the group. They should share, if they desire some personal information regarding their names, ages, and experience with the disease and treatment, which hopefully help create a better supportive environment. Afterwards, the psychologist will talk about the intervention plan and its goals, addressing the use of Cognitive-Behavioral Therapy with poetry. The importance of the intervention, the respective sessions and their impact on the lives of patients will be highlighted, as well as the importance of talking and seeking to learn about mental health. It will also address how cancer affects physical, psychological and social functioning, highlighting that deterioration of these dimensions as common in this medical condition.

The patient will feel free to ask any questions and clarify any doubts.

As we approach the end, there will be a moment of reflection about the session after all questions have been asked. The psychologist will ask how they feel after what was said. Finally, a relaxation technique will be performed. The psychologist will briefly explain how relaxation techniques can help reduce anxiety and alleviate physical symptoms associated with stress. In this context, diaphragmatic breathing will be performed.

## **SESSION 2: SHARING, LISTENING AND FEELING - A POWERFUL GROUP THERAPY GOAL**

This session aims to share patients' experiences, problems, emotions, feelings and challenges; show them that they are heard and that their emotional issues are validated, making them realize that they are not alone; identify situations, thoughts, emotions, and problems that are challenging or that cause greater suffering; promote mutual support and empathy and social wellbeing.

As mentioned previously, one of the major consequences that arise in people with kidney cancer is their distancing from other people, leading to social isolation. From this point of view, living has a social nature. Social wellbeing needs to be considered when it comes to a holistic approach to mental health and overall wellbeing. Social wellbeing includes social integration and, this proposal plan aims to increase this dimension. Individuals feel integrated when they have something in common with other members of their social context. The feeling of social integration has positive psychological effects, as it conditions the feeling of belonging and self-esteem, in addition to contributing to the prevention of psychopathologies. Thus, this intervention aims to develop this same feeling since all members have something in common and have the opportunity to share their experiences so that they can realize that they are not alone and can be heard. Professionals must be aware of the importance of reducing social isolation, promoting social integration and contributing to higher levels of social wellbeing, leading to a sense of belonging, security and greater self-esteem (Lages et al., 2018).

Another aspect to be highlighted is the issue of stigma regarding mental health present in the baby boom generation. Therefore, we also aim to break this stigma, making people feel welcome to talk about their emotional problems and that it is okay to be vulnerable.

The psychologist will remind again about confidentiality. He will invite each person to share about their problems, emotions and challenges they are facing due to cancer and/or treatment. Then, he will actively listen, empathetically understanding what is being said in order to show that he is following along. Additionally, it will also encourage the group to listen, support and allow them to comment on what is being shared in order to help each other. It will be pointed out that no one is there to judge. After each sharing, the psychologist will invite all patients to share about how they felt when talking and listening to their peers. Session 3: Sharing, Listening, Feeling and Reflecting

This session aims to address some problems caused by the disease, help patients look at their lives more positively, promote the development of solutions, and try to modify dysfunctional thoughts.

Draeger et al. (2018) observed that the use of reflection and coping strategies improves the likelihood of survival. The way the patient faces the problem influences their adaptation and, therefore, coping allows patients to deal with the demands imposed by the disease and may increase the feeling of general wellbeing. Problem-focused and emotion-focused coping strategies of CBT are the most used in cancer patients. These mechanisms, when well applied, can be great allies in preserving the quality of life, as they contribute to increasing the individual's resilience (Soares & Caires, 2024; Santo & Soares, 2024, Freitas & Soares, 2024).

### **SESSION 3: THE SESSION WILL BEGIN WITH THE PSYCHOLOGIST REFLECTING ABOUT THE TOPICS OF THE PREVIOUS SESSION.**

The psychologist will use gaming cards to put the “coping card” technique into practice (Eichinger & Conceição, 2020). He will explain that this technique consists of motivating towards changing behavior with realistic but motivational phrases, helping people to stay focused, especially in those moments when everything seems to be falling apart, in addition to promote cognitive reformulation and coping with emotions (Sachweh & Conceição, 2022). The psychologist will distribute the cards, along with pens, and ask patients to reflect on what they shared in the previous session and to think of a phrase or phrases that can help them deal with their challenging situations.. These cards can include phrases like "you can do it", "you are strong", or reasons to continue the treatment. In the end, the psychologist will suggest that they can keep these cards and place them in a visible place in their homes (kitchen, bedroom, walls) so that they can look at them every day and regain motivation.

Then, the psychologist will distribute new cards, but this time, the content will be different. He will ask them to reflect again on the previous session, asking open-ended questions to facilitate reflection, such as, "What are your biggest fears regarding the diagnosis? / What are your biggest concerns?" On the front of the cards, patients will place the challenging situation or negative thought or emotion and on the back a positive coping strategy. The psychologist will help develop reflection by asking, for example, "How can you create a supportive environment around you? /What advice would you give to someone who is going through the same thing?" and even encourage colleagues to do the same for him.

Everyone will be asked to read their cards out loud, if they wish to. Peers can suggest adjustments or comment on how the strategies could also work for them or whether they already use them or have used them.

Finally, the psychologist will suggest that the group keep the cards close to them so that when they are faced with a challenging situation, they can replicate the strategies. Likewise, he will also suggest that they do this exercise at home. No cards are needed; they write down on a piece of paper what bothers them, their negative thoughts, and challenging situations and try to come up with a strategy solution.

## **SESSION 4: STRENGTH IN SMALL AND LARGE ACHIEVEMENTS**

This session focuses on helping patients recognize their small and/or large achievements, making them realize that they are still capable of doing baby steps in some activities promoting self-efficacy and promoting a better understanding and perception of the things they achieve even with the disease.

As mentioned previously, self-efficacy and self-confidence decreases with the onset of cancer. These are fundamental aspects to be developed since they increase the individual's ability to find solutions to their problems caused by cancer and to adopt behaviours that improve their symptoms (Soares & Caires, 2024).

The psychologist will begin the session by asking patients if they have been able to do more coping cards at home and if they are having any difficulties. Next, the idea will be introduced that often, when they face a disease like cancer, people tend to focus more on difficulties and forget to recognize their achievements and efforts. Therefore, in this session, the "list of merits" technique will be used. The psychologist will introduce the technique and explain its objective: to write a list of positive things that the patient did that day or that week for which he deserves credit, even if it was difficult to achieve. It does not matter how small it was; the important thing will be to recognize the achievements (Nepomuceno & Conceição, 2020). Patients will be asked to think about everything they have done that day or week in any area of their lives, (for example: "I am able to ask for help when I need it."). Once they have finished making their lists, the psychologist will invite patients to share them. The psychologist will listen and validate everyone's achievements.

The session will end with the psychologist reinforcing the emotional impact of recognizing one's achievements and the importance of continuing with this exercise throughout the day.

## **SESSION 5: CHANGING THE SMOKING HABIT – LOOKING AFTER THEM AND THE ENVIRONMENT**

The objectives of this session are to raise awareness about the negative effects of tobacco on cancer treatment and overall health, explore the environmental impact that tobacco consumption has and how quitting smoking is good not only for your health but also for the environment to reflect on tobacco addiction and promotion of healthy and sustainable habits.

One of the objectives of the State Health Department, included in the Priority Health Programs and Health Goals in Portugal (2020), is the prevention and control of smoking. The aim is to promote and support smoking cessation, protect against daily exposure to environmental smoke, increase population literacy in the field of tobacco prevention and control and promote a social climate favourable to tobacco control. In turn, the United Nations aims for sustainable development, with tobacco and its industry being one of the biggest causes of environmental problems (United Nations, 2023).

As the main risk factor for kidney cancer is smoking and, one of the criteria for forming the group was people that smoke, the aim is to put the aforementioned Health Goals (2020) into practice, with the aim of contributing to a holistic vision of health together with a better environment. In this sense, we use the "bibliotherapy" technique (utilizing a poem by HAEMZ), to reflect and reinforce what is being addressed throughout the intervention and highlighting the issue of smoking (Hiera & Conceição, 2022).

The psychologist will begin the session by reading the poem (Poem by HAEMZ) and distributing it to all members. He will read it aloud and subsequently allow a few minutes for patients to reflect on what was read to them. Here is the poem:

The last inhale  
 One inhale, you take me.  
 Take me away from —  
 Life, to live as death.  
 One inhale, you make me.  
 Make me forget to —  
 Live and numb my mind.  
 One inhale, you push me.  
 Push me away from —  
 Love, to feel only hate.  
 One inhale, you change me.  
 Change all of me into—  
 Self-hate, into isolation.  
 One inhale, you suffocate me.  
 Suffocate my thoughts until—  
 Silence is all I know, a hollow echo.  
  
 One inhale, you leave me.  
 Leave me trapped, in—  
 Clouds of ash, broken lungs screaming.  
  
 One inhale, you break me.  
 Break my will, to—  
 Hope for breath beyond you.  
  
 One exhale, I see you.  
 See you for what you are—  
 A thief, robbing me of time, of peace.  
  
 One inhale, you poison me.  
 Poison my thoughts until—  
 I lose sight of myself in your smoke.  
  
 With one exhale, I reclaim myself.  
 Reclaim my life, my time—  
 Breathing out your lies, breathing in truth.  
  
 No more inhales, no more lies.  
 I reclaim the air—  
 And breathe without your weight  
 Poema de HAEMZ

Next, we will try to listen to their perception of the poem and encourage the premise that although tobacco gives a certain feeling of relief and comfort, it is only destroying the person more and more, to the point of neglecting certain aspects of their life and themselves. It will seek to encourage them to reduce their consumption or even stop smoking altogether.

An individual interpretation of the poem will be carried out by each patient, seeking opportunities, from their point of view, to highlight that it begins with the presence of some awareness about the effects of tobacco, becoming increasingly more gradual as the writing progresses. We begin to observe resistance, a desire to change, surrounded by hope and transformation, resulting in freedom from addiction and how beneficial and liberating this is. As a reflection, the psychologist will reinforce the issue that smoking is often a way of coping with problems. Patients need to realize that despite the temporary feeling of peace and relief, smoking causes more problems for their physical and mental health. It becomes a vicious cycle: the person smokes a cigarette to feel better but ends up sinking into more difficult and painful emotions, increasing symptoms of anxiety, depression and the desire to smoke. In such cases, they need to switch from tobacco to healthier alternatives, which simultaneously contribute to the environment. Thinking about which those alternatives might be is also encouraged by the psychologist.

This idea will be highlighted through a discussion on how tobacco affects health, how it interferes with the effectiveness of treatment, worsens the cancer condition and harms physical and psychological wellbeing, in addition to having great financial expenses. It can also harm other people around them, such as family and friends, as inhaling smoke passively can be harmful. Thus, the psychologist will invite members to share their emotional difficulties and challenges in relation to tobacco consumption through some questions. One of the main questions will be, "Do you feel that tobacco is a way of dealing with your illness?" Some other examples of questions might include: "What are the biggest emotional challenges you face when trying to quit smoking?" "What do you feel and think when you experience the urge to smoke?" "How do you feel when you go a long time without smoking?"



After each person has spoken and been heard, the psychologist will discuss how tobacco also has a great environmental impact, sharing the fact that tobacco cultivation is harmful since it requires large areas of land, contributing to great deforestation. It requires intensive use of water and leads to soil degradation due to the constant use of chemical fertilizers and pesticides; its manufacture is highly polluting; cigarette butts cause a lot of waste, often ending up in the sea, which contaminates the seawater; and, above all, its consumption contributes to air pollution, leading also to climate change.

Finally, the psychologist might suggest some healthy practices as an alternative to tobacco, namely doing physical exercise, walking outdoors, Mindfulness, healthy diet, hydrating a lot, and finding new hobbies (painting, writing, crafts, gardening). Some practices that help battle climate change will also be suggested, such as avoiding food waste, recycling, buying sustainable products, buying some plants and taking care of them, and using public transportation more.

## **SESSION 6: REFLECTION AS CLOSURE**

The last session aims to reflect on the therapeutic process, consolidate what was acquired and learned, reinforcing the strategies learned and the importance of a supportive network. Also the posttest should be reapplied (the same one used in session 0, to assess if there were any differences, from pre and post intervention regarding anxiety and mental health). The session will begin with a brief summary of the previous sessions, recalling the strategies learned so that patients can take these learnings and applied them into their daily lives.

Each participant will be invited to reflect on their journey during intervention, highlighting how they feel upon reaching this final session, their achievements, challenges. It is important to understand how the intervention process helped them face and overcome these challenges..

Next, a dynamic could be carried out in which each participant must think of a quality, attitude or strategy that they admired or learned from the other peer members of the group during the sessions, promoting an environment of mutual support and

recognition. The aim is to to maintain the bonds that were created reinforcing a support network.

After the administration of the psychological tests (equal from the first session), Jacobson's progressive muscle relaxation will be performed. This exercise helps with anxiety, stress, insomnia and low blood pressure, consisting of contracting and relaxing specific muscle groups, making the person more aware of their body and physical sensations (Tromm & Conceição, 2020).

## **CONCLUSION AND FUTURE STUDIES**

The promotion of positive mental health of individuals has increased day by day in nowadays and with younger generations. Psychological wellbeing has been a crucial aspect of general health. Higher levels of functionality and psychological wellbeing are associated with better physical and mental health and, consequently, longevity. Investing in the quality of life of patients with cancer is essential, as it encompasses the most varied domains, namely wellbeing in social networks, interpersonal wellbeing, transpersonal wellbeing and spiritual wellbeing. They end up working together, affecting and meaning different things to different individuals (Ahrens et al., 2020; Pradhan & Hati, 2019; Sham et al., 2021). It is also necessary to consider two perspectives: the eudemonistic and the hedonistic. Each perspective focuses on different aspects of the human experience, proposing different paths to achieve a full life. They are distinct yet complementary, which provides a greater understanding of individuals' wellbeing. In this sense, to provide a holistic vision and greater understanding, it is necessary to balance all these domains and perspectives to promote wellbeing strategies and instruments that are promising in order to contribute to the development of good health (Mcdowell, 2009). Working the body and mind is simultaneously crucial to provide good health and general wellbeing. Understanding how this works has significant implications for how we view self-care, treating physical and mental illnesses, and promoting a balanced life. We cannot work the body without the mind.

Research has shown an increase interest in mental wellbeing, and it has seen significant growth over the past few years. There has been progress in the development of instruments that assess psychological wellbeing all over the world. Many of them allow their application in different specific and cultural contexts, proving to be reliable and valid for measuring mental wellbeing in these same contexts and populations. Although there has been progress and advantages, studies of these instruments have simultaneously demonstrated a need to carry out other studies that use a larger, more diverse and more representative sample since limited samples have been used. Despite this, the studies open paths to understand and study the different domains and conceptions of wellbeing and to develop future research that may

be promising and even more complete (Lages et al., 2018; Pereira et al., 2018; Sham et al., 2021). We suggest that these studies and instruments should be validated and adapted to the Portuguese population since there is still a small set in Portugal. Furthermore, it was recognized that it is necessary to consider other aspects, such as self-perception of health, self-concept and mental health literacy (Goñi et al., 2011; Mattos et al., 2021; Neto et al., 2021). Knowing the different domains of wellbeing and their influence on general health enables a more holistic psychosocial approach, a more complete, comprehensive and well-founded plan, developing skills and greater flexibility that might help in adjusting the needs of patients throughout the intervention.

## REFERENCES

- [1] Ahrens, R. B., Lirani, L. S., & Francisco, A. C. (2020). Construct validity and reliability of the work environment assessment instrument WE-10. *International Journal of Environmental Research and Public Health*, 17(20), 1-12. <https://doi.org/10.3390/ijerph17207364>
- [2] Andrade, A. M. R., & Azevedo, J. M. H. (2018). O impacto do diagnóstico oncológico: contribuições da terapia cognitivo-comportamental. *Revista Científica Hospital Santa Isabel*, 2(3), 36-40. <https://doi.org/10.35753/rchsi.v2i3.109>
- [3] Balon, R. (2023). An explanation of generations and generational changes. *Academic Psychiatry*, 48, 280-282. <https://doi.org/10.1007/s40596-023-01921-3>
- [4] Bogenberger, R. (2024, Abril 5). Baby boomers and mental health. *Therapist*. <https://therapist.com/generations/baby-boomers/>
- [5] Calzada, J. V. D., Souza, T. R., Souza, T. R., Batista, N. R., Alves, F. C., Partata, I. F., Chahla, S. M., & Leal, K. B. C. P. (2024). Câncer renal: uma revisão da literatura. *Periódicos Brasil. Pesquisa Científica*, 3(2), 1544-1551.
- [6] Capitanio, U., & Montorsi, F. (2016). Renal cancer. *Seminars*, 387(10021), 894-906. [https://doi.org/10.1016/S0140-6736\(15\)00046-X](https://doi.org/10.1016/S0140-6736(15)00046-X)
- [7] Conceição, J., & Bueno, G. (2020). 101 Técnicas da Terapia Cognitivo-Comportamental. Editora UnC.
- [8] CUF (2024). Cancro do Rim. CUF. <https://www.cuf.pt/saude-a-z/cancro-do-rim>
- [9] Direção-Geral da Saúde. (2020). Programas de Saúde Prioritários. Metas de Saúde 2020. Direção-Geral da Saúde.
- [10] Direção Regional de Estatística da Madeira. (2022). Estatísticas da Saúde da Região Autónoma da Madeira 2020. Direção Regional de Estatística da Madeira.
- [11] Draeger, D. L., Sievert, K. D., & Hakenberg, O. W. (2018). Analysis of psychological stress factors in patients with renal cancer. *Therapeutic Advances in Urology*, 10(6), 175-182. <https://doi.org/10.1177/1756287218754766>
- [12] Eichinger, L., & Conceição, J. (2020). Técnica 62: Psicoeducação. In J. Conceição & G. Bueno (Eds.), 101 Técnicas da Terapia Cognitivo-Comportamental (pp. 110-111). Editora UnC.
- [13] Ferreira, I. S., Araújo, A. S., Cajé, R. O., & Lopes, A. P. (2021). Aplicações da terapia cognitivo-comportamental em pacientes oncológicos: uma revisão integrativa. *Research, Society and Development*, 10(5), 1-16. <http://dx.doi.org/10.33448/rsd-v10i5.14941>
- [14] Figueiredo, S., Trigueiro, M. J., Silva, S. V., Coelho, T., Almeida, R. S., Portugal, P., Sousa, S., Campos, F., & Marques, A. (2022). Tradução, adaptação e contributo para a validação da escala Warwick-Edinburgh mental wellbeing scale para a população portuguesa. *Revista Científica da Rede Académica das Ciências da Saúde da Lusofonia*, 4(2), 26-38. <http://dx.doi.org/10.51126/revsalus.v4i2.192>
- [15] Fonseca, R. (2016). A importância da atuação do psicólogo junto a pacientes com cancro: uma abordagem psico-oncológica. *Psicologia e Saúde em Debate*, 2, 54-72. <https://doi.org/10.22289/2446-922X.V2EEA5>
- [16] Freitas, L. & Soares, L. (2024). Cognitive Behavioral Therapy (CBT)-Based Group Intervention Plan for Liver Cancer Patients: Poetry, Healthy Habits, and Environmental Sustainability, *ATSK Journal of Psychology*, 5, 1,2, ISSN:2709-5436. <https://atsk.website/atskjp51a2/>

- [17] Goñi, E., Madariaga, J. M., Axpe, I., & Goñi, A. (2011). Structure of the personal self-concept (PSC) questionnaire. *International Journal of Clinical and Health Psychology*, 11(3), 509-522.
- [18] HAEMZ. (2024, Setembro 14). The Last Inhale. Hello Poetry. <https://hellopoetry.com/poem/4878042/the-last-inhale/>
- [19] Hiera, G. D., & Conceição, J. (2020). Técnica 52: tarefas de casa – biblioterapia. In J. Conceição & G. Bueno (Eds.), 101 Técnicas da Terapia Cognitivo-Comportamental (p. 96). Editora UnC.
- [20] Lages, A., & Magalhães, E., Antunes, C., & Ferreira, C. (2018). Social wellbeing scales: validity and reliability evidence in the Portuguese context. *PSICOLOGIA*, 32(2), 15-26. <http://dx.doi.org/10.17575/rpsicol.v32i2.1334>
- [21] Liga portuguesa contra o cancro (2024). Cancro do Rim. Liga Portuguesa contra o cancro. <https://www.ligacontracancro.pt/cancro-do-rim/>
- [22] Liu, J., Gong, D. X., Zeng, Y., Li, Z. H., & Kong, C. Z. (2018). Positive factors associated with quality of life among Chinese patients with renal carcinoma: a cross-sectional study. *Psychology, health e medicine*, 23(1), 106-113. <https://doi.org/10.1080/13548506.2017.1335875>
- [23] Mattos, S., Moreira, T., Florêncio, R., & Cestari, V. (2021). Elaboração e validação de um instrumento para mensurar autopercepção de saúde em adultos. *Saúde Debate*, 25(129), 366-377. <https://doi.org/10.1590/0103-1104202112909>
- [24] Mcdowell, I. (2009). Measures of self-perceived wellbeing. *Journal of Psychosomatic Research*, 69(1), 69-79. <https://doi.org/10.1016/j.jpsychores.2009.07.002>
- [25] Nepomuceno, A., & Conceição, J. (2020). Técnica 03: lista de méritos. In J. Conceição & G. Bueno (Eds.), 101 Técnicas da Terapia Cognitivo-Comportamental (p. 15). Editora UnC.
- [26] Neto, D. D., Rocha, I., Figueiras, M. J., & Silva, A. N. (2021). Measuring mental health literacy: adaptation and validation of the Portuguese version of the mental health literacy scale (MHLS). *European Journal of Mental Health*, 16, 64-77. <http://hdl.handle.net/10400.12/8166>
- [27] Pereira, M. C. A. R. S., Antunes, M. C. Q., Barroso, I. M. A. R. C., Correia, T. I. G., Brito, I. S., & Monteiro, M. J. F. S. P. (2018). Adaptação e validação do questionário geral de bem-estar psicológico: análise fatorial confirmatória da versão reduzida. *Revista de Enfermagem Referência*, 4(18), 9-18. <https://doi.org/10.12707/RIV18001>
- [28] Pradhan, R. K., & Hati, L. (2022). The measurement of employee wellbeing: development and validation of a scale. *Global Business Review*, 23(2), 385-407. <http://dx.doi.org/10.1177/0972150919859101>
- [29] Ribeiro, J. L. P., Honrado, A., & Leal, I. (2004). Contribuição para o estudo da adaptação portuguesa das escalas de ansiedade, depressão e stress (EADS) de 21 itens de Lovibond e Lovibond. *Psicologia, saúde e doenças*, 5(1), 229-239. <https://doi.org/10.51126/revsalus.v4i2.192>
- [30] Santo, C. & Soares, L. (2024). Psychological Intervention in Individuals with
- [31] Esophageal Cancer: A Proposal in Six Sessions Called The Flower and The Nausea a Poem by Carlos Drumond Andrade, *ATSK Journal of Psychology*, 4, 2,1, ISSN:2709-5436. <https://atsk.website/atskjp4i2a1/>
- [32] Sachweh, E. S., & Conceição, J. (2020). Técnica 17: cartão de enfrentamento. In J. Conceição & G. Bueno (Eds.), 101 Técnicas da Terapia Cognitiva-Comportamental (p.39). Editora UnC.
- [33] Santos, C. F., Ariento, M., Diniz, M. V. C., & Dovigo, A. A. (2011). O processo evolutivo entre as gerações X, Y e babyboomers. *Anais do XIV SEMEAD Ensino e Pesquisa em Administração*, 13.
- [34] Sham, W. W. L., Yeung, G. T. Y., Mak, W. W. S., & Powell, C. L. Y. M. (2021). Comprehensive wellbeing scale: development and validation among Chinese in recovery of mental illness in Hong Kong. *BMC Psychology*, 8, 1-12. <https://doi.org/10.1186/s40359-021-00686-4>
- [35] Soares, L., & Caires, S. (2024). Renal cell carcinoma: a review on patient's quality of life. *Journal of Urology and Nephrology Research*, 1(1). <http://dx.doi.org/10.26717/BJSTR.2024.55.008649>
- [36] Suchara, G. J., & Conceição, J. (2020). Técnica 29: Respiração Diafragmática. In J. Conceição & G. Bueno (Eds.), 101 Técnicas da Terapia Cognitivo-Comportamental (p. 58). Editora UnC.
- [37] Tromm, K. C., & Conceição, J. (2020). Técnica 37: Relaxamento muscular progressivo de Jacobson. In J. Conceição & G. Bueno (Eds.), 101 Técnicas da Terapia Cognitivo-Comportamental (pp. 69-70). Editora UnC.
- [38] United Nations. (2023). Determined. Report of the Secretary-General on the work of the organization 2023. <https://www.un.org/en/delegate/report-secretary-general-work-organization>
- [39] Younas, S., Nisa, A., & Younas, M. T. (2022). Validation of Warwick Edinburgh mental wellbeing scale among married couples. *NUST Journal of social science and humanities*, 8(2), 279-294. <http://dx.doi.org/10.51732/njssh.v8i2.157>