

دکتر مریم زوار موسوی
فوق تخصص روانپزشکی کودک و نوجوان
ارزیابی و مدیریت درمان اختلالات خلقی در کودکان سرطانی

- Cancer is one of the most common diseases in childhood and adolescence
- The Childhood Cancer Registry of Piedmont (CCRP) reported increasing incidence trends during the period 1967–2011, specifically for leukemia, lymphoma, central nervous system (CNS) tumors and neuroblastoma
- With the development of new medical treatments and technologies, survival rate of children with cancer has increased
- However, childhood cancer has a unpleasant impact on patients and their families and it remains a challenge for public health

- several studies have suggested the increased risk of psychiatric problems in children with medical illnesses
- In addition, evidence demonstrates that there is a bidirectional association between psychiatric disorders and many medical illnesses such that psychiatric disorders might be a causal factor in different illnesses or be resulted of them or they might affect the course of medical illnesses

- In general, hospitalization is a stressful experience for children, and many studies have concluded that children are afraid of illness and hospitalization.
- Hospitalized children have reported concerns about pain, amputation, lack of mobility, separation from significant people in life, loss of control and confusion

- Most kids with cancer experience some level of distress associated with their diagnosis and treatment.
- Distress is defined as any unpleasant feeling, emotion, or experience that affects your quality of life, and your ability to cope with your cancer diagnosis and treatment. Distress is a normal and expected side effect of cancer diagnosis, treatment

- Distress can be experienced in many different ways and can impact different parts of our lives. Distress includes:
- Practical issues/challenges (housing, insurance, transportation, disability).
- Family issues (talking with family and siblings, family support systems).
- Emotional challenges (depression, fears, nervousness, sadness, worry, loss of interest in usual activities).
- Spiritual or religious concerns.
- Physical problems (appearance, fatigue, pain, eating, getting around, sexual function, sleep).

- This distress can impact your child's functioning (physically, emotionally, and psychologically).
- Children with cancer also experience worry, sadness, anger, and hopelessness at various times in their cancer experiences. However, most children are resilient and possess strategies for managing these feelings, harnessing social support, accessing assistance, and processing emotions.
- But, distress can develop into depression as a result of the stress of the diagnosis, treatment

- The prevalence of anxiety and depressive disorders in children and adolescents with chronic diseases varies from 17% in the society to 33% in clinical samples
- A review of the literature has shown that the incidence and prevalence of emotional and behavioral problems in children and adolescents is on the rise
- In a study, it was indicated that 33.3% of children with acute lymphoblastic leukemia had emotional disorders . In another study, 53% of children with neoplasms were suffering from some emotional and behavioral disorders

- There are other factors that may increase the risk of depression in children. These include:
- Having a family history of depression.
- Being a girl.
- Being in puberty and experiencing hormonal changes.
- Experiencing other challenges, like anxiety and learning disorders.
- Having a history of emotional, behavioral, or developmental issues.
- Being an adolescent.
- Experiencing prolonged absence from school and peer support, which leads to social isolation.

- Depression symptoms can also put additional stress on relationships with family and friends.
- Depression symptoms can overlap with cancer-related distress, but depression is different.
- Depression can interfere with education, school, and recreational activities. It is important for parents to be aware of the symptoms of depression

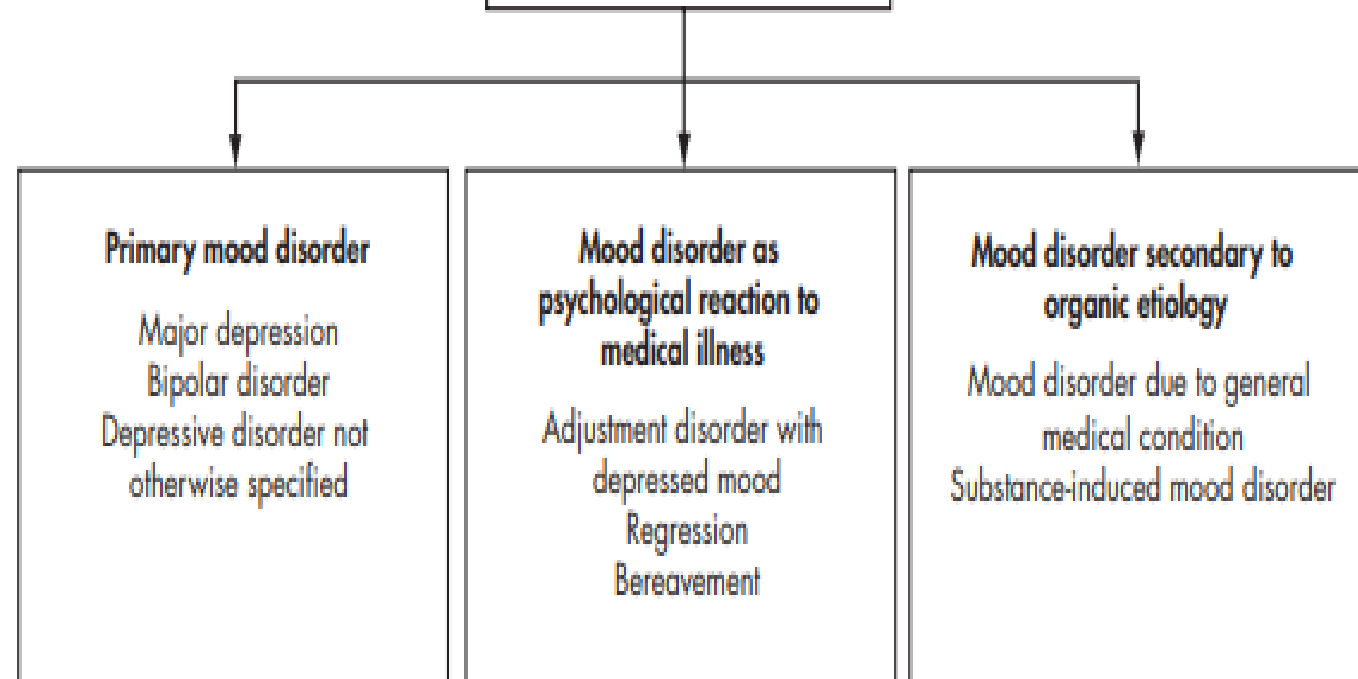
- Some symptoms of depression are:
- Feeling sad, down, and/or hopeless.
- Loss of enjoyment in activities.
- Changes in eating and sleeping habits.
- Irritability.
- Anger.
- Hypersensitivity (taking things too personally).
- Social withdrawal.
- Behavior changes characterized by vocal outbursts, crying, temper tantrums, or “melt-downs.”
- Inability to concentrate.
- Recurrent thoughts of death or suicide.

- In children with cancer, the diagnosis of depression can be very difficult, as some of the symptoms (like fatigue, changes in weight, appetite, and sleep problems) can also all be related to the cancer and its treatment.

- mood disorders are a critical health care problem affecting individuals across the life span
- Mood disorders not only place individuals at risk for suicide but often result in poor academic performance, impairments in social functioning, and an increased risk of substance abuse that persists into adulthood
- children and adolescents with medical illnesses have rates of depression nearly double those seen in the community, along with adverse medical outcomes and decreased quality of life

- The pediatric patient who presents with a depressive episode will generally fall into one of the following categories:
- 1) a primary mood disorder; 2) mood disorder as a psychological reaction to medical illness (adjustment disorder or situational depression syndrome); or 3) mood disorder secondary to an organic etiology

**Mood disorders in the
physically ill child**



Primary mood disorder

- Patients with primary depression meet the full DSM-5 criteria for major depressive episode
- They are more likely to have suicidal thoughts, feelings of helplessness, dysphoria, guilt, distractibility, and discouragement than patients experiencing mood symptoms directly related to or in reaction to their physical condition

- The neurovegetative symptoms of depression may be less descriptive of depression in children because many medical conditions and treatment side effects are accompanied by lethargy, decreased appetite, and sleep difficulties
- One factor that may help with the differential diagnosis is the past psychiatric history. Patients with a previous history of depressive episodes are more likely to have an underlying psychiatric disorder. By contrast, only 20% of patients with mood disorder due to a general medical condition are likely to have a past history of depression

Mood Disorder as Reaction to Medical Illness

- adjustment Disorder
- The stress of having a medical illness and receiving treatment may trigger feelings of helplessness and result in symptoms of depression, particularly in the early phases after the diagnosis
- this dysphoric mood is a reactive or situational response to an aversive event. It tends to be milder in form and responsive to distraction. It is sometimes difficult to differentiate between depressed mood as an adjustment to the medical illness and the clinical syndrome of major depression.

- the essential feature of an adjustment disorder with depressed mood is the presence of symptoms of depression that do not meet criteria for major depression but are associated with an impairment in social or occupational functioning

- the risk of developing depressive disorders is increased in most chronic medical conditions,
- depression can be a risk factor for the development of medical illnesses
- There are multiple nonspecific factors, such as disability and physical suffering, that may increase the risk of depression in serious medical illnesses.

- Depression is frequently underdiagnosed and untreated in medical settings, despite its frequency, negative effects on health, and responsiveness to treatment
- This diagnostic and therapeutic neglect may be due to
 - underreporting of symptoms because of stigma,
 - difficulty distinguishing normative from pathological distress,
 - physical symptom overlap between depression and medical illness, and
 - lack of sufficient caregiver training in or comfort with mental health inquiry

- Untreated depression is of concern in medical populations because it is associated with greater somatic symptom burden and worse quality of life in common medical disorders
- Depression is also associated with higher rates of health care utilization, such that the cost of medical care for depressed medical patients is 50% higher than that for nondepressed medical patients; depressed patients also tend to be less compliant with medical treatment and to have less functional capacity and less occupational productivity

- Paradoxically, depression is also overdiagnosed in medical settings, with unnecessary prescription of antidepressant medication for nonpathological sadness or grief or diagnoses based solely on scores on depression screening instruments.
- . A variety of interrelated reasons likely underlie the missed diagnosis of depression in physically ill patients. For example, children and adolescents are more likely to present with irritability or somatic complaints rather than classic complaints of sadness. In the medical setting, patients and their families are also more likely to emphasize somatic complaints rather than mood or cognitive symptoms

The Continuum of Depression: From Experience to Disorder

Sadness is a normal, expectable response to the adverse effects of a serious medical illness,

- including changes in bodily appearance and functioning; pain and physical distress; limitations in the capacity to work and to engage in pleasurable activities; perceived alteration in the anticipated life trajectory; fears of disability and dependency; and alterations in intimate relationships, family life, social relationships, and other activities.
- Nonpathological sadness and grief lie at one end of the continuum of depression in medical populations.

- . In the middle lie subthreshold depressions , which are the most prevalent depressive presentations among medically ill patients . At the more severe end are depressive symptoms that clearly meet diagnostic criteria for major depressive disorder as specified in DSM5

Normal sadness	Subthreshold depression	DSM-5 major depressive disorder
<ul style="list-style-type: none"> • Maintenance of intimacy and connection • Belief that things will get better • Capacity to enjoy happy memories • Sense of self-worth fluctuating with thoughts of cancer • Capacity to look forward to the future • Retention of capacity for pleasure • Maintenance of will to live 	<ul style="list-style-type: none"> • Low mood presentation similar to major depressive disorder but not meeting full criteria for symptom number or duration • Potentially transient and self-limited, including mood episodes lasting <2 weeks • Includes persistent depressive disorder if >2 years' duration 	<ul style="list-style-type: none"> • Feeling of isolation • Feeling of permanence • Excessive guilt and regret • Self-critical ruminations/loathing • Constant, pervasive, and nonreactive sadness • Sense of hopelessness • Loss of interest in activities • Suicidal thoughts/behavior

TABLE 7–1. Prevalence of depression in selected medical illnesses

Medical illness	Prevalence of MDD (%)	MDD vs. subthreshold depression (%)	References
Cancer	8–24	15 vs. 22	Mitchell et al. 2011
Diabetes	9–26	14 vs. 32	Musselman et al. 2003 ; Roy and Lloyd 2012
	Type 2: 6–33		
	Type 1: 6–44		
Heart disease	17–27	18 vs. 27	Rudisch and Nemeroff 2003 ; Schleifer et al. 1989
COPD/asthma	20–50	28 vs. 40	Van Lieshout et al. 2009
HIV/AIDS	18–50	22 vs. 45	Arseniou et al. 2014
Stroke	15–31	14 vs. 18	Morris et al. 1990 ; Robinson and Jorge 2016
Epilepsy	20–29	23 vs. 29	Fiest et al. 2013
Multiple sclerosis	26–35	30 vs. 33	Boeschoten et al. 2017

mood disorder secondary to an organic etiology

- . It has been hypothesized that illness-specific biological mechanisms lay the foundations for depression in certain medical conditions, including hypothyroidism, stroke, Parkinson's disease, diabetes, and some types of cancer.
- Although specificity for depression has not been substantiated in any of these conditions, each is associated with multiple nonspecific risk factors that may increase the prevalence of depression. In fact, depression in the context of medical illness is a prime example of the biopsychosocial model of disease, with interacting pathophysiological and psychosocial factors contributing to comorbidity.

- . The final common pathway to depression—resulting from the interaction of disease-related, psychological, and social risk and protective factors
- Potential biological contributors to depression in medical illness include the physical effects of illness and treatment, medications, neurological involvement, genetic vulnerability, and systemic inflammation
- greater pain and treatment intensity , more advanced disease , and proximity to death have all been shown to increase the risk of depression.

- Psychosocial factors that may contribute to the development of a comorbid depressive disorder in medical illness include
 - the stigma and personal meaning of the medical condition,
 - illness-related disability ,
 - maladaptive coping styles ,
 - low self-esteem,
 - impaired spiritual well-being ,
 - and reduced capacity to express affect .
- Low social support and poor communication with medical caregivers also increase the likelihood of a comorbid depressive disorder.

- In medical populations, depressive symptoms may manifest in atypical or masked forms, including:
 - amplification of somatic symptoms and noncompliance with or refusal of medical treatment .
 - These symptoms or behaviors may not be recognized as manifestations of depression, leading to underdiagnosis of depression.

Treatment

- Several studies have reported that both pharmacological and psychotherapeutic interventions are effective in treating depression in patients with medical disorders, although these effects may be less robust than those in individuals with MDD without medical comorbidity
- Most current disease-specific depression treatment guidelines recommend the use of both pharmacological and psychotherapeutic interventions, based on pooled evidence of benefit in medical populations and extrapolation from effectiveness in primary psychiatric population

- Stepped care is a framework for care delivery in which treatment is graded to the severity of depression .
- All patients with depression are provided with basic assessment, support, psychoeducation, monitoring, and referral (Step 1).
- Based on evidence that the risk– benefit ratio does not support the use of antidepressant medications in subthreshold depression, less intrusive and low-intensity psychological or psychosocial interventions are provided first (Step 2),
- with progression to the next step of medications and/or highintensity psychological interventions (Step 3), which may be delivered within a collaborative care model if there is inadequate response to initial treatment.

- . Complex depression involving suicide risk, psychosis, or severe psychosocial risk may require inpatient admission and/or brain stimulation therapies. The components of these interventions are described more fully below.

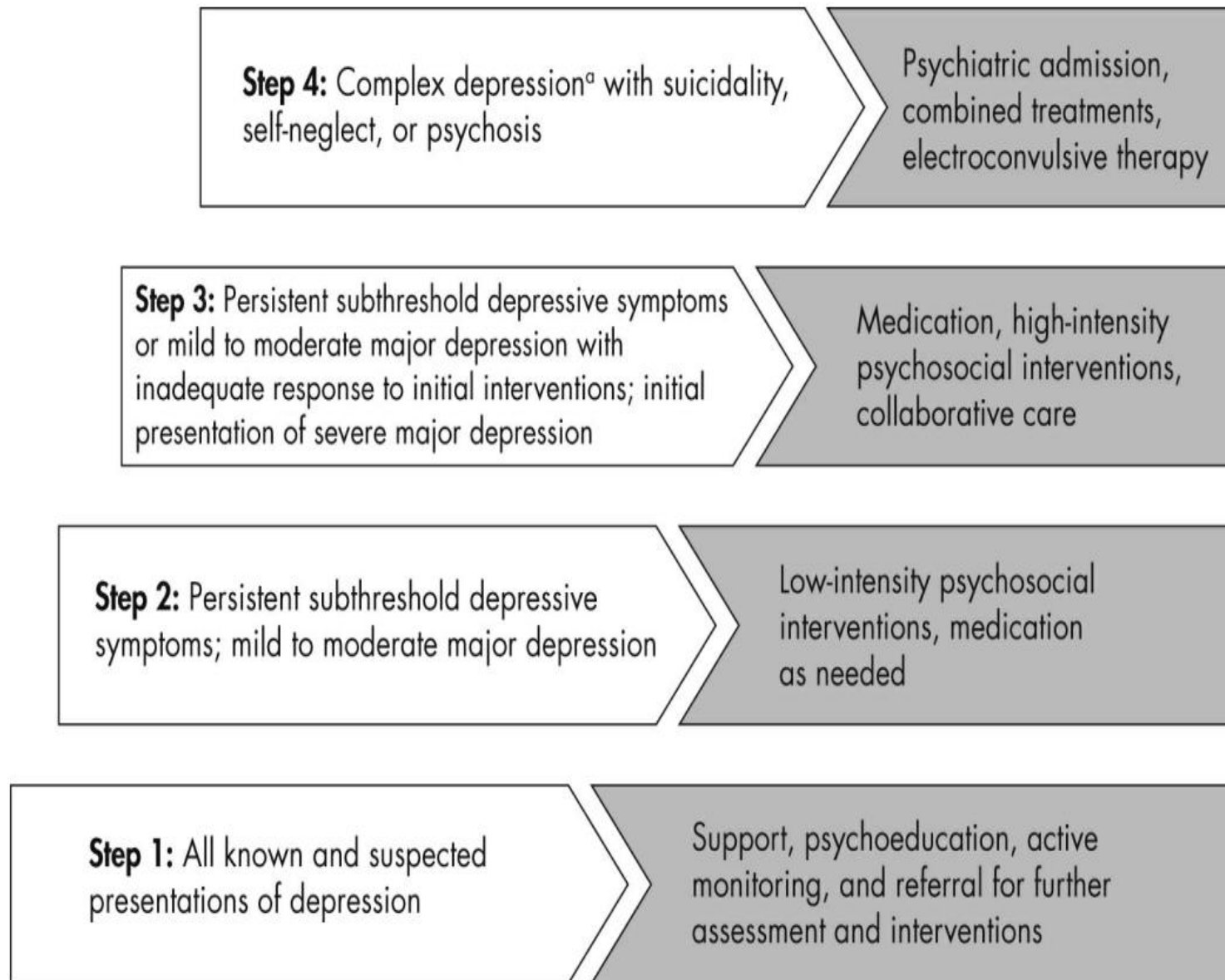


FIGURE 7–2. Stepped-care model of depression care, with treatment intensity corresponding to depression severity.

^aComplex depression is defined as depression with significant functional impairment, suicidal thoughts or behaviors, or psychotic features.