

AMERICAN UNIVERSITY OF BEIRUT

A PSYCHO-ONCOLOGY EDUCATIONAL PROGRAM  
FOR THE ADULT ONCOLOGY NURSES AT AUBMC

By

FATIMA KHALIL SALLOUM

A project  
submitted in partial fulfillment of the requirements  
for the degree of Master of Science  
to the Hariri School of Nursing  
at the American University of Beirut

Beirut, Lebanon  
May 2022

AMERICAN UNIVERSITY OF BEIRUT

A PSYCHO-ONCOLOGY EDUCATIONAL PROGRAM  
FOR THE ADULT ONCOLOGY NURSES AT AUBMC

by  
FATIMA KHALIL SALLOUM

Approved by:



---

Dr. Laila Farhood, Professor  
Hariri School of Nursing

First Reader



---

Dr. Lina Abi Fakhr, Clinical Associate Professor  
Hariri School of Nursing

Second Reader

Date of project presentation: May 6, 2022

# AMERICAN UNIVERSITY OF BEIRUT

## PROJECT RELEASE FORM

Student Name: Salloum Fatima Khalil  
Last First Middle

I authorize the American University of Beirut, to: (a) reproduce hard or electronic copies of my project; (b) include such copies in the archives and digital repositories of the University; and (c) make freely available such copies to third parties for research or educational purposes:

- As of the date of submission
- One year from the date of submission of my project.
- Two years from the date of submission of my project.
- Three years from the date of submission of my project.



May 11, 2022

---

Signature

Date

## ACKNOWLEDGMENTS

First, I would like to express my gratitude to my supervisor, Dean Laila Farhood, for believing in me and supporting me. Her constant guidance, encouragement, and mentoring throughout my master's journey has been very important to me.

I am also very grateful for my second reader Dr. Lina Abi Fakher for always providing detailed feedback, guidance, help, and support.

Finally, I would like to express my endless gratitude to my parents and siblings, for their tremendous support. They have always supported and believed in me; this was no exception.

Lastly, and most importantly, I would like to acknowledge AUB and AUBMC for providing the appropriate learning environment to their students and staff to grow both individually and professionally.

## ABSTRACT OF THE PROJECT OF

Fatima Khalil Salloum

for

Master of Science in Nursing

Major: Psychiatric Mental Health

Title: A Psycho-Oncology Educational Program for the Adult Oncology Nurses at AUBMC

Cancer affects not only the physical health of patients, but also their mental health. The sudden change in everyday life, long hospital admission, frequent treatment, pain, and society's perception of cancer patients affect their mental health negatively. It is well known that a worsened mental state affects the progression of cancer; however, it is rare that psychological distress is accurately assessed by oncology nurses as they require formal education or training on psychological assessment of cancer patients. This psycho-oncology nursing program aims at developing knowledge, skills, and attitudes of nurses who are entitled to deliver care to the adult cancer patient population. The program aims at educating oncology nurses and preparing them regarding assessing patients by accurately using distress screening tools and appropriately selecting intervention strategies appropriate to the situation at hand. Also, it is hoped to include this program as a module in the future orientation program for novice junior oncology nurses. After implementing this program at AUBMC, it can be proposed for adoption in other hospitals in Lebanon in collaboration with the Lebanese Order of Nurses (LON). This program contributes to the improvement of patient care through equipping oncology nurses with skills, knowledge, and confidence regarding early detection of distress in cancer patients, together with concerting efforts with the psycho-oncology team.

## TABLE OF CONTENTS

ACKNOWLEDGMENTS .....	1
ABSTRACT .....	2
INTRODUCTION AND BACKGROUND .....	7
A. Program Significance .....	9
B. Summary .....	10
LITERATURE REVIEW .....	11
A. Cancer: An Overview .....	11
B. Psychological Impact of Cancer on Patients .....	12
Anxiety in the Cancer Patient Population .....	14
Post-Traumatic Stress Disorder in the Cancer Patient Population .....	17
Grief in the Cancer Patient Population .....	18
Depression Disorder in the Cancer Patient Population .....	20
Suicide and Cancer Patients .....	22
C. Importance of Screening .....	23
D. Psycho-Oncology: Definition and Significance .....	24
E. Role of Oncology Nurses in Psycho-Oncology care .....	26
F. Psycho-Oncology Training for Oncology Nurses .....	27
G. Barriers to the Psycho-Oncology Care .....	29
1. Lack of Adequate Preparation .....	30
2. Lack of Time .....	30
3. Lack of Communication Skills .....	30
4. Lack of Empathy .....	31

5. Emotional Vulnerability.....	31
6. Lack of Resources .....	32
I. Role of the APN in Psycho-Oncology Care.....	32
J. Summary .....	33
<b>THE PROGRAM.....</b>	<b>34</b>
A. Program Description .....	34
B. Program Learning Outcomes .....	35
C. Target Population .....	35
D. Instructional Approaches .....	36
E. Assessment Approaches .....	37
F. Program Outline .....	37
G. Summary .....	43
<b>PROGRAM IMPLEMENTATION AND EVALUATION.....</b>	<b>44</b>
A. Evaluation .....	45
1. Assessing Achievement of Program Learning Outcomes.....	45
2. Evaluating Program Effectiveness .....	46
3. A Follow up on Achieving Overall Program Outcomes .....	46
B. Summary .....	47
<b>CONCLUSION .....</b>	<b>48</b>
<b>APPENDIX A PRE-PROGRAM TEST .....</b>	<b>49</b>
<b>APPENDIX B UNIT TWO .....</b>	<b>50</b>
<b>APPENDIX C ROLE PLAY – UNIT THREE .....</b>	<b>52</b>

APPENDIX D CASE STUDY – UNIT FOUR.....	53
APPENDIX E CASE STUDY – UNIT FIVE .....	54
APPENDIX F POSTER .....	55
APPENDIX G POST-PROGRAM TEST .....	56
APPENDIX H PROGRAM EVALUATION FORM .....	61
APPENDIX I INSTUCTIONAL MATERIAL SAMPLE .....	63
REFERENCES .....	67



## TABLE OF PROGRAM UNITS

UNIT 1: INTRODUCTION TO PSYCHO-ONCOLOGY .....	38
UNIT 2: PSYCHIATRIC DISORDERS AMONG THE CANCER POPULATION.....	39
UNIT 3: SCREENING AND ASSESSMENT IN PSYCHO-ONCOLOGY .....	39
UNIT 4: PSYCHOTROPIC MANAGEMENT IN CANCER PATIENTS .....	40
UNIT 5: PSYCHOTHERAPEUTIC INTERVENTIONS IN CANCER PATIENTS .....	41
UNIT 6: THE ROLE OF THE FAMILY OF CANCER PATIENTS WITH PSYCHOLOGICAL DISTRESS .....	42

# CHAPTER I

## INTRODUCTION AND BACKGROUND

Patients with complicated and chronic diseases are more likely to have comorbid mental health disorders and psychosocial challenges, which can exacerbate their disease (Molina, 2019). Among these patients are cancer patients who may face emotional, psychological, spiritual, social, and economic challenges because of cancer diagnosis leading to psychological distress. Psychological distress reflects a negative emotional experience that makes it difficult for cancer patients to cope well with cancer and its symptoms, and with therapies causing more distress than other patients do. Around 33% to 50% of cancer patients will experience at least one of the following distressing problems: anxiety, despair, discomfort, exhaustion, or insomnia (Holt, 2018).

As cancer treatment advances, it is more important than ever to understand the mental health of cancer patients. The Institute of Medicine's (2008) report entitled 'Cancer Care for the Whole Patient: Meeting Psychosocial Needs', aimed at highlighting the psychosocial health needs of these patients. Failing to address the individual, social, and physiologic aspects of distress results in additional patient and family suffering, thus deterring appropriate care and affecting the disease's course of action. In addition, untreated distress can have harmful physiologic implications on a person, as well as on the family and the greater community (Stonelake-French et al., 2018).

Early diagnosis of emotional distress would increase the patient's adherence to medical therapy, provide adaption methods, and explicitly address any psychopathological

disorders or symptoms; all of which can improve the clinical course and quality of life (Ortiz-Zayas, 2018). According to the National Institute for Health and Care Excellence (2004), oncology nurses are encouraged to assess and diagnose psychological distress in cancer patients appropriately and deem every effort to prevent any psychological harm (Kubota, Akechi, & Okuyama, 2018).

Psychological Distress is a common clinical phenomenon that affects 25 to 50 percent of cancer patients. To prevent this phenomenon, psycho-oncologists have recommended the incorporation of both medical and psychological care, referred to as integrated care, with the involvement of all health care workers. In recent years, integrated care has gained popularity. Although psychotherapy interventions solely have not proved to improve cancer survival, yet they relieve discomfort and reduce pain (Suzuki, 2011).

Despite the recommendations and the availability of validated instruments to evaluate distress, many studies have revealed that healthcare providers (HCPs) commonly fail to diagnose mental health disorders in cancer patients. Most of the published evidence suggests that HCPs have a poor ability to recognize emotional distress in cancer patients. In a study by Granek et al. (2019) only 30% of seriously distressed cancer patients were diagnosed by their oncologists with mental health concerns. Although patients' unwillingness to reveal emotional distress can make it difficult for HCPs to recognize it, they are often hesitant to assess distress thoroughly (Granek et al., 2019).

Because oncology nurses have frequent contact with both cancer patients and their families, they are most likely to detect distress. Through active listening and caring for patients, nurses build a relationship of trust. This enables patients to be more open and

transparent with nurses about their feelings and concerns. For this reason, teaching nurses skills to detect signs of distress is crucial (Abrahamson, 2010).

This quality improvement educational program aims at providing adult oncology nurses with relevant education regarding the benefits of psychological care, skills of distress screening, and means to encourage and engage patients in distress screening and management.

### **A. Program Significance**

This program has the potential of greatly improving the cancer patient's quality of life (QOL) through preparing adult oncology nurses on how to support cancer patients and their families and provide means to manage psychological distress; eventually, improving the quality of care and patient's quality of life respectively. The program also prepares oncology nurses to accurately assess psychological distress and manage it through appropriate interventions. Included in the program is information about the development of the field of psycho-oncology, current research on psychosocial needs and interventions among the cancer population receiving treatment, standards of nursing care and clinical practice guidelines, and barriers to psychosocial care implementation.

In a previous unpublished study conducted by Richa (2010) on the impact of psychological complications on cancer patients and their effect on treatment, findings revealed that oncology nurses at the American University of Beirut (AUBMC) lacked knowledge and skills pertaining to psychological assessment. Most of these nurses

expressed the need for formal education or training on the topic, as there was neither a preparatory program in place upon joining AUBMC nor was there a psychiatric Advanced Practice Nurse (APN) in the oncology team. The status quo mandates the establishment of a program that aims at advancing knowledge of the adult oncology nurses at AUBMC regarding psycho-oncology principles, screening skills, and distress recognition. Benefits of such programs include, but not limited to, promoting nurses' competence and confidence about how to deal with cancer patients in psychological distress and improving their overall quality of life.

## **B. Summary**

Cancer is a worldwide chronic disease that is associated with psychological distress, where 33% to 50% of patients experience at least one of the following distressing problems: anxiety, despair, discomfort, exhaustion, or insomnia. Oncology nurses spend time with patients; therefore, they are more likely to detect signs of distress. Oncology nurses at the AUBMC lack knowledge and skills in psychological assessments. This program is developed based on the educational needs of the adult oncology nurses at AUBMC and aims at advancing their knowledge regarding psycho-oncology principles, screening skills, and distress recognition, as well as increasing competence and confidence in dealing with cancer patients with psychological distress.

## CHAPTER II

### LITERATURE REVIEW

Cancer patients struggle from physical pain and suffer from the chemotherapy they receive; they feel pressured to get better for their sake and for the sake of their families. Hence, patients are prone to suffer from psychological distress. Psychological distress in turn affects their functioning and the course of treatment and worsens their prognosis. Early diagnosis of psychological distress is crucial in cancer patients, garnered by the significant role that nurses play. This literature review explores psychological distress in cancer patients. It also highlights the role of nurses in distress screening and importance of equipping them with psycho-oncology-related knowledge and skills.

#### **A. Cancer: An Overview**

Cancer is considered the second leading cause of death worldwide (Hassanpour & Dehghani, 2017), accounting for around 10 million deaths in 2020 (Ferlay et. al., 2015). With optimize treatments, the survival rate of cancer patients worldwide has improved with around 32.6 million cancer survivors living with long-term effects of cancer treatment (Howell et al., 2017).

Cancer diagnosis is often a shocking news to cancer patients and their families. It brings along feelings of fear from the disease, future, and death. The diagnosis is usually followed with long periods of harsh treatments that may be painful, cause discomfort, and lead to several life-threatening complications and serious long-term effects if not managed accurately (Howell et al., 2017). Cancer treatment may result in suffering from hair loss,

increased fatigue, decreased productivity, decreased libido, skin discoloration, etc. Patients do not recognize themselves anymore, which could lead to psychological problems such as stress, anxiety, and depression (Gegechkori et al., 2017).

## **B. Psychological Impact of Cancer on Patients**

Cancer is associated with incidence of psychological disorders. This relationship between cancer and psychological disorders have been noted and studied ever since the 18<sup>th</sup> and 19<sup>th</sup> centuries. Cancer patients experience severe emotional grief reactions, such as shock, disbelief, bargaining, anger, depression, and acceptance (Gopalan et al., 2016). It is estimated that 20 to 65% of patients with advanced stages of cancer experience psychological disorders that vary in both severity, stage, and type (Anuk et al., 2019), which may affect the physical, social, and lifestyle of these patients (Bail et al., 2018).

Regardless of the stage, cancer has psychological impact on both patient and family members. Almost all cancer patients experience psychological or emotional disturbances over the course of cancer diagnosis and treatment. However, some patients might mentally recover from their cancer experience, while others might suffer from psychological long-term effects. It is worth mentioning that both the stress and psychological burden that cancer has on patients is dynamic and fluid across time; that is, at time of diagnosis, stress might be associated with fear and feelings of existential threat caused by the diagnosis, the uncertain treatment options, recovery rate, etc. However, at the end of cancer treatment, stress and psychological burden might be associated with fear of cancer reoccurrence, financial difficulties, difficulties with sexuality, and long-term

physical effects of treatment. It is essential that health care professionals recognize the presence of any psychological distress among cancer patients to provide them with the needed support (Stein et al., 2008).

Anxiety, depression, and adjustment issues are among the most prevalent psychological disorders (Gopalan et al., 2016). Concluded was that all mental illnesses tend to be associated with an increased risk of self-harm and subsequent unnatural death in the first 12 months post diagnosis, especially in patients undergoing radiotherapy and chemotherapy treatments (Chang et al., 2022). Moreover, cancer is a leading cause of death, and it has been shown to be a risk factor for complicated grief, which affects the development of depression. Grief can often lead to psychological distress; in fact, individuals who suffer from bereavement have a higher risk (54.2%) of developing depression (Große et al., 2018).

The psychological effect of cancer extends to involve the patient's family and caregivers (Statham & Davis, 2018), who play the role of untrained caregivers, resulting in suffering from practical challenges such as adapting to new responsibilities, learning new skills, and coordinating the care of the cancer patient. The status quo results in emotional, physical, social, and financial burden, especially when the patient's condition deteriorates, and death becomes closer. The caregiver burden can develop due to feelings of overload, stress, guilt, embarrassment, and anger. It is estimated that 32% to 50.7% of cancer caregivers suffer from this burden, which eventually affects their mental health status (Große et al., 2018).



### *Anxiety in the Cancer Patient Population*

Anxiety is considered a normal human emotion that surfaces when a potential threat or danger is around. Anxiety becomes pathologic when it is present in the absence of those potential threats or dangers. Its persistence affects the brain's functionality by disrupting the formation and release of several neurotransmitters, thus disabling individuals from having normal life (Ströhle et al., 2018). Anxiety disorders can occur for several reasons such as medical illnesses (Bystritsky et al., 2013), genetic factors, and environmental factors (Ströhle et al., 2018).

Around 33% of the population will experience any form of anxiety disorders during their lifetime (Bandelow & Michaelis, 2015); however, several comparisons have indicated that people with cancer are more prone to having anxiety compared to individuals who do not suffer from any health conditions. As the illness progresses, incidence of having anxiety disorders increases (Stark & House 2000); actually, 20% to 60% of cancer patients report feelings of anxiety (Bail et al., 2018). Indeed, anxiety causes disruptions in the quality of life. For instance, it can contribute to symptoms of anorexia, nausea, vomiting and fatigue in cancer patients (Stark & House, 2000). Other anxiety-related symptoms include restlessness, irritability, muscle tension, difficulty in sleeping, and difficulty concentrating (Munir & Takov, 2022). With the right treatment and psychotherapy, physical symptoms can significantly decrease after psychotherapy (Stark & House, 2000).

From the point of cancer diagnosis throughout chemotherapy, radiotherapy and other treatment modalities, patients are subject to various anxiety triggers. However, anxiety tends to peak at the time of diagnosis and at the progression of cancer (Bail et al., 2018). It is important that the oncology team, both nurses and physicians, stay alert to any

of the anxiety signs and symptoms in cancer patients and perform regular screening. Once anxiety is identified, it is essential that an intervention be made. Interventions can be in the form of referring patients to a specialist to receive the appropriate pharmacological or psychological interventions (Stark & House, 2000).

To diagnose anxiety, healthcare professionals usually interview patients based on several screening tools. One of the most common tools is the Generalized Anxiety Disorder (GAD-7) which is a 7-item tool that assesses: (a) feelings of nervousness, anxiety or feeling on edge, (b) ability to stop or control worrying; (c) worrying too much about different things; (d) trouble relaxing, (e) feeling restless, (f) being easily annoyed or irritable, and (g) feeling afraid as if something awful might happen (Johnson et al., 2019). GAD-7 was originally developed for use in primary settings; however, it may be a potential tool to use in oncology settings (Psycho-Oncology, 2015). In this manner, data from literature have confirmed the usage of the GAD-7 tool to assess anxiety in cancer patients (Esser et al., 2018; Naser et al., 2021), as it was identified to be psychometrically sound for use in cancer settings (Plummer et al., 2016). It is self-completed by patients after receiving instructions from both the physician and nurse on how to fill the tool (Li et al., 2021).

Neurotransmitters play a significant role in the context of anxiety pathophysiology; therefore, they are the targets of several pharmaceutical drugs. Some of the most common drug classes are the Selective Serotonin Reuptake Inhibitors (SSRIs), Serotonin-Norepinephrine Reuptake Inhibitors (SNRIs), Tricyclic Antidepressants (TCAs), Benzodiazepines, with SSRIs being the first line drugs for anxiety and depression (Bystritsky et al., 2013).

Effective medication management requires the collaboration between different healthcare providers such as nurses, physicians, and pharmacists. Nurses have a crucial role in this process, as they are responsible for evaluating the patient's care plan progress, recognizing potential problems through constant assessment and patient monitoring, and resolving issues to enhance patient treatment and safety (Mardani et al., 2020). Nurses educate patients about their medications and their side effects and on what to report to the HCP. Through constant assessment, monitoring, and communication with both patients and families, nurses can detect any problems in the medication management and report to physicians (Huisman et al., 2020).

Besides pharmaceutical treatments, psychological management of cancer patients suffering from anxiety disorders include the Cognitive Behavioral Therapy (CBT) (Bystritsky et al., 2013). Previous studies tested the integration of CBT in the management of anxiety in cancer patients, revealing favorable results in overcoming untoward symptoms (Brother et al., 2011; Greer, 2008; Lee et al., 2011). Similarly, Tatrow and Montgomery (2006) revealed in their study that pain and distress were decreased by 69% in cancer patients on CBT therapy. Evidence from the literature shows that CBT is effective in treating psychological distress, even one year after the initiation of chemotherapy, thereby showing the long-term effectiveness of this kind of psychological intervention, as it addresses the different maladaptive schemas and beliefs that occur from emotional disturbance due to chemotherapy (Abbas et al., 2022; Rossi et al., 2019).

CBT can be performed by either psychotherapists, psychiatric APNs, or trained oncology nurses to help patients identify their thoughts and think of them in a more

plausible manner. Upon receiving training on CBT techniques and interventions, either through manual or on-site training, oncology APs would be able to implement CBT and integrate it into patient care routine (Daniels, 2015). In a study conducted by Lee et al. (2011) to evaluate the effectiveness of nurse-led CBT in patients with breast cancer, findings revealed that fatigue experienced by breast cancer patients undergoing radiotherapy was significantly reduced. Accordingly, CBT is believed to be a psycho-oncology intervention in anxiety management in cancer patients.

### ***Post-Traumatic Stress Disorder in the Cancer Patient Population***

Posttraumatic stress disorder (PTSD) is a syndrome that occurs due to exposure to life threatening situations such as near-death experience, serious injuries, or sexual assaults. According to the DSM-V, PTSD is a subcategory of the Trauma and Stress related disorders (Mann & Marwaha, 2022). PTSD is associated with persistence of intense, distressful, and fearful avoidance reactions to reminders of traumatic events; mood swings; disrupted sleep; hypervigilance; etc. Previous mental disorders, fewer years of education, exposure to four or more traumatic events, and a history of exposure to interpersonal violence increase the risk for PTSD (Zhou et al., 2019).

Cancer is a traumatic experience that can completely change someone's life. Cancer diagnosis, treatment, testing, and waiting periods are traumatic events that can lead to cancer-related PTSD (Leano et al., 2019). According to Ghazali et al. (2013), cancer survivors can be triggered by follow-up scans, oncology doctors' visits, pain, death of a public figure due to cancer and many others (Ghazali et al., 2013). Cancer-related PTSD

symptoms can remain for years after cancer diagnosis despite treatment-related symptoms have disappeared (Chan et al. 2018; Ni et al. (2018).

PTSD affects multiple aspects of patient's life, such as self-image, relationships, spirituality, ability to work, and sense of belonging, thereby affecting the health of cancer patients by worsening it and negatively impacting their quality of life. Cancer-related PTSD behaviors include missed appointments, noncompliance to treatments, and avoiding speech about their cancer (Leano et al., 2019).

Treating PTSD and reducing its symptoms is linked to a better quality of life, improved physical health, mental health, and social function (Leano et al., 2019; Monika, 2017). It is recommended that cancer-related PTSD is treated with CBT. In a study where CBT was provided for prostate cancer patients, patients were found to have improvement in their quality of life after 10 sessions only. Similarly, CBT has been linked with enhanced lifestyle choices in breast cancer survivors (French-Rosas et al., 2011). However, there are no published studies on psycho-pharmaceutical management for cancer-related PTSD. As for PTSD pharmacologic management, there are only two agents (Paroxetine and Sertaline) that are approved for the treatment by the U.S. Food and Drug Administration; both medications belong to the SSRRI family (Cukor et al., 2010).

### ***Grief in the Cancer Patient Population***

When a patient receives a diagnosis of cancer, he/she often experiences grief. Grief, a 5-stage-process, is a reaction to the threat of losing one's ability to independently function, losing one's identity, and changing one's role within the family; all of which are

factors associated with fear of death. The patient's main responsibility is to deal with various losses. It is important that grieving individuals take their time, go through each stage, acknowledge, and understand their emotions (McAlearney et al., 2015).

However, cancer diagnosis is accompanied with several abrupt changes in a patient's daily routine, interfering with their life goal. This is also accompanied with loss of health and functioning, independence, social roles, self-image, and sense of control; thus leading to grief reactions (Gökler-Danışman et al., 2017). Oncology nurses are in a position where they can assist patients in normalizing and validating their emotions and feelings by providing a safe and supportive environment. They can also support patients in developing new coping techniques and respecify their roles within the family. Furthermore, one of the most essential goals is to assist patients in re-framing "hope" in a realistic manner to experience personal growth.

Nevertheless, research on grief reactions among cancer patients is limited. In fact, grief and depression share common symptoms such as sleep and appetite disturbances and intense sadness and withdrawal, making it difficult to differentiate between them (Walker et al., 2014). It is important that HCPs notice and identify grief reactions among cancer patients as they have the potential to advance into prolonged grief disorders and lead to further physiological and mental complications (Gökler-Danışman et al., 2017). In fact, individuals who suffer from grief have a higher risk of 54.2% to develop depression (Große et al., 2018).

### ***Depression Disorder in the Cancer Patient Population***

Depression is a mood disorder characterized by feeling of sadness and loss of interest; it is rarely diagnosed and therefore is left untreated (McCarter, 2008). Depression is a serious psychiatric disorder that affects around 120 million individuals worldwide. Chang et al. (2022) revealed that depression was the most common psychiatric disorder among cancer patients. It is estimated that 15% of cancer patients in oncology and haemato-oncology settings suffer from major depression, whereas 20% of cancer patients suffer from other depressive diagnoses such as minor depression and persistent depression disorder (dysthymia) in these settings (Ostuzzi et al., 2018).

Depression is a serious risk factor for suicide attempts; in fact, the World Health Organization (WHO) estimates that by 2030, depression will be the leading cause of death (Peng et al., 2015). Risk factors for depression include medical illness, history of psychiatric disorders, genetic factors, and environmental factors (McCarter, 2008). Diagnosing cancer patients with depression is a challenge, since many cancer symptoms may overlap with depression symptoms which include fatigue, weight loss, and sleep interruption. Moreover, cancer progression causes impairment in the social and functional activity of affected individuals. It is worth noting that atypical depressive symptoms such as anxiety, fatigue, body image distortions, social withdrawals, and post-traumatic stress symptoms are more persistent in cancer patients (Ostuzzi et al., 2018). Therefore, it is important to deeply assess these symptoms in addition to hopelessness in terminally ill patients (Parpa et al., 2019).

Indeed, cancer diagnosis increases patients' risk to developing depression. Depression, like other psychiatric comorbidities, play a role in worsening the quality of life of cancer patients. It also increases the risk of not being compliant with medications and having active death wishes and higher suicide risks. Depression increases the mortality rate of cancer patients; it is found to be 26% higher in cancer patients with depressive symptoms and 39% higher in patients with major depression (Ostuzzi et al., 2018).

Many screening tools are available to diagnose depressive disorders. A common one is the Patient Health Questionnaire – 9 (PHQ-9) scale; the scale is a 9-item depression module from the full PHQ filled by the patient without any supervision; after which the clinician scans the questionnaire and scores it. The score can range from 0 (no depressive symptoms) to 27 (all depressive symptoms occur on daily basis). A score of 10 or more is sufficient to confirm a diagnosis of major depression (Kroenke et al., 2001). Although the tool is developed for primary care centers, it has been shown to be an excellent screening tool for depressive disorders in various clinical populations including oncology patients where it has a sensitivity and specificity of more than 80% (Psycho-Oncology, 2015).

To manage symptoms of psychological distress and depression among cancer patients, oncologists prescribe psychotropic medications. SSRIs, SNRIs, TCAs, and Benzodiazepines are among the drug classes to treat depressive symptoms. Mood stabilizers as well as antipsychotics treat depression symptoms like insomnia, nausea, irritability, and neuropathic pain (McCarter, 2008; Biringen et al., 2021). It is essential to note that some antidepressants might worsen cancer symptoms; therefore, medical doctors tend to be careful when prescribing them (Pitman et al., 2018).



### ***Suicide and Cancer Patients***

Suicide is one of the leading causes of death worldwide with more than 800,000 people dying due to suicide annually (Naghavi, 2016). The risk for suicide among cancer patients is four times greater than that for the general population, especially for patients with cancer of the lung, head and neck, testes, and Hodgkins Lymphoma and in cancer patients older than 50 years. However, this risk for suicide decreases years after the diagnosis (Gascon et al., 2021; Misono et al. 2008; Zaorsky, 2017). With the prevalence of anxiety, PTSD, and depression among cancer patients and with their association with suicidal ideation or suicidal attempts, it is important to investigate the risk for suicide among cancer patients. Despite this, there remains a lack of evident strategies to decrease suicide risk among cancer patients (Gascon et al., 2021).

There are recommendations for suicide risk screening in medical settings, yet screening has not been implemented in all countries and in oncology settings (Gascon et al., 2021). One of the common screening tools for suicide is the Columbia-Suicide Severity Rating Scale (C-SSRS). The C-SSRS was designed to identify both suicidal ideations and behavior; it allows to measure the severity and intensity of suicidal ideations, suicidal behavior, and lethality where actual attempts are tested (Posner et al., 2011). According to Meyer et al. (2010), the C-SSRS is a unique scale that meets all the criteria required for assessing suicidal-related phenomena; it has a 100% specificity and 100% sensitivity in identifying lifetime actual suicide attempts, and 99% specificity and 94% sensitivity in accurately identifying lifetime interrupted attempts (Posner et al., 2011).

That been said, identifying the most effective strategies to assess risk and screen for suicidal thoughts and intents among cancer patients is one of the most difficult aspects of

suicide prevention, especially that more research is needed to identify how to better assess and treat cancer patients for suicidal ideations and behaviors.

### **C. Importance of Screening**

Mental health screening tests help physicians and health care professionals diagnose cases (Maxim et al., 2014). The integration of screening tools into the nursing care plan allows nurses to further assess patient's needs and help make clinical judgment regarding the problem, potential responses, and treatment options that are patient-centered (Richardson et al., 2015). To add value to the screening, interventions must take place with consideration to following up on patients after the intervention to validate its effectiveness (Toney-Butler & Thayer, 2021).

Cancer patients who experience psychological distress or problems tend to have worse treatment adherence and longer hospital stays (Almigbal et al., 2019). It is critical to identify cancer patients who are prone to develop psychological discomfort as their disease progresses, to target the right interventions and provide the best care (Almigbal et al., 2019). Screening is believed to provide cancer patients the chance to communicate their emotional state without having to openly admit their need for psycho-oncological counselling (Hermelink et al., 2014).

Considering the above, oncology nurses must possess knowledge on how to assess risk factors and conduct routine psychological distress screening. Hermelink et al. (2014) reported that two-thirds of counseled patients had significant gain from psycho-oncology assistance, whereas the other third reported no significant gain from counseling. This

finding reflects both screening failure and poor counseling. In general, counseled patients showed less distress at discharge, whereas non-counseled patients did not (Hermelink et al., 2014). To further highlight the importance of psychological distress screening, recommendations focus on the integration of psychological screening as a sixth vital sign (Grassi, 2020).

#### **D. Psycho-Oncology: Definition and Significance**

Emerged in the 1970s, Psycho-oncology is a field that recognizes psychological distress among cancer patients. Its main purpose is investigating the impact of behavioral and psychological influence on cancer morbidity and mortality. Not only does the psycho-oncology field address emotional aspects in cancer patients and their families, it also investigates the role of mind-body connection in cancer patients (Akechi, 2018).

Ever since its development, research around the topic has emerged and national societies are created in almost all developed countries which in turn joined the International Psycho-Oncology Society (IPOS), aiming at developing and implementing guidelines regarding the psycho-oncology care. Psycho-oncology interventions are currently expanding worldwide as the concept of improving quality of life for cancer patients broadens (Lang-Rollin & Berberich, 2018).

Psycho-oncology aims to differentiate between adaptive and maladaptive emotions. Negative emotions are normal and are expected to be present when someone is diagnosed with cancer. However, those emotions become problematic when they are intense and

linger for a long period of time and negatively affect the patient's life. The role of psycho-oncology is acknowledging those emotions and helping patients cope (Karchoud et al., 2021). To effectively identify and acknowledge psychological distress and problems in cancer patients, a psycho-oncology team of psychiatrists, psychosomatic physicians, clinical psychologists, psychiatric nurses, and oncology nurses work in collaboration to assess cancer patients and implement psycho-oncology interventions, which include psychoeducation, Cognitive Behavioral Therapy (CBT), individual psychotherapy, and group therapy (Travado, 2015).

Psychoeducation refers to educating cancer patients and their families about the disease, its progression, treatment, and dealing with emerging symptoms. This increases knowledge of both patients and their families, hence giving them a sense of psychological well-being (Fawzy & Fawzy, 2011). The increase in knowledge can decrease anxiety, depression, and life disruptions in cancer patients (Croy, 2010). As CBT targets negative thoughts, emotions, and behaviors that can increase psychological distress symptoms, it equips patients with the knowledge and skills needed to solve problems, reduce their negative thoughts, and decrease their stress levels. In other words, CBT teaches patients how to cope with negative feelings (Horne & Watson, 2011). Several studies suggest that CBT can contribute to the decreased biological and psychological effects of chemotherapy (Croy, 2010). As for Individual psychotherapy, it refers to one-on-one sessions between the patient and the nurse (CNS) or therapist, aiming at improving emotional well-being by helping patients express negative feelings (Lederberg & Holland, 2011). Finally, group therapy or group support consists of different cancer patients with similar or different

diagnosis supervised by a nurse psychologist. Through communicating and sharing feelings and experiences, group therapy reduces feelings of isolation and social stigmatization among cancer patients (Croy, 2010; Travado, 2015).

Mental health status can affect the course of treatment. Recently, there has been a trend to cure the patient with the disease not just the disease. Studies have revealed the effectiveness of psycho-oncology interventions. For example, Simpson et al. (2001) assessed an improvement in psychological, physical, and social status of patients with breast cancer who received group psychotherapy intervention. Not only that, even the health care cost was less by 23.5%. Therefore, psycho-oncology care can provide both increased quality of life for cancer patients as well as reduction in the cost of cancer treatment (Carlson & Bultz, 2004).

#### **E. Role of Oncology Nurses in Psycho-Oncology care**

Oncology nurses are huge contributors in the care of cancer patients, as they attend to the care of both cancer patients and their families (Holland, 2002). Nurses are responsible for the general assessment of patients, education, coordination of the care, managing symptoms, and providing the needed support. Through active listening and caring, oncology nurses can build a relationship of trust with patients where they express their feelings and concerns. Furthermore, family members interact with oncology nurses more than other healthcare professionals; they rely on them and view them as trustworthy to confide in and share concerns with (Abrahamson, 2010). In fact, oncology nurses are the

first to support patients when they receive their cancer diagnosis and throughout their illness (Kubota et al., 2018). It is believed that oncology nurses can most likely detect distress through assessment and screening (Abrahamson, 2010). Nurses who perform distress screening and understand scores can give direct interventions and timely referrals that increase patient satisfaction. Oncology nurses are therefore responsible for conducting the screening test and overseeing the results, as well as following-up on their distressed patients (Fulcher & Gosselin-Acomb, 2007). In fact, The National Institute for Health and Care Excellence (NICE) recommends that nurses appropriately assess psychological problems in cancer patients to avoid any psychological harm (Kubota et al., 2018). In addition to all these roles, through their input and insight, oncology nurses play a significant contribution to both measurement and control policies in the psycho-oncology field (Holland, 2002).

#### **F. Psycho-Oncology Training for Oncology Nurses**

During the course of cancer, almost all patients suffer from psychological distress or problems; one in three patients disclosed needing psychosocial support. However, only 38% of patients who received psychological support felt well informed about psycho-oncology services (Faller et al., 2016). In a recent study conducted by Dreismann et al. (2022) to determine barriers nurses face when assessing and screening for psychological problems, it was concluded that lack of training, uncertainty of process, lack of awareness for psychological distress, and uncertainty of the effectiveness of psycho-oncology interventions pose the most important barriers to effective screening. Similar results were

revealed by Richa (2010) who reported that both nurses and physicians lack understanding regarding psychological problems and lack appropriate training on psychological screening. Pursuing from the lack of appropriate preparation of oncology nurses at AUBMC, the need to develop an educational program about psycho-oncology nursing care is paramount.

The aim of such educational programs is enhancing knowledge, performance, communication skills, and confidence among nurses in practice. Several studies were conducted to evaluate the effect of psycho-oncology training on nurses. In fact, both Chambers et. al (2017) and Kubota et al. (2018) concluded that training programs increased knowledge and confidence in nurses and improved their communication skills. Granek et al. (2019a) revealed that nurses who underwent training on communication skills were more capable in detecting distress among cancer patients than nurses who did not receive any. Similarly, in a study assessing the effect of 105 hours of a training program on attitudes, communication skills and occupational stress of oncology nurses, it was revealed that training affects nurses in a positive way (Delvaux et al., 2004). Moreover, nurses reported feeling more prepared and informed to provide the needed emotional support for both patients and their families. Not only did this training change nurses' attitudes, but it also improved patients' satisfaction; patients felt that their concerns were more clarified, and they felt more informed and reassured (Delvaux et al., 2004).

Training, in general, has a positive impact on nurses; it makes them more confident and helps them attain a higher status, which in turn affects their participation in team decisions. Trained nurses tend to speak up more often and feel psychologically safe about

their information and decisions. Hence, training nurses improves the quality of care rendered to oncology patients experiencing psychologic distress (Seibert et al., 2021).

### **G. Barriers to the Psycho-Oncology Care**

There is currently little to no studies that have investigated barriers and facilitators that oncology physicians and nurses face in psycho-oncology care. Barriers are visualized at various levels: patient and provider levels (Ehlers et al., 2019). At the patient level, barriers can develop due to social stigma, lack of self-advocacy, hesitance to discuss emotions, or denial (Ehlers et al., 2019; Schouten et al., 2019). Psychosocial screening and subsequent care can often be hampered by attitudes of both the patient and family member. Many patients believe that they do not require such care or that getting tested or obtaining care will cause embarrassment. Even though the National Comprehensive Cancer Network (2015) utilizes the word "distress" to lessen possible stigma, fear of stigma still influences responses to screening items and affects the reliability of results (Stanley, 2017).

On the other hand, barriers at the provider level include lack of knowledge and education, time management, communication skills, empathy, and resources (Ehlers et al., 2019; Schouten et al., 2019). In addition, the provider's emotional vulnerability projects an additional barrier to psycho-oncology care (Schouten et al., 2019).

### **H. Provider's Barriers to Psycho-oncology Care**

As revealed in the literature, there exists several barriers to providing psycho-oncology care. The barriers include: (a) lack of adequate preparation, (b) lack of time, (c)



lack of communication skills, (d) lack of empathy, (e) emotional vulnerability, and (f) lack of resources.

### ***1. Lack of Adequate Preparation***

The first step to detect any psychological distress or disorder is through screening and assessing. However, psychological screening is not a common practice in oncology settings. In fact, clinicians lack training and confidence in administering the screening test and evaluating results, as well as scarcity in resources to manage psychosocial distress (Dilworth et al., 2013). In a study conducted by Schouten et al. (2019) to evaluate the health care practitioners' perspectives on barriers to psychological care for cancer patients, insufficient knowledge and training on how to check mental status of patients and help meet their psychological needs surfaced from the data (Granek et al., 2019b; Schouten et al., 2019).

### ***2. Lack of Time***

Another obstacle reported by nurses is lack of time due to work overload. Accordingly, nurses are not available to sit with their patients and discuss their emotional well-being (Granek et al., 2019a).

### ***3. Lack of Communication Skills***

For nurses or oncologists to properly assess signs of psychological distress or psychological disorders they must communicate with patients. However, health care

practitioners do not deliver information to their patients, thus jeopardizing patient care (Schouten et al., 2019). In a study conducted by Güner et al. (2018), nurses conveyed difficulty in communicating with patients and their families, because they often feel unsure of what and how much to say and what approach to use. Other studies supported prior notions that oncology nurses lack adequate training, leading to feeling most helpless in times of death, palliative care, and transitional periods, as the care for cancer patients changes from recovery to end-of-life care (Güner et al., 2018; Kubota et al., 2018).

#### ***4. Lack of Empathy***

It is important for nurses to be empathetic as this promotes a trusting relationship and patient-centered care. However, despite its importance, many nurses suffer from lack of empathy in clinical settings. The extreme workload and lack of time and communication make it difficult for nurses to display empathy towards their patients (Ashouri et al., 2018). Furthermore, some nurses believe that they can't be empathic towards something they have not experienced before (Schouten et al., 2019).

#### ***5. Emotional Vulnerability***

The lack of both knowledge and skills in psychological care causes nurses to experience serious stressors. Furthermore, some nurses believe that caring for patients with cancer is exhausting, since caring and loving patients who eventually die drains them emotionally. Nurses believe that unless they are feeling mentally well, they can't provide the needed psychological help (Güner et al., 2018).

## ***6. Lack of Resources***

Another barrier to psycho-oncology care lies in the lack of resources where there is a limited number of social workers, psychologists, and psychiatrists who can attend to patients' needs (Granek et al., 2019b). Moreover, there is no clear protocol for healthcare professionals to approach cancer patients with sensitive topics such as emotional and sexual dysfunction; pain relief; social, financial, and spiritual issues; rehabilitation; and return to work. Furthermore, there is lack of follow-up for patients as not much attention is given for home support and family members support (Schouten et al., 2019).

### **I. Role of the APN in Psycho-Oncology Care**

According to the International Council of Nurses (ICN), advanced practice nurses (APNs) are registered nurses who have gained extensive knowledge through graduate school, complex decision-making skills, and clinical competencies in a specific field (Hu & Forgeron, 2018). The psychiatric mental health APNs play an important role in advancing knowledge and skills of the healthcare work force. As endorsed by Woo et al.'s (2017) work, APNs are better than physicians in patient education, answering concerns, listening to patients, and managing their pain. Similarly, Htay and Whitehead (2021) confirmed that APNs have more positive impact in terms of patient satisfaction when directly compared to physicians.

Psychiatric APNs are members of the psycho-oncology multidisciplinary team; they can exert interventions such as assessing cancer patients for signs of psychological distress

by conducting an in-depth mental health assessment, assisting patients to cope with distress, and appropriately referring them. However, their main role in the psycho-oncology team resides in providing consultations for oncology nurses dealing with the distressed cancer patients and evaluating the rendered management (O'Sullivan et al., 2011).

The presence of a psychiatric APN in cancer care provides support for oncology nurses. The psychiatric APN can help nurses and other staff deal with stress, burnout, and emotional fatigue. Moreover, the psychiatric APN can offer direct education to nurses needing psycho-oncology education, develop training programs for the novice oncology nurses, and introduce new methods in psycho-oncology care (Middleton, 2014).

## **J. Summary**

Cancer diagnosis can lead to psychological distress in cancer patients such as anxiety and depression, resulting in further deterioration. Oncology nurses can assume vital roles in the psycho-oncology team by assessing and identifying signs of psychological distress in cancer patients. It is important that nurses receive adequate preparation. Due to gaps in psycho-oncology knowledge and the many challenges and barriers that oncology nurses face at the workplace, they fall short in terms of effectively detecting, assessing, and planning care to the psychologically distressed cancer patients.

## CHAPTER III

### THE PROGRAM

This chapter provides information about the psycho-oncology program designed for the adult oncology nurses dealing with distressed cancer patients. From my experience as an oncology and a psychiatric nurse at AUBMC, I had a first-hand perspective regarding the lack of psychological distress screening for oncology patients. The status quo inspired me to propose this psycho-oncology educational program, which includes topics on psycho-oncology principles with emphasis on screening techniques. The program will be delivered face-to-face. This chapter provides a detailed description of the program.

#### **A. Program Description**

This six-session psycho-oncology program targets adult oncology nurses as part of their professional development and continuing education requirement. Integrated in the program are latest evidence on psycho-oncology theories, distress assessment tools, and distress screening techniques. Various psycho-oncology interventions deemed essential to help cancer patients and their families cope with psychological distress will be discussed in depth. Learning activities integrated in the program ensure interaction and engagement in discussion; accordingly, role-plays, case studies, and narrative pedagogy form the instructional means of the sessions in the program.

## **B. Program Learning Outcomes**

After successfully completing this program, participants will be able to:

- 1- Demonstrate understanding of the role of the oncology nurse in dealing with cancer patients and their families.
- 2- Examine the most common psychiatric disorders among the cancer population using the DSM-5 diagnostic criteria.
- 3- Assess psychological distress in patients and families from a psycho-oncological perspective using a variety of screening tools.
- 4- Analyze the need of cancer patients experiencing psychiatric disorders for the available psychotherapy modalities.
- 5- Describe the various psychopharmacological approaches used in the management of cancer patients with distress.
- 6- Explore the importance and role of the family members as fundamental components of the psycho-oncology care.

## **C. Target Population**

The program will target interested adult oncology registered nurses working on Basile inpatient and outpatient floors at AUBMC.

#### **D. Instructional Approaches**

Several instructional approaches will be utilized in the program, such as lectures, case studies, discussion, role-plays, and narrative pedagogy. The program material will be delivered didactically through PowerPoint presentations. A clinical situation will be integrated in each unit of the program, developed in a case study format. Case studies are real-life scenarios where nurses' experiences and understanding of the course material can be unraveled through discussion. Case studies provide a major advantage in teaching as they help learners develop several skills including problem solving, decision-making, and analytical thinking. Furthermore, case studies increase the learner's motivation by participating and engaging in the educational process. Because they are real situations, case-studies can help nurses reflect and relate knowledge to similar situations they have previously encountered with their patients (Bonney, 2015).

Role-plays will be integrated in the units to simulate the topic under discussion. Role-plays are educational techniques commonly used in mental health teaching. Through playing the role of patients, learners explore patient's feelings, emotions, and attitudes. This approach promotes reflection and insight by playing the role of both patients and therapists and observing colleagues. Thereby, it is important to stress on the important role that role-plays have in increasing learner's involvement, self-efficacy, and empathic skills (Rønning & Bjørkly, 2019).

In addition to the above instructional approaches, narrative pedagogy using videos, has become an essential part of educational programs. This instructional strategy delivers

information while also allowing learners to become involved in their own learning by focusing, understanding, and analyzing the video content (Moradi & Chen, 2019).

### **E. Assessment Approaches**

The program commences with a pre-test to assess participants' knowledge about psycho-oncology in general and nursing practice when dealing with psychological issues among cancer patients (see Appendix A). At the end of the program, participants will sit for a post-test, which covers all discussed content in the program. A minimum grade of 80% will mark the successful completion of the program requirements, along with a certificate of attendance granted by the Clinical and Professional Development Center (CPDC) at AUBMC. In case participants fail to meet the minimum grade, they need to retake the exam two weeks after the end of the course.

### **F. Program Outline**

The program includes six units, delivered over a six-week period. The duration of each unit is 2 to 3 hours.

⇒ **Unit 1: Introduction to psycho-oncology**

⇒ **Unit 2: Psychiatric Disorders Among the Cancer Population**

⇒ **Unit 3: Screening and Assessment in Psycho-Oncology**

⇒ **Unit 4 : Psychotropic Management in Cancer Patients**



⇒ **Unit 5: Psychotherapeutic Interventions for Cancer Patients**

⇒ **Unit 6: The Role of the Family of a Cancer Patient with Psychological Distress**

***Unit 1: Introduction to psycho-oncology***

<b>Unit 1</b>	<b>Introduction to Psycho-oncology</b>
<b>Outline</b>	<ul style="list-style-type: none"><li>• Orientation to the Course</li><li>• The Oncology Nurse as a Part of the Psycho-Oncology Team</li><li>• Educating and Training Oncology Nurses in Psycho-Oncology</li><li>• Oncology Nurses Stress and Related Interventions</li></ul>
<b>Duration</b>	2 hours
<b>Teaching Method</b>	PowerPoint Presentation Narrative pedagogy using a video

Unit 1: Description

This is an introductory session. The program coordinator will start by assessing the participants' knowledge of the topic with a pre-test (see appendix A), followed by a discussion about the program's aims and significance. Participants will be introduced to their role in the psycho-oncology team, especially in screening, assessing, and identifying psychological distress and psychiatric disorders in cancer patients, requiring professional help. During this session, the program coordinator will further explain how working in an oncology setting can affect nurses' wellbeing, and how to properly manage any untoward experience. Moreover, a video about a real-life experience of a cancer survivor will be presented and discussed thus further highlighting the impact of psycho-oncology nursing on cancer patients.

Video: <https://www.youtube.com/watch?v=VPqYDJtIYPQ>

***Unit 2: Psychiatric Disorders Among the Cancer Population***

<b>Unit 2</b>	Psychiatric Disorders Among the Cancer Population
<b>Outline</b>	<ul style="list-style-type: none"><li>• Depressive Disorders and Suicide</li><li>• Adjustment and Anxiety Disorders</li><li>• Post-Traumatic Stress Disorder Related to Cancer Diagnosis and Treatment</li><li>• Grief</li></ul>
<b>Duration</b>	3 hours
<b>Teaching Method</b>	PowerPoint Presentation Case-study discussion (Appendix B) Narrative pedagogy using a video

Unit 2: Description

This unit examines the most common psychiatric disorders among the cancer population using the DSM-5 diagnostic criteria for each disorder (depressive disorders, adjustment disorders, anxiety disorders, post-traumatic stress disorder, grief, and suicide). Case studies will be used in this session to properly identify different behaviors and warning signs for each disorder indicating the presence of a psychiatric problem (See Appendix B). Also, a video will be presented to further explain how cancer affects the psychosocial aspect of patients.

Video: <https://www.youtube.com/watch?v=HkYjlsUC6o>

***Unit 3: Screening and Assessment in Psycho-Oncology***

<b>Unit 3</b>	Screening and Assessment in Psycho-Oncology
<b>Outline</b>	<ul style="list-style-type: none"><li>• Distress as the 6<sup>th</sup> vital sign</li><li>• Depression and Anxiety</li><li>• Suicide</li></ul>
<b>Duration</b>	2 hours

<b>Teaching Method</b>	PowerPoint presentation Case Scenario Role play reflection (Appendix C)
------------------------	---

### Unit 3: Description

In this unit, participants will be introduced to a variety of screening tools used to identify different psychological problems in cancer patients. The unit will provide participants with the opportunity to have an ongoing discussion and on-site training on assessing and screening patients with psycho-oncology problems. This will be done in as a teamwork, where participants will be divided into groups of two; one will play the role of a cancer patient in distress and the other will play the role of the oncology nurse who will use the previously discussed screening tools to assess the patient. Participants will be given 5 to 10 minutes to read the scenario after which they will present their scene. After each role-play, participants will critique the scenario by reflecting on nurses' assessment technique, pointing out areas that need further improvement. The aim behind this unit is linking the theoretical aspects of psycho-oncology screening and assessment with direct patient care.

### *Unit 4: Psychotropic Management in Cancer Patients*

<b>Unit 4</b>	Psychotropic Management in Cancer Patients
<b>Outline</b>	<ul style="list-style-type: none"> <li>• Antidepressants</li> <li>• Anxiolytics</li> <li>• Antipsychotics</li> <li>• Mood Stabilizers</li> <li>• Hypnotics</li> </ul>
<b>Duration</b>	2 hours
<b>Teaching Method</b>	PowerPoint presentation Application using case studies

#### Unit 4: Description

Psychotropic medications have a wide array of use in oncology. Though these medications address primarily psychiatric conditions, they are also helpful in managing cancer-related side effects and symptoms including nausea, fatigue, hot flashes, sleep disturbances, pain, loss of appetite, and weight loss. This unit will provide participants with an overview of the different classes of psychotropic medications, side effects, mechanism of action, drug-drug interactions, indications for use depending on specific symptoms and benefits, and nursing consideration. During the session, the program coordinator will share a case study about a cancer patient who presented with distress; the participants will be asked to read, understand, and discuss the case in terms of choosing the appropriate psychotropic medications and proper nursing considerations (See Appendix D).

#### ***Unit 5: Psychotherapeutic Interventions in Cancer Patients***

<b>Unit 5</b>	Psychotherapeutic Interventions in Cancer Patients
<b>Outline</b>	<ul style="list-style-type: none"><li>• Cognitive and Behavioral Interventions</li><li>• Therapeutic Communication Skills</li><li>• Managing Clinically Significant Distress</li></ul>
<b>Duration</b>	3 hours
<b>Teaching Method</b>	PowerPoint presentation Narrative pedagogy using a video Case study discussion

#### Unit 5: Description

This unit will focus on the latest evidence on principles and skills of psychotherapy that must be considered throughout the cancer trajectory. Theoretical framework for goal setting, therapeutic communication, and relationship will be discussed. Improving nurses'

interpersonal skills regarding offering psychological support will be exercised using case-scenarios, and other skills. The concepts will be further clarified through presenting and discussing a video. After explaining different psychotherapy approaches, the presenter will share a case study with participants to discuss (See Appendix E).

Video: <https://www.youtube.com/watch?v=HkYjltsUC6o>

***Unit 6: The Role of the Family of Cancer Patients with Psychological Distress***

<b>Unit 6</b>	The Role of the Family of Cancer Patients with Psychological Distress
<b>Outline</b>	<ul style="list-style-type: none"> <li>• Family-Centered Approach in the Setting of Cancer Care</li> <li>• Psychosocial Interventions for Families Coping with Cancer</li> <li>• Bereavement in the Setting of Cancer Care</li> </ul>
<b>Duration</b>	3 hours
<b>Teaching Method</b>	PowerPoint presentation Narrative pedagogy using a video

Unit 6: Description

In this unit, participants will be introduced to a different approach regarding patient care. Cancer doesn't affect the patient only but also other family members including spouse, parents, and children. Participants will comprehend the importance of the family as the fundamental context of medical care in psycho-oncology. By assessing family dynamics, nurses will be enabled to assist families with the proper psychological interventions using family-centered approach. The aim is to help both patients and their families during illness and treatment trajectory and focus the care on both the patient and family. After exploring the effect of caring for a cancer patient on the patient's family as a whole, a short video displaying a family member's experience will be discussed.

Video: <https://www.youtube.com/watch?v=KZaGDVqr8vE>

## **G. Summary**

The Psycho-Oncology program will target the adult oncology nurses. The program comprises six units of psycho-oncology nursing offered over six weeks; each unit is of two to three hours duration. Nurses will be assessed through a pre-test on their psycho-oncology knowledge. Among the covered topics are the basis of psycho-oncology, psychiatric disorders among the cancer population and screening methods, psychotropic management of cancer patients, and principles of psychotherapy interventions for cancer patients, as well as providing psychological help to the cancer patient family. An array of instructional approaches will be used, such as role-plays, case studies, narrative pedagogy, and discussion. The participants will then undergo a post-test to validate the acquisition of the program material.

## CHAPTER IV

### PROGRAM IMPLEMENTATION AND EVALUATION

AUBMC continuously provides nurses with continuing educational courses to improve practice and quality of nursing care. The need of oncology nurses at AUBMC to correctly assess and handle psychological distress in oncology patients are among the many reasons to develop this program, which aims at educating oncology nurses regarding psycho-oncology care and practice. This chapter will discuss the implementation process of the program and will include details about the evaluation process of both the program and participants.

Before implementing the course, the need of such program will be shared with the nursing administration at AUBMC for approval. After securing their approval, the program's material will be shared with the Clinical and Professional Development Center (CPDC) at AUBMC. The CPDC will carefully review the course material and approve it. The program will be communicated with nurse managers in both the adult oncology unit and outpatient oncology department to introduce the program outcomes, benefits, and implications of psycho-oncology practice on the quality of life of cancer patients and their families.

Included in this phase is announcing the implementation of the program regarding venue, date, and time. In this regard, a poster will be posted on the adult oncology unit and outpatient departments or clinics (See Appendix F). At a later stage, the program may be

sent to the Lebanese Order of Nurses for their review and potential implementation in different hospitals in Lebanon.

A total of 40 registered oncology nurses will be invited to attend the program. Interested ones will be asked to register their names with their manager, who in turn will send the list to the program coordinator via e-mail. Nurses who confirm their interest and willingness to participate will be granted access to Moodle and the program's instructional material. If the number of interested nurses exceeds 15, they need to enroll in the upcoming offering, scheduled to take place every 2 months. Attendance is mandatory; accordingly, certificates and contact hours will be issued only to participants after successfully completing the requirements of the program and passing the final exam.

## **A. Evaluation**

Evaluation of the program will include the following: (a) assessing the achievement of program learning outcomes, (b) evaluating program effectiveness, and (c) evaluating overall impact of the program on increasing referrals and reporting to the psycho-oncology team.

### ***1. Assessing Achievement of Program Learning Outcomes***

To assess the acquisition of knowledge and achievement of program learning outcomes, participants will be required to take a post-test that takes place one week after the last session. The exam will be held in person and includes 22 questions divided into two parts. The first part includes multiple-choice questions, and the second part is essay



questions. The time allotted to complete the post-test will be 90 minutes. Participants will receive their grade after 2 days of the exam (See Appendix G).

## ***2. Evaluating Program Effectiveness***

To improve the program delivery, structure, and content, it is important to consider the feedback from participants. For this reason, an evaluation form is developed. The form aims at obtaining participants' feedback on program structure, content, and delivery methods. The evaluation will be filled anonymously by participants. The form is divided into two parts: Part one includes a total of 12 items using the Likert scale. Items focus on program content, delivery, session length, instruction, and instructor. As for part two, it is more of a qualitative section inviting learners to share their comments about the program (see Appendix H).

## ***3. A Follow up on Achieving Overall Program Outcomes***

After program completion, it is important to transfer learning outcomes to practice. To begin with, the coordinator who is an Advanced Practice Nurse will provide the contact details to all oncology nurses who successfully completed the program to assist in any arising matter pertaining to the program and provide guidance and mentoring when needed.

Another method to evaluate the program's effectiveness will be through looking at the data pertaining to psychological distress assessment and psychiatry referrals for cancer patients. AUBMC uses the electronic system EPIC to ease the process of documentation.

Depending on the unit, different screening tools appear; for instance, the distress-screening tool appears as a task required for completion by adult oncology nurses. If the distress score is high, the system automatically requests psycho-oncology consult. It is worth noting that data are saved into the system and a monthly report can be extracted. By accessing the EPIC system and using the previously mentioned feature, the coordinator will be evaluating the monthly distress screening and number of psycho-oncology consults. An increase in the psycho-oncology consults will be an indication of nurses' involvement in the distress screening. The collected data will be with the CPDC to present the program evaluation and its effect on the performance of oncology nurses.

## **B. Summary**

The above program targets oncology nurses at AUBMC. Implementation will be coordinated with the CPDC, and the program will be advertised through the nurse managers of both the Basile In-patient and Out-patient departments. Evaluation will take place at three levels: assessing learning through a test, evaluating the overall program, and determining program effectiveness by following up on nurses' application of screening of oncology patients in distress, increase in referrals, and reporting to the psycho-oncology team.

## CHAPTER V

### CONCLUSION

Cancer affects not only the physical health of patients, but also their mental health. The sudden change in the life of cancer patients, frequent admission and long hospital stay, complexity of cancer treatment, pain, and society's perception about cancer, all of which affect the patient's mental health negatively. It is well known that a worsened mental state affects the progression of cancer; however, it is uncommon for oncology nurses to accurately assess psychological distress, since they require formal education and preparation. This psycho-oncology nursing program aims at developing knowledge, skills, and attitudes of nurses who are entitled to deliver care to the adult cancer patient population. The program aims at educating oncology nurses and preparing them regarding assessing patients by accurately using distress screening tools and appropriately selecting intervention strategies appropriate to the situation at hand. The program can be used in the orientation of novice junior oncology nurses. After implementing this program at AUBMC, it can be proposed for adoption in other hospitals in Lebanon in collaboration with the Lebanese Order of Nurses (LON). This program contributes to the improvement of patient care through equipping oncology nurses with skills, knowledge, and confidence regarding early detection of distress in cancer patients, together with concerting efforts with the psycho-oncology team.

## APPENDIX A

### PRE-PROGRAM TEST

**Read the statements below and answer with True or False.**

1. \_\_\_\_\_ Return demonstration is a performance to evaluate the effectiveness of teaching a patient coping skill.
2. \_\_\_\_\_ Adult oncology nurses must be educated and trained in psycho-oncology as they play an important role in the psycho-oncology team.
3. \_\_\_\_\_ Distress is an intense negative state of feeling and emotions in which the individual fails to return to his/her psychological equilibrium.
4. \_\_\_\_\_ PHQ-9 and GAD-7 are used to screen for anxiety and depression.
5. \_\_\_\_\_ Suicide is common among cancer patients.
6. \_\_\_\_\_ Burnout is the result of extreme and persistent mental, physical, and emotional stress on one's job.
7. \_\_\_\_\_ Mirtazapine is the drug of choice for a cancer patient complaining from low PO intake and insomnia.
8. \_\_\_\_\_ It is evident that evolving from patient-centered care to family-centered care has a positive outcome on both the patient and family during treatment.
9. \_\_\_\_\_ Cognitive Behavior Therapy is a form of psychotherapy to enhance the quality of life of cancer patients and their spiritual well-being.
10. \_\_\_\_\_ Psycho-oncology is a branch of medicine that deals with the psychosocial aspect of cancer patients.

## APPENDIX B

### UNIT TWO

#### 1. CASE STUDY ON DEPRESSION

Mr. Omar, a 67-year-old male diagnosed with stage IV non-small cell lung cancer 3 months ago, he was admitted for pneumonia and weight loss of 15 kg over the past 3 months. In her assessment, Ola, an oncology nurse, noticed that Omar spends most of his time asleep during the day and, if awake, closes his eyes when the staff enter the room. His answers were only limited to “yes” or “no” only, also he refused to get out of the bed for ambulation as he lacked energy and interest. Not only that, but he also seemed emotionally detached when his oncologist talked about his illness and course of treatment. He expressed his wishes to die on several occasions as he sees no hope to get cured.

- Identify the signs and symptoms presented in the case, then formulate the proper diagnosis using the DSM-V diagnostic criteria.

#### 2. CASE-STUDY ON ANXIETY

Sarah, a 29-year-old married female patient and a mother of two kids, has been recently diagnosed with Stage II breast cancer. The patient presented for her 2nd chemotherapy cycle of Adriamycin-Cyclophosphamide. Upon diagnosing her with cancer, Sarah started excessively worrying about her prognosis, despite being assured from her oncologist that she has good prognosis. She also seeks continuous reassurance from the medical and nursing teams and tends to ruminate about her current health status excessively. This is accompanied with irritability, restlessness, low concentration, difficulty falling and staying

asleep, decreased appetite, and significant muscle tension. Sarah is unable to control her worry which is causing debilitating effect on her mental and physical well-being.

- Identify the signs and symptoms presented in the case, then formulate the proper diagnosis using the DSM-V diagnostic criteria.

### 3. CASE-STUDY ON GRIEF

Wafaa, a 42-year-old female patient, married and a mother of 4, had a screening mammogram which revealed an abnormality in the right breast. A surgical biopsy was done and revealed a grade III infiltrating ductal carcinoma. Diagnosis was confirmed in a telephone conversation with her oncologist. She presented for a follow-up appointment to discuss definitive treatment. Wafaa was informed that she will undergo surgery followed by radiation therapy with possible chemotherapy. Post-surgery, she was admitted to the oncology ward for chemotherapy and radiotherapy. During her stay, Lana, an oncology nurse noted that Wafaa seemed irritable, verbally aggressive with her husband and sister, with low tolerance to physical pain caused by chemotherapy. Upon further assessment, Wafaa reported to nurse Lana feelings of guilt, sadness, a sense of worthlessness, anger, anguish, interrupted sleep, and containing feelings of remorse and sadness. She is also reporting ongoing anger at God who is making her suffer with no reason, as she is a dedicated worshiper and never done anything wrong in her life. Wafaa kept saying:” Why me!?! I have never done anything wrong in my life, I have small kids, why is God doing this to me? This couldn’t be happening!”

Identify signs and symptoms presented in the case, then formulate the proper diagnosis using the DSM-V diagnostic criteria.

## APPENDIX C

### ROLE PLAY – UNIT THREE

#### **Instructions**

The instructor will divide participants into groups of two.

The instructor will provide details about the role-play where participants are asked to prepare a role-play script where one member of the group shall play the role of a cancer patient in distress while the other shall play the role of the oncology nurse who will use the previously discussed screening tools to assess the patient.

#### Case Scenario – Suicide and Depression Screening

Salem is a 53-year-old male patient known to have AML status post-BMT, presented for a follow-up at day 90 post-BMT. After completing all blood workups, it was determined that Salem has relapsed, and he was admitted starting chemotherapy. During his hospital stay, Wael, an oncology nurse, noticed that Salem seemed withdrawn, sad with constricted affect, interacting minimally with the staff, and he was heard on several occasions expressing passive death wishes. During his hourly round, Wael noticed that Salem was checking the balcony in his room and commented the following:” A good fall from here will do the job.”

## APPENDIX D

### CASE STUDY – UNIT FOUR

Ahmad is a 44-year-old widowed male patient and a father of 3 children. He is a self-employed architect and the sole provider to his family. He was recently diagnosed with stage III rectal cancer, and he's set to start his 1<sup>st</sup> cycle of neoadjuvant chemoradiation therapy. Nurse Rami received Mr. Ahmad on his first admission. Rami noticed that the patient is worried, irritable, with low mood and concentration, decreased appetite for the past 4 weeks accompanied with nausea, difficulty sleeping, and complaining from neuropathic pain. While assessing Mr. Ahmad's psychosocial needs, Rami discovers that the patient scored 24 on the PHQ-9 scale, and 15 on the GAD-7 scale. Rami contacted the psycho-oncology team to further assess Mr. Ahmad, in which they recommended to start Mr. Ahmad on Remeron 15 mg and Duloxetine 30 mg.

- Indicate why the patient was started on both Remeron and Duloxetine? Write all nursing considerations.



## APPENDIX E

### CASE STUDY – UNIT FIVE

Amal, a 52-year-old female patient and a mother of 4, was recently diagnosed with carcinoma of the sigmoid colon. She is admitted to the infusion unit to receive her 1<sup>st</sup> cycle of GIAJFL chemotherapy protocol out of 12 post-surgery resections. Upon assessment, the patient wasn't engaging in conversation and asked nurse Lara to leave her alone.

Afterwards, the husband approached nurse Lara and expressed his concerns about his wife. He informed her that Amal after the surgery had little interest in doing daily tasks for more than half of the days accompanied with decrease oral intake, nausea, fatigue, lack of concentration, low mood, and spending most of her time asleep refusing to get out of bed; she also expressed to him that “the kids and him are better-off without her.” During the interview with the husband, Lara noticed that he was tearful, frustrated, extremely worried and anxious that his wife might harm herself. He also expressed his fear about losing his wife and being overwhelmed from the more responsibilities he had gained after his wife's diagnosis.

Following a comprehensive assessment and distress screening, Lara decided to contact the psycho-oncology team. After being assessed by the psycho-oncology team, Amal was started on an antidepressant, and she was encouraged to engage in psychotherapy.

- What are the different psychotherapy approaches offered for Amal at this point, and which type of psychotherapy, in your opinion, is most suitable for her? Elaborate.

## APPENDIX F

### POSTER

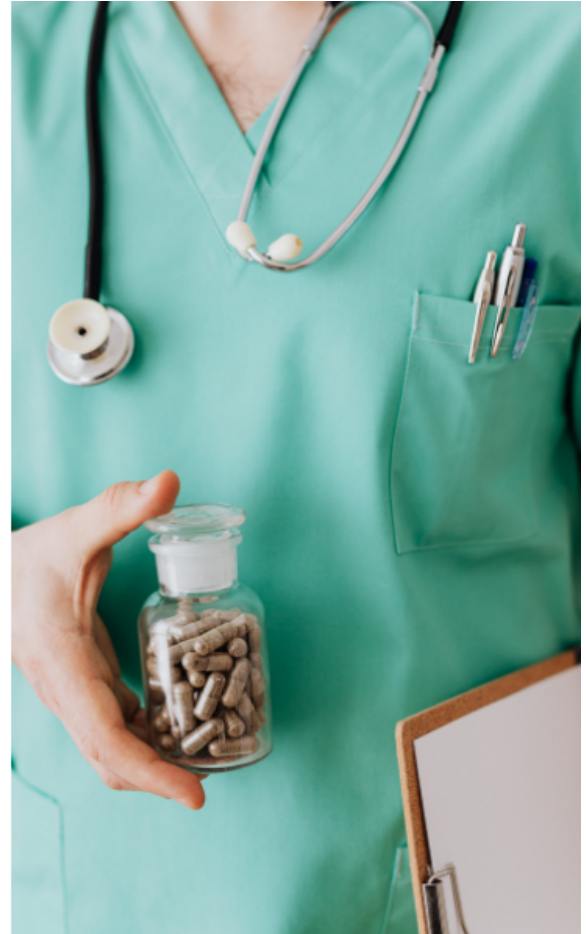


Our lives are dedicated to yours

**WE INVITE YOU TO  
PARTICIPATE IN THE  
EDUCATIONAL  
PROGRAM**

**PSYCHO-ONCOLOGY:  
AN INTRODUCTION TO  
THEORY AND PRACTICE**

**CONTACT US FOR MORE INFO**  
[fs95@aub.edu.lb](mailto:fs95@aub.edu.lb)



## APPENDIX G

### POST-PROGRAM TEST

Name: \_\_\_\_\_ I.D. \_\_\_\_\_

**Read the below questions and circle the best answer.**

1. Nurse Hala is taking care of a breast cancer patient who frequently experiences panic attacks. Hala would like to help the patient using cognitive-behavioral techniques. Which from the following techniques are most common to the cognitive-behavioral model theoretical framework? **Select all that apply.**
  - a. Administering anti-anxiety medication as prescribed.
  - b. Helping the patient to use controlled relaxation breathing.
  - c. Helping the patient examine evidence of stressors.
  - d. Questioning the patient about early childhood relationships.
  - e. Teaching the patient about anxiety and panic.
  
2. Nurse Rayan noticed Fouad is pacing, restless, and irritable. She asks him if something is upsetting him, his response is unclear and vague. Nurse Rayan assesses Fouad's level of anxiety as:
  - a. Mild
  - b. Moderate
  - c. Severe
  - d. Panic

#### **Scenario**

Salma, a widow aged 48, whose husband died one year ago from lung cancer, has just been diagnosed with breast cancer. Salma says to nurse Kassem, "Why me? How could God do this to me?"

The case applies to questions 3 and 4.

3. Salma's reaction reflects which of the following stages of grief:
  - a. Depression
  - b. Denial
  - c. Anger
  - d. Bargaining
  
4. Kassem's best therapeutic response would be:
  - a. "I will refer you to a clergy who can help you understand what is happening."
  - b. "It isn't fair that an innocent woman like you suffer from cancer."
  - c. "That is a negative attitude; you are hurting yourself with this attitude."
  - d. "It must really be frustrating for you; how can I best help you?"
  
5. While giving the discharge instructions to a post-BMT patient, nurse Rami noticed that the patient is concerned and worried about his upcoming discharge. Which of the following statements by Rami reflects the most therapeutic approach?
  - a. "You are much better than when admitted so there's no reason to worry."
  - b. "What would you like to do now that you are about to go home?"
  - c. "You seem to have concerns about going home."
  - d. "Aren't you glad that you're going home soon?"
  
6. Which of the following is not a stage in Elisabeth Kübler-Ross' grief cycle?
  - a. Denial
  - b. Acceptance
  - c. Depression
  - d. Acting out
  
7. Which psychological therapy has the best evidence for success in treating anxiety or depression in patients with cancer?
  - a. Adjuvant psychological treatment
  - b. Small group therapy
  - c. Group intervention
  - d. Generic CBT

8. Which of the following is not an identified grief reaction?
- Anticipatory grief
  - Prolonged grief
  - Unresolved grief
  - Absent grief
9. Which of the following treatment modalities is true for treatment of depression in patients with cancer?
- SSRIs are a good choice for GI cancer patients with stoma
  - Prozac (Fluoxetine) is the safest medication for a patient on tamoxifen
  - Moclobemide must be avoided in patients at risk of developing seizures due to CNS cancer
  - Tricyclic antidepressants may be the drug of choice for patients experiencing nausea
10. It would be **most** helpful for the nurse to deal with a patient with severe anxiety by:
- Giving specific instructions using concise statements.
  - Asking the patient to identify the cause of anxiety.
  - Explaining in detail the developed plan of care.
  - Urging the patient to focus on what the nurse is saying.
11. Wafaa is under evaluation for imminent suicide risk. Which information given by her would be **most** significant?
- At least a 2-year history of feeling depressed more days than not.
  - Divorced from spouse five months ago.
  - Feeling loss of energy and appetite.
  - Referring to suicide as best solution to problems.
12. Cognitive behavior therapy for a cancer patient with depression aims at:
- Challenging negative thinking
  - Encouraging analysis of dreams
  - Prescribing antidepressants
  - Discussing future goals of care

### **Scenario**

**Jane Doe, a 42-year-old female patient, married, mother of 4, is recently diagnosed with breast cancer. She is admitted to the infusion unit to receive her second cycle of**

**Adriamycin-Cyclophosphamide. Upon assessment, the patient wasn't engaging in conversation, closed her eyes and asked you to leave her alone. Afterwards, her husband approached you and expressed his concerns about his wife. He informed you that Jane after the first cycle she had little interest in doing daily tasks for more than half of the days accompanied with decrease PO intake, irritability, nausea, fatigue, neuropathic pain, lack of concentration, low mood, crying spells, and spending most of her time asleep, she also expressed to him her wishes to "die and end the suffer."**

- 1) As an oncology nurse, what are the proper interventions to do in this case? (2 Marks)
- 2) Identify the warning signs and behaviors observed on Jane. (5 Marks)
- 3) Which is/are the proper screening tools to be used in this case to assess Jane's psychological well-being? Explain (5 Marks)
- 4) Depending on the above findings, what is the most probable diagnosis for Jane? (3 Marks)

**Following a comprehensive assessment, you decided to contact the psycho-oncology team. After being assessed by the psycho-oncology team, Jane was started on both Remeron (Mirtazapine) and Cymbalta (Duloxetine). The patient was also encouraged to engage in a behavioral activation plan.**

- 5) (a) What are the indications for prescribing both Remeron (Mirtazapine) and Cymbalta (Duloxetine)? (3 Marks)  
  
(b) What are the nursing considerations? (2 Marks)
- 6) How would a behavioral activation plan help Jane? Elaborate. (5 Marks)

**During the interview with the husband, he was tearful, frustrated, extremely worried and anxious that his wife might harm herself. He expressed his fear about losing his**

**wife and being overwhelmed from the more responsibilities he had gained after his wife's diagnosis. He also reported that they haven't disclosed to the kids yet their mother's diagnosis as a means of protecting them.**

7) What is the appropriate approach you should use with Jane's husband and why? (5

Marks)

8) Using this approach, address the different aspects to be included in order to help Jane's

husband. (5 Marks)

9) Explain if you would agree with the husband to not inform the children. If not, how

would you address this concern? (5 Marks)

10) Dealing with such cases can cause a major work-related stress to most of the oncology

nurses. How would you properly deal with such stress? (5 Marks)

## APPENDIX H

### PROGRAM EVALUATION FORM

**Date:** \_\_\_\_\_

**Moderator:** \_\_\_\_\_

**Instructions:** Please rate the following items from 1 to 5.

**1:** Strongly Disagree, **2:** Disagree, **3:** Neutral, **4:** Agree, **5:** Strongly Agree

	1	2	3	4	5
1. The learning outcomes of the program were clearly stated.					
2. The expectations of the program were covered.					
3. The time allotted for the program content was adequate.					
4. The instructional outcomes of the program were achieved.					
5. The material was presented in an interesting way.					
6. The used teaching methodology and strategy was 7. efficient.					
8. The level of complexity of the program content was appropriate.					
9. The content of the program was adequate to advance the nurse's knowledge on best practices in oncology nursing.					
10. The topics of the program were presented in a clear and understandable manner.					
11. The program content was presented in a structured and organized manner.					
12. The moderator was knowledgeable about the topics of the program.					
13. The moderator was well prepared, and the session was smooth.					

**What new information have you acquired from this program?**



---

---

**Do you have any comments or recommended changes that would help improve the program?**

---

---

**Would you recommend the program to other nurses?**

- Yes
- NO

- **Further Comments**


---

---

**Thank you for Your Feedback!**

# APPENDIX I

## INSTRUCTIONAL MATERIAL SAMPLE



# Assessing and Screening for Depression and Anxiety in Cancer Patients

Fatima Salloum, RN, BSN

### Outline

- Objectives
- Significance and clinical utility
- Screening Tools
  - PHQ-9
  - GAD-7
- Score's Interpretation and Proposed Treatment Actions
- Psychometric Properties

### Objectives

- To educate oncology nursing staff on the PHQ-9 and GAD-7 tools to screen for anxiety and depression in cancer patients in a clinical setting
- To appropriately identify and screen individuals with risk of depressive and anxiety disorders
- To improve oncology nurses' mood assessment skills by reviewing appropriate use of the PHQ-9 and GAD-7 tools and familiarizing nurses with resources to help patients who score high

### Significance and Clinical Utility

Nurses play an important role in assessing and providing first level intervention to patients under psychosocial distress - it is an integral part of "cancer care for the whole patient" (IOM 2007).

### Why should I use it?

Measurement based care emphasizes the use of standardized assessments, and other "tests" to help personalize care and guide treatment decisions.

Routinely using these tools to measure longitudinal changes and track treatment progress are associated with superior client outcomes when compared to usual care

- Assessments alert clinicians to lack of progress, guides treatment decisions, identifies potential intervention targets, and assists in differential diagnosis
- Assessments prompt changes in interventions if needed when things are not working or can prompt stepdown in care after a patient's functioning has improved

The data can be used by the clinician to engage the client in therapeutic process, overall validating them as an active partner in their health care and mental wellness

It can improve communication between providers and facilitate collaboration among different services

## Screening Tools

### PHQ-9 (Patient Health Questionnaire)

### GAD-7 (General Anxiety Disorder/7 item self-report)

### PHQ-9 (Patient Health Questionnaire)

The Patient Health Questionnaire (PHQ) is a self-administered version of the PRIME-MD diagnostic instrument for common mental disorders. The PHQ-9 is the depression module, which scores each of the 9 DSM-IV criteria as "0" (not at all) to "3" (nearly every day) (Kroenke, Spitzer, & Williams, 2001).

### GAD-7 (General Anxiety Disorder/7 item self-report)

Is a self-administered 7 item instrument that uses some of the DSM-V criteria for GAD (General Anxiety Disorder) to identify probable cases of GAD along with measuring anxiety symptom severity. It can also be used as a screening measure of panic, social anxiety, and PTSD. It was modeled after the PHQ9 to be used quickly and effectively within a primary care setting (Kroenke, Spitzer, & Williams, 2006).

### Score's Interpretation and Proposed Treatment Actions

PHQ-9 Score	GAD-7 Score	Severity	Proposed Treatment Actions
0 - 4	0 - 5	None	None
5 - 9	6 - 10	Mild	Watchful waiting, repeating at follow-up.
10 - 14	11 - 15	Moderate	Consider CBT and pharmacotherapy.
15 - 19		Moderately Severe	Immediate initiation of pharmacotherapy and CBT.
20 - 27	16 - 21	Severe	Initiation of pharmacotherapy and CBT. Consider specialist referral

## Can I trust it?

### Psychometric Properties

Reliability: good procedural reliability, excellent internal consistency

Validity: good criterion validity, factorial validity, and procedural validity

### References

Institute of Medicine (US). Evidence-Based Medicine and the Changing Nature of Healthcare: 2007 IOM Annual Meeting Summary. Washington (DC): National Academies Press (US); 2008. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK52822/doi/10.17226/12041>

Kroenke, K., Spitzer, R. L., & Williams, J. B. (2001). The PHQ-9: validity of a brief depression severity measure. *Journal of general internal medicine, 16*(9), 606-613. <https://doi.org/10.1046/j.1525-1497.2001.016009606.x>

Spitzer, R. L., Kroenke, K., Williams, J. B., & Löwe, B. (2006). A brief measure for assessing generalized anxiety disorder: the GAD-7. *Archives of internal medicine, 166*(10), 1092-1097. <https://doi.org/10.1001/archinte.166.10.1092>

<https://www.efficacy.org.uk/therapy/phq-9-and-gad-7/>

# Generalized Anxiety Disorder (GAD) Among Cancer Patients



• Fatima Salloum, RN, BSN

## Outline

- Objectives
- Anxiety in Cancer Patients
- Definition of Anxiety Disorder
- Anxiety disorder prevalence among the general population
- Anxiety disorder prevalence among cancer patients
- Clinical presentation
- DSM-V Diagnostic Criteria
- Assessment of Anxiety disorder
- Treatments
- Summary

## Objective

- After attending this presentation, oncology nurses will be able to:
  - Identify the signs and symptoms of generalized anxiety disorder among cancer patients using the DSM-V diagnostic criteria

## Anxiety In Cancer Patients

- Anxiety is a common reaction to a cancer diagnosis
- Anxiety may persist throughout the disease process, affecting the patient's quality of life significantly
- Anxiety often coexists with depression in cancer patients
- Anxiety is a frequent reason for psychiatric and psychological
- consultation in the cancer setting

## Anxiety In Cancer Patients

- Anxiety tends to appear or worsen at critical points during the course of cancer:
  - At diagnosis
  - At the beginning and end of treatment
  - At recurrence
  - At advanced or terminal stages

## Definition of GAD

GAD is characterized by worry, defined as repetitive thinking about potential future threat, imagined catastrophes, uncertainties, & risks.

Individuals with GAD spend an excessive amount of time worrying about different topics, and they find it difficult to control the worry.

Worry might serve as an avoidant function, where individuals might report that worry serves as distraction from more emotional topics.

Uncertain situations are unacceptable and distressing and may lead to worry. (Intolerance to Uncertainty)

## Anxiety Disorder Prevalence Among the General Population

**Prevalence:** lifetime prevalence rate is between 2.8% and 6.2%.

**Gender:** more prevalent in women, approximately as twice as likely, due to environmental and cognitive influences.

**Age of Onset:** ~ 50% of cases begin by age of 31.

**Comorbidity:** High rates of comorbidity and overlap with other disorders, especially MDD. (GAD and MDD have highest rates of comorbidity of all mood and anxiety disorders).

**Clinical Course:** longitudinal study found that 42% of participants who were diagnosed with GAD at baseline were still symptomatic at 12 year follow up.

## Anxiety Disorder Prevalence among Cancer Patients

- Prevalence is uncertain due to limitations in research methodology: Differing study populations (single vs. mixed cancer diagnosis; differing tumor sites; early vs. late-stage disease; outpatient vs. inpatient, etc.); varying diagnostic criteria and assessment instruments; studies failing to separate anxiety from depression, etc.
- Estimated current prevalence of anxiety disorders in oncology is within a range of 15% - 26%.
- Numerous studies show that anxiety disorders are more common in cancer patients than in the general population.

## Clinical Presentation

Uneasiness, unpleasant feeling of anxious restlessness	Irritability	Habitual or near habitual tics
Difficulty falling asleep (leads to fatigue and low tolerance to frustration)	Occasionally sense of impending doom	Distractibility
Helplessness and sense of loss of control over feelings	Symptoms of autonomic arousal: Rapid or forceful heartbeat, sweating, urination, tightness in stomach, shortness of breath, dizziness	Vegetative disturbances: loss of appetite, decreased sexual interest
	Parasympathetically-mediated symptoms: abdominal distress, nausea, diarrhea	

## DSM-5 Diagnostic Criteria for GAD

- A. Excessive anxiety and worry (apprehensive expectation), occurring more days than not for at least 6 months, about a number of events or activities (such as work or school performance).
- B. The individual finds it difficult to control the worry.
- C. The anxiety and worry are associated with three (or more) of the following six symptoms (at least some symptoms having been present for more days than not for the past 6 months):
  - Restlessness or feeling keyed up or on edge.
  - Being easily fatigued.
  - Difficulty concentrating or mind going blank.
  - Irritability.
  - Muscle tension.
  - Sleep disturbance (difficulty falling or staying asleep, or restless, unsatisfying sleep).
- D. The anxiety, worry, or physical symptoms cause clinically significant distress or impairment in social, occupational, or other important areas of functioning.
- E. The disturbance is not attributable to the physiological effects of a substance (e.g., a drug of abuse, a medication) or another medical condition (e.g., hyperthyroidism).
- F. The disturbance is not better explained by another mental disorder.

## DSM-5 Diagnostic Criteria for GAD

## Assessment of GAD

- Clinical Interviews:** use of structured interviews is recommended. Anxiety Disorders Interview Schedule for DSM-5. Structured Clinical Interview for DSM-5.
- Self-Report Measures:** GAD-7, which has optimized levels of sensitivity and specificity than the previous questionnaires. Worry can be assessed by Pen State Worry Questionnaire.
- Behavioral Assessments:** self monitoring to record levels of anxiety and associated behaviors and cognition at many points throughout the day. The resulting enhanced awareness is then used to help clients catch the anxiety spiral early on to intervene using prescribed interventions before anxiety becomes excessive.

## Treatment of GAD

**Pharmacological therapy:**

Benzodiazepams, SSRIs, SNRIs, and TCAs.

Recommendations: initial treatment with SSRI or SNRI (proven efficacy in long and short-term treatment of GAD).

Benzos have been shown to have efficacy in short-term treatment of GAD but are associated with increased abuse potential and higher dropout rates.

While benzos are effective in relieving somatic symptoms, SSRIs or SNRIs are recommended for their larger effect on affective symptom relief, especially that GAD is comorbid with depression.

## Treatment of GAD (cont.)

CBT is effective treatment of GAD. Contemporary approaches to treating GAD emphasize function of worry in maintaining anxiety via avoidance of internal experiences.

Treatments combine components such as targeting non-adaptive patterns of behavior and cognition, exposure experiments, and teaching relaxation and problem-solving strategies.

Group therapy show better reduction of worry than individual therapy at 6 months and 12 months.

Combination treatments are not superior to monotherapy in GAD.

Anxiety Disorders include disorders that share features of excessive fear and related behavioral disturbances. Fear is the emotional response to real or perceived imminent threat, whereas anxiety is anticipation of future threat.

## Summary

Anxiety disorders differ from developmentally appropriate periods.

Disorders differ from one another in the types of objects or situations that induce fear, anxiety, or avoidance behavior, and the associated cognitive ideation. Thus, while the anxiety disorders tend to be highly comorbid with each other, they can be differentiated by close examination of the types of situations that are feared or avoided and the content of the associated thoughts or beliefs.

## References:

American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Washington, DC

Beidel, D. C., & Frueh, B. C. (Eds.). (2018). *Adult psychopathology and diagnosis*. John Wiley & Sons.

<https://www.mayoclinic.org/diseases-conditions/agoraphobia/diagnosis/treatment/drc-20355993>

<http://www.minddisorders.com/Py-Z/Substance-induced-anxiety-disorder.html>

[https://www.theravive.com/therapedia/anxiety-disorder-due-to-another-medical-condition-dsm--5-293.84-\(icd--10--cm-multiple-codes\)](https://www.theravive.com/therapedia/anxiety-disorder-due-to-another-medical-condition-dsm--5-293.84-(icd--10--cm-multiple-codes))

## REFERENCES

- Abbas, Q., Arooj, N., Baig, K.B., Umar Khna, M., Khalid, M., & Shahzadi, M. (2022). A clinical trial of cognitive behavior therapy for psychiatric comorbidity and quality of life with Cancer Patients during Chemotherapy (CPdC). *BMC Psychiatry*, 22, 222. Retrieved from <https://doi.org/10.1186/s12888-022-03863-w>
- Abrahamson, K. (2010). Helping Patients with Cancer-Related Distress. *Oncology Times*, 32(8),7-8. doi:10.1097/01.COT.0000372179.06602.7c
- Akechi, T. (2018). Psycho-oncology: History, Current Status, and Future Directions in Japan. *JMA Journal*, 1(1), 22-29. doi:10.31662/jmaj.2018-0001
- Almigbal, T. H., Almutairi, K., Fu, J., Vinluan, J., Alhelih, E., Alonazi, W., . . . & Mubaraki, M. (2019). Assessment of psychological distress among cancer patients undergoing radiotherapy in Saudi Arabia. *Psychology Research and Behavior Management*, 12, 691–700. doi:10.2147/PRBM.S209896
- Anuk, D., Özkan, M., Kizir, A., & Ozkan, S. (2019). The characteristics and risk factors for common psychiatric disorders in patients with cancer seeking help for mental health. *BMC Psychiatry* 19, 269 (2019). <https://doi.org/10.1186/s12888-019-2251-z>
- Ashouri, E., Taleghani, F., Memarzadeh, M., Saburi, M., & Babashahi, F. (2018). The Perceptions of nurses, patients and family members regarding nurses' empathetic behaviours towards patients suffering from cancer: a descriptive qualitative study. *J Res Nurs*, 23(5), 428-443. doi:10.1177/1744987118756945

- Bail, J. R., Traeger, L., Pirl, W. F., & Bakitas, M. A. (2018). Psychological Symptoms in Advanced Cancer. *Seminars in Oncology Nursing*, 34(3), 241-251. doi: <https://doi.org/10.1016/j.soncn.2018.06.005>
- Bandelow, B., & Michaelis, S. (2015). Epidemiology of anxiety disorders in the 21st century. *Dialogues Clin Neurosci*, 17(3), 327-335. doi:10.31887/DCNS.2015.17.3/bbandelow
- Biringen, E. K., Cox-Martin, E., Niemiec, S., Wood, C., Purcell, W. T., & Kolva, E. (2021). Psychotropic medications in oncology. *Supportive Care in Cancer*, 29(11), 6801-6806. doi:10.1007/s00520-021-06283-w
- Bonney K. M. (2015). Case study teaching method improves student performance and perceptions of learning gains. *Journal of Microbiology & Biology Education*, 16(1), 21–28. <https://doi.org/10.1128/jmbe.v16i1.846>
- Brothers, B. M., Yang, H. C., Strunk, D. R., & Andersen, B. L. (2011). Cancer patients with Major depressive disorder: testing a biobehavioral/cognitive behavior intervention. *J Consult Clin Psychol*, 79(2), 253-260. doi:10.1037/a0022566
- Bystritsky, A., Khalsa, S. S., Cameron, M. E., & Schiffman, J. (2013). Current diagnosis and treatment of anxiety disorders. *P & T: A peer-reviewed journal for formulary management*, 38(1), 30–57.
- Carlson, L. E., & Bultz, B. D. (2004). Efficacy and medical cost offset of psychosocial interventions in cancer care: making the case for economic analyses. *Psychooncology*, 13(12), 837-849. doi:10.1002/pon.832
- Chan, C., Ng, C. G., Taib, N. A., Wee, L. H., Krupat, E., & Meyer, F. (2018). Course and



predictors of post-traumatic stress disorder in a cohort of psychologically distressed patients with cancer: A 4-year follow-up study. *Cancer*, 124(2), 406–416.

<https://doi.org/10.1002/cncr.30980>

Chang, W.H., & Lai, A.G. (2022). Cumulative burden of psychiatric disorders and self-harm across 26 adult cancers. *Nat Med* (2022). Retrieved from

<https://doi.org/10.1038/s41591-022-01740-3>

Croy, P. (2010). *An Investigation of the Outcomes of Psycho-oncology Interventions*.

Retrieved from <https://mro.massey.ac.nz/handle/10179/2668>

Cukor J, Olden M, Lee F, Difede J. (2010). Evidence-based treatments for PTSD, new directions, and special challenges. *Annals of the New York Academy of Sciences*,

1208(1), 82–89. Retrieved from <https://doi.org/10.1111/j.1749-6632.2010.05793.x>

Daniels, S. (2015). Cognitive behavior therapy for patients with cancer. *Journal of the*

*Advanced Practitioner in Oncology*, 6(1), 54-56. Retrieved from

<https://doi.org/10.6004/jadpro.2015.6.1.5>

Delvaux, N., Razavi, D., Marchal, S., Brédart, A., Farvacques, C., & Slachmuylder, J. L.

(2004). Effects of a 105 hours psychological training program on attitudes, communication skills and occupational stress in oncology: a randomised study.

*British Journal of Cancer*, 90(1), 106–114. Retrieved from

<https://doi.org/10.1038/sj.bjc.6601459>

Dilworth, S., Higgins, I., Parker, V., Kelly, B., & Turner, J. (2013). Finding a way forward:

A literature review on the current debates around clinical supervision.

*Contemporary nurse*, 45(1), 22-32. doi:10.5172/conu.2013.45.1.22



- Dreismann, L., Goretzki, A., Ginger, V., & Zimmermann, T. (2022). What if... I Asked CancerPatients About Psychological Distress? Barriers in Psycho-Oncological Screening From The Perspective of Nurses-A Qualitative Analysis. *Frontiers in psychiatry*, *12*, 786691. Retrieved from <https://doi.org/10.3389/fpsyt.2021.786691>
- Ehlers, S. L., Davis, K., Bluethmann, S. M., Quintiliani, L. M., Kendall, J., Ratwani, R. M., ...Graves, K. D. (2019). Screening for psychosocial distress among patients with cancer: implications for clinical practice, healthcare policy, and dissemination to enhance cancer survivorship. *Transl Behav Med*, *9*(2), 282-291.  
doi:10.1093/tbm/iby123
- Esser, P., Hartung, T. J., Friedrich, M., Johansen, C., Wittchen, H. U., Faller, H., . . . Mehnert, A. (2018). The Generalized Anxiety Disorder Screener (GAD-7) and the anxiety module of the Hospital and Depression Scale (HADS-A) as screening tools for generalized anxiety disorder among cancer patients. *Psycho-Oncology*, *27*(6), 1509-1516. doi:10.1002/pon.4681
- Faller, H., Koch, U., Brähler, E., Härter, M., Keller, M., Schulz, H., ... Mehnert, A. (2016). Satisfaction with information and unmet information needs in men and women with cancer. *Journal of Cancer Survivorship: Research and Practice*, *10*(1), 62–70.  
Retrieved from <https://doi.org/10.1007/s11764-015-0451-1>
- Fawzy, F., & Fawzy, N. (2011). A Short Term, Structured, Psychoeducational Intervention for Newly Diagnosed Cancer Patients. *Handbook of Psychotherapy in Cancer Care*, 119-135. doi:10.1002/9780470975176.ch11
- Ferlay, J., Soerjomataram, I., Dikshit, R., Eser, S., Mathers, C., Rebelo, M., Parkin, D. M.,

- Forman, D., & Bray, F. (2015). Cancer incidence and mortality worldwide: sources, methods, and major patterns in GLOBOCAN 2012. *International Journal of Cancer*, *136*(5), E359–E386. Retrieved from <https://doi.org/10.1002/ijc.29210>
- French-Rosas, L. N., Moye, J., & Naik, A. D. (2011). Improving the recognition and treatment of cancer-related posttraumatic stress disorder. *Journal of psychiatric practice*, *17*(4), 270–276. Retrieved from <https://doi.org/10.1097/01.pra.0000400264.30043.ae>
- Fulcher, C. D., & Gosselin-Acomb, T. K. (2007). Distress assessment: Practice change through guideline implementation. *Clinical Journal of Oncology Nursing*, *11*(6), 817-821.
- Gascon, B., Leung, Y., Espin-Garcia, O., Rodin, G., Chu, D., & Li, M. (2021). Suicide risk screening and suicide prevention in patients with cancer. *JNCI Cancer Spectrum*, *5*(4). Retrieved from <https://doi.org/10.1093/jncics/pkab057>
- Gegechkori, N., Haines, L., & Lin, J. J. (2017). Long-term and latent side effects of specific cancer types. *The Medical Clinics of North America*, *101*(6), 1053-1073. Retrieved from <https://doi.org/10.1016/j.mcna.2017.06.003>
- Ghazali, N., Cadwallader, E., Lowe, D., Humphris, G., Ozakinci, G., & Rogers, S. N. (2013). Fear of recurrence among head and neck cancer survivors: Longitudinal trends. *Psycho-oncology*, *22*(4), 807–813. Retrieved from <https://doi.org/10.1002/pon.3069>
- Gokler-Danisman, I., Yalcinay-Inan, M., & Yigit, I. (2017). Experience of grief by patients

with cancer in relation to perceptions of illness: The mediating roles of identity centrality, stigma-induced discrimination, and hopefulness. *Journal of Psychosocial Oncology*, 35(6), 776- 796. Retrieved from <https://doi.org/10.1080/07347332.2017.1340389>

Gopalan, M. R., Karunakaran, V., Prabhakaran, A., & Jayakumar, K. L. (2016). Prevalence of psychiatric morbidity among cancer patients-hospital-based, cross-sectional survey. *Indian J Psychiatry*, 58(3), 275-280. doi:10.4103/0019-5545.191995

Granek, L., Nakash, O., Ariad, S., Shapira, S., & Ben-David, M. (2019). Mental Health Distress: Oncology Nurses' Strategies and Barriers in Identifying Distress in Patients With Cancer. *Clinical journal of oncology nursing*, 23(1), 43–51. Retrieved from <https://doi.org/10.1188/19.CJON.43-51>

Granek, L., Nakash, O., Ariad, S., Shapira, S., & Ben-David, M. (2019a). Mental Health Distress:Oncology Nurses' Strategies and Barriers in Identifying Distress in Patients With Cancer. *Clin J Oncol Nurs*, 23(1), 43-51. doi:10.1188/19.Cjon.43-51

Granek, L., Nakash, O., Ariad, S., Shapira, S., & Ben-David, M. (2019b). Strategies and Barriers in Addressing Mental Health and Suicidality in Patients With Cancer. *Oncol Nurs Forum*, 46(5), 561-571. doi:10.1188/19.Onf.561-571

Grassi L. (2020). Psychiatric and psychosocial implications in cancer care: the agenda of Psycho-oncology. *Epidemiology and psychiatric sciences*, 29, e89. Retrieved from <https://doi.org/10.1017/S2045796019000829>

Greer, S. (2008). CBT for emotional distress of people with cancer: some personal observations. *Psychooncology*, 17(2), 170-173. doi:10.1002/pon.1205

- Große, J., Treml, J., & Kersting, A. (2018). Impact of caregiver burden on mental health in bereaved caregivers of cancer patients: A systematic review. *Psycho-Oncology*, 27(3), 757-767. Retrieved from <https://doi.org/10.1002/pon.4529>
- Güner, P., Hiçdurmaz, D., Kocaman Yıldırım, N., & İnci, F. (2018). Psychosocial care from the perspective of nurses working in oncology: A qualitative study. *Eur J Oncol Nurs*, 34, 68-75. doi:10.1016/j.ejon.2018.03.005
- Hassanpour, S. H., & Dehghani, M. (2017). Review of cancer from perspective of molecular. *Journal of Cancer Research and Practice*, 4(4), 127-129. Retrieved from <https://doi.org/10.1016/j.jcrpr.2017.07.001>
- Hermelink, K., Höhn, H., Hasmüller, S., Gallwas, J., Härtl, K., Würstlein, R., & Köhm, J. (2014, May). Brief Distress Screening in Clinical Practice: Does it Help to Effectively Allocate Psycho-Oncological Support to Female Cancer Inpatients? *Breast Care (Basel)*, 9(2), 129–133. doi:10.1159/000360788
- Holland, J., Breitbart, W., Jacobsen, P., Loscalzo, M., McCorkle, R., & Butow, P. (Eds.). (2015). *Psycho-Oncology* (3<sup>rd</sup> ed.). Oxford, UK: Oxford University Press. Retrieved from <https://oxfordmedicine.com/view/10.1093/med/9780199363315.001.0001/med-9780199363315> 1203.
- Holland, J. (2002). History of psycho-oncology: Overcoming attitudinal and conceptual barriers. *Psychosomatic Medicine*, 64(2), 206–221. Retrieved from <https://doi.org/10.1097/00006842-200203000-00004>

- Butcher Holt, M. (2018). *Improving psychosocial distress screening: A quality improvement project using staff education*. Retrieved from:  
<https://www.proquest.com/docview/2055722004?pq-origsite=summon>
- Horne, D., & Watson, M. (2011). *Cognitive-Behavioural Therapies in Cancer Care*. Handbook of Psychotherapy in Cancer Care, pp. 15-26.
- Howell, D., Harth, T., Brown, J., Bennett, C., & Boyko, S. (2017). Self-management education interventions for patients with cancer: a systematic review. *Support Care Cancer*, 25(4), 1323-1355. doi:10.1007/s00520-016-3500-z
- Htay, M.M., & Whitehead, D. (2021). The effectiveness of the role of advanced nurse practitioners compared to physician-led or usual care: A systematic review. *International Journal of Nursing Studies Advances*, 3,100034. Doi:  
[10.1016/j.ijnsa.2021.100034](https://doi.org/10.1016/j.ijnsa.2021.100034)
- Hu, J., & Forgeron, P. (2018). Thinking, educating, acting: Developing advanced practice nursing. *Int J Nurs Sci*, 5(2), 99-100. doi:10.1016/j.ijnss.2018.04.006
- Huisman, B.A.A., Geijteman, E.C.T., Dees, M.K., Schonewille, N., Wieles, M., Zuylen, L., Szadek, M., & Van der Heide, A. (2020). Role of nurses in medication management at the end of life: a qualitative interview study. *BMC Palliative Care*, 19 (68). Retrieved from <https://doi.org/10.1186/s12904-020-00574-5>
- Li, S., Li, L., Shi, X., Wang, M., Song, X., & Cui, F. (2021). *Personalized prechemotherapy education reduces peri-chemotherapy anxiety in colorectal*

*cancer patients*. Retrieved from <https://doi.org/10.1155/2021/6662938>

- Johnson, S. U., Ulvenes, P. G., Øktedalen, T., & Hoffart, A. (2019). Psychometric Properties of the General Anxiety Disorder 7-Item (GAD-7) Scale in a Heterogeneous Psychiatric Sample. *Front Psychol*, *10*, 1713. doi:10.3389/fpsyg.2019.01713
- Karchoud, J.F., de Kruif, A.M., Lamers, F., Van Linde, M.E., Van Dodewaard-de Jong, J. M., Braamse, A.M.J., . . . Dekker, J. (2021). Clinical judgment of the need for professional mental health care in patients with cancer: a qualitative study among oncologists and nurses. *Journal of Cancer Survivorship*. doi:10.1007/s11764-021-01151-2
- Kroenke, K., Spitzer, R. L., & Williams, J. B. (2001). The PHQ-9: validity of a brief depression severity measure. *J Gen Intern Med*, *16*(9), 606-613. doi:10.1046/j.1525-1497.2001.016009606.x
- Kubota, Y., Akechi, T., & Okuyama, T. (2018, June). Effectiveness of a brief psycho oncology training program for general nurses: a preliminary study. *Japanese Journal of Clinical Oncology*, *48*(6), 594-597. doi:10.1093/jjco/hyy059
- Lang-Rollin, I., & Berberich, G. (2018). Psycho-oncology. *Dialogues Clin Neurosci*, *20*(1), 1322. doi:10.31887/DCNS.2018.20.1/ilangrollin
- Leano, A., Korman, M. B., Goldberg, L., & Ellis, J. (2019). Are we missing PTSD in our patients with cancer? Part I. *Canadian Oncology Nursing Journal*, *29*(2), 141–146.
- Lederberg, M. S., & Holland, J. C. (2011). Supportive psychotherapy in cancer care: An

- essential ingredient of all therapy. *Handbook of Psychotherapy in Cancer Care*, 1-14. Retrieved from <https://doi.org/10.1002/9780470975176.ch1>
- Lee, H., Lim, Y., Yoo, M. S., & Kim, Y. (2011). Effects of a nurse-led cognitive-behavior therapy on fatigue and quality of life of patients with breast cancer undergoing radiotherapy: an exploratory study. *Cancer Nurs*, 34(6), e22-30.  
doi:10.1097/NCC.0b013e31820d173
- Mann, S.K., & Marwaha, R. (2022). *Posttraumatic Stress Disorder*. Retrieved from <https://www.ncbi.nlm.nih.gov/books/NBK559129/>
- Mardani, A., Griffiths, P., & Vaismoradi, M. (2020). The Role of the Nurse in the Management of Medicines During Transitional Care: A Systematic Review. *Journal of multidisciplinary healthcare*, 13, 1347–1361. Retrieved from <https://doi.org/10.2147/JMDH.S276061>
- Maxim, L. D., Niebo, R., & Utell, M. J. (2014). Screening tests: A review with examples. *Inhalation toxicology*, 26(13), 811–828. Retrieved from <https://doi.org/10.3109/08958378.2014.955932>
- McAlearney, A. S., Hefner, J. L., Sieck, C. J., & Huerta, T. R. (2015). The journey through grief: insights from a qualitative study of electronic health record implementation. *Health services research*, 50(2), 462–488. Retrieved from <https://doi.org/10.1111/1475-6773.12227>
- McCarter, T. (2008). Depression overview. *American Health & Drug Benefits*, 1(3), 44-51.
- Meyer, R.E., Salzman, C., Youngstrom, E.A., Clayton, P.J., Goodwin, F.K., Mann, J.J.,

... Sheehan, D.V. (2010). Suicidality and risk of suicide - definition, drug safety concerns, and a necessary target for drug development: A consensus statement. *The Journal of Clinical Psychiatry*, 71(8), e1-e2. Retrieved from <https://doi.org/10.4088/JCP.10cs06070blu>

Middleton, R. J. o. (2014;2013;). Meeting the psychological care needs of patients with cancer. *Nursing Standard*, 28(21), 39-45. Retrieved from <https://doi.org/10.7748/ns2014.01.28.21.39.e8149>

Misono, S., Weiss, N. S., Fann, J. R., Redman, M. & Yueh, B. Incidence of suicide in persons with cancer. *Journal of Clinical Oncology*, 26, 4731–4738 (2008).

Molina, M. (2019, August). *Implementing Education Session to Increase Depression and Anxiety Screening Among Gastroenterology Providers*. Retrieved from <https://www.proquest.com/docview/2316056338?pq-origsite=summon&parentSessionId=GR%2Fbg6MMmeGoW4EKH8JRdIIZvYZ9cJcvrUEl5AB7y%2F8%3D>

Moradi, H., & Chen, H. (2019). Digital Storytelling in Language Education. *Behavioral Sciences*, 9, 147. 10.3390/bs9120147.

Mughal, S., Azhar, Y., Mahon, M.M., & Siddiqui, W. (2022). *Grief Reaction*. Retrieved from <https://www.ncbi.nlm.nih.gov/books/NBK507832/>

Munir, S., Takov, V. (2022). *Generalized Anxiety Disorder*. Retrieved from



<https://www.ncbi.nlm.nih.gov/books/NBK441870/>

- Naghavi, M. (2016). Global, regional, and national burden of suicide mortality 1990 to 2016: Systematic analysis for the Global Burden of Disease Study. *BMJ*, 2019, 364: 194.
- Naser, A. Y., Hameed, A. N., Mustafa, N., Alwafi, H., Dahmash, E. Z., Alyami, H. S., & Khalil, H. (2021). Depression and anxiety in patients with cancer: A cross-sectional study. *Frontiers in Psychology*, 12, 585534-585534. Retrieved from <https://doi.org/10.3389/fpsyg.2021.585534>
- Ni, J., Feng, J., Denehy, L., Wu, Y., Xu, L., & Granger, C. L. (2018). Symptoms of posttraumatic stress disorder and associated risk factors in patients with lung cancer: A longitudinal observational study. *Integrative Cancer Therapies*, 17(4), 1195-1203. Retrieved from <https://doi.org/10.1177/1534735418807970>
- Ortiz, Zayas, Jonnell Educating Oncology Nurses About the Emotional Impact of Cancer Diagnosis" (2018). *Walden Dissertations and Doctoral Studies*. 6083. Retrieved from <https://scholarworks.waldenu.edu/dissertations/6083>
- Ostuzzi, G., Matcham, F., Dauchy, S., Barbui, C., & Hotopf, M. (2018). Antidepressants for the treatment of depression in people with cancer. *Cochrane Database Syst Rev*, 4(4), Cd011006. doi:10.1002/14651858.CD011006.pub3
- O'Sullivan, C.K., Bowles, K.H., Jeon, S., Ercolano, E., & McCorkle, R. (2011).

- Psychological distress during ovarian cancer treatment: Improving quality by examining patient problems and advanced practice nursing interventions. *Nurs Res Pract*, 2011, 351642. doi:10.1155/2011/351642
- Parpa, E., Tsilika, E., Galanos, A., Nikoloudi, M., & Mystakidou, K. (2019). Depression as mediator and or moderator on the relationship between hopelessness and patients' desire for hastened death. *Supportive Care in Cancer*, 27(11), 4353-4358. doi:10.1007/s00520-019-04715-2
- Peng, G. J., Tian, J. S., Gao, X. X., Zhou, Y. Z., & Qin, X. M. (2015). Research on the Pathological Mechanism and Drug Treatment Mechanism of Depression. *Current Neuropharmacology*, 13(4), 514-523. doi:10.2174/1570159x1304150831120428
- Pitman, A., Suleman, S., Hyde, N., & Hodgkiss, A. (2018). Depression and anxiety in patients with cancer. *BMJ*, k1415. doi:10.1136/bmj.k1415
- Plummer, F., Manea, L., Trepel, D., & McMillan, D. (2016). Screening for anxiety disorders with the GAD-7 and GAD-2: a systematic review and diagnostic metaanalysis. *General Hospital Psychiatry*, 39, 24-31. Retrieved from <https://doi.org/10.1016/j.genhosppsy.2015.11.005>
- Posner, K., Brown, G.K., Stanley, B., Brent, D.A., Yershova, K.V., Oquendo, M.A., ... & Mann, J. J. (2011). The Columbia-Suicide Severity Rating Scale: Initial validity and internal consistency findings from three multisite studies with adolescents and adults. *The American Journal of Psychiatry*, 168(12), 1266–1277. Retrieved from <https://doi.org/10.1176/appi.ajp.2011.10111704>
- Richa, H. P. (2010, June). *The Knowledge, Practice, and Attitudes Of Oncology Physicians*

*And Nurses Regarding the Psychological Assessment Of Adult Cancer Patients at The American University Of Beirut Medical Center (AUBMC). Beirut: American University of Beirut.*

Richardson, R., Trépel, D., Perry, A., Ali, S., Duffy, S., Gabe, R.,... & McMillan, D.

(2015). Screening for psychological and mental health difficulties in young people who offend: A systematic review and decision model. *Health Technology Assessment, 19*(1), 1-158. Retrieved from <https://doi.org/10.3310/hta19010>

Rønning, S. B., & Bjørkly, S. (2019). The use of clinical role-play and reflection in learning therapeutic communication skills in mental health education: an integrative review. *Advances in Medical Education and Practice, 10*, 415–425. Retrieved from <https://doi.org/10.2147/AMEP.S202115>

Rossi, A., Marconi, M., Mannarini, S., Minelli, I., Anderboni, M., Rossini, C., .... & Verusio, C. (2019). Effectiveness of psychological distress reduction with cognitive behavioral therapy for oncological patients: A one-year follow-up study *Journal of Clinical Oncology, 37*(15). DOI: 10.1200/JCO.2019.37.15

Schouten, B., Bergs, J., Vankrunkelsven, P., & Hellings, J. (2019). Healthcare professionals' perspectives on the prevalence, barriers and management of psychosocial issues in cancer care: A mixed methods study. *Eur J Cancer Care, 28*(1), e12936. doi:10.1111/ecc.12936

Seibert, M., Pfaff, H., Scholten, N., & Kuntz, L. (2021). Do trained nurses feel more

- psychologically safe? Results from a multi-level modelling approach. *Nurs Open*, 8(6), 3024-3035. doi:10.1002/nop2.1015
- Stanley, M. L. (2017). *Barriers and facilitators to implementing psychosocial distress assessments in the pediatric oncology setting*. Chapel Hill. Retrieved from <https://doi.org/10.17615/nw28-tb77>
- Stark, D. P., & House, A. (2000). Anxiety in Cancer Patients. *British Journal of Cancer*, 83(10), 1261–1267. doi:10.1054/bjoc.2000.1405
- Statham, C., & Davis, C. (2018). Psychological burden of haematological cancer on patient and family: is it time for a multisystem approach? *Curr Opin Support Palliat Care*, 12(4), 518-521. doi:10.1097/spc.0000000000000396
- Stein, K. D., Syrjala, K. L., & Andrykowski, M. A. (2008). Physical and psychological long-term and late effects of cancer. *Cancer*, 112(11 Suppl), 2577–2592. <https://doi.org/10.1002/cncr.23448>
- Stonelake-French, H., Moos, B., Brueggen, C., Gravemann, E., Hansen, A., Voll, J., & Dose, A. (2018). Understanding Distress in the Hospital: A Qualitative Study Examining Adults With Cancer. *Oncology Nursing Forum*, 45(2), 206-216 <https://doi.org/10.1188/18.ONF.206-216>
- Ströhle, A., Gensichen, J., & Domschke, K. (2018). The Diagnosis and Treatment of Anxiety Disorders. *Dtsch Arztebl Int*, 155(37), 611-620. doi:10.3238/arztebl.2018.0611
- Suzuki, K. (2011). *Perceptions of the Role of Nurses in Providing Psychosocial Care for Patients with Cancer*. Retrieved from <https://core.ac.uk/download/pdf/147832321.pdf>

Tatrow, K., & Montgomery, G. H. (2006). Cognitive behavioral therapy techniques for distress and pain in breast cancer patients: a meta-analysis. *J Behav Med*, 29(1), 17-27. doi:10.1007/s10865-005-9036-1

Toney-Butler, T.J., Thayer, J.M. (2022). *Nursing Process*. Retrieved from <https://www.ncbi.nlm.nih.gov/books/NBK499937/>

Travado, L. (2015). *The Role and Challenges of Psycho-Oncology in Improving Cancer care*. 10.13140/RG.2.1.2076.8086. Retrieved from [https://www.researchgate.net/publication/285590111\\_The\\_Role\\_and\\_Challenges\\_of\\_Psycho-Oncology\\_in\\_Improving\\_Cancer\\_care/citation/download](https://www.researchgate.net/publication/285590111_The_Role_and_Challenges_of_Psycho-Oncology_in_Improving_Cancer_care/citation/download)

Walker, J., Hansen, C. H., Martin, P., Symeonides, S., Ramessur, R., Murray, G., &

Sharpe, M. (2014). Prevalence, associations, and adequacy of treatment of major depression in patients with cancer: A cross-sectional analysis of routinely collected clinical data. *The lancet. Psychiatry*, 1(5), 343–350. [https://doi.org/10.1016/S2215-0366\(14\)70313-X](https://doi.org/10.1016/S2215-0366(14)70313-X)

Woo, B.F.Y., Lee, J.X.Y., & Tam, W.W.S. (2017). The impact of the advanced practice nursing role on quality of care, clinical outcomes, patient satisfaction, and cost in the emergency and critical care settings: A systematic review. *Hum Resour Health*, 15(1), 63. doi:10.1186/s12960-017-0237-9

Zaorsky, N.G., Churilla, T.M., Egleston, B.L., Fisher, S.G., Ridge, J.A., Horwitz, E.M.,

& Meyer, J.E. (2017). Causes of death among cancer patients. *Annals of Oncology : Official Journal of the European Society for Medical Oncology*, 28(2), 400–407.

<https://doi.org/10.1093/annonc/mdw604>

Zhou, X., Gao, M., Wang, W., & Wu, X. (2019). Patterns of posttraumatic stress disorder symptoms among cancer patients: A latent profile analysis. *Journal of Psychosomatic Research*, 125, 109788-109788. Retrieved from

<https://doi.org/10.1016/j.jpsychores.2019.109788>