Depression

Diagnosis/Condition:	Depression
Discipline:	ND, LAc
ICD-10 Codes:	F32.XX
Origination Date:	2014
Review/Revised Date:	10/2024
Next Review Date:	10/2026

Depression is the most common psychiatric disorder in the general population and the most common mental health condition in primary care, yet many patients do not recognize or want to discuss symptoms of depression with their medical provider.[1,2,3] Many present instead with somatic symptoms (e.g., headache, back problems, fatigue, or chronic pain), which may make diagnosing depression more difficult.[4,5]

There are multiple types of depression varying in symptoms and severity. The type of depression focused on in this paper is (unipolar) major depressive disorder (MDD).
The average annual incidence of MDD diagnosed events in adults is 8.4%, are more common in females, and most prevalent between ages 18-25.[6] Individuals who have suffered from one episode of depression frequently have recurrences, with 72% having more than one episode. The National Institute of Mental Health (NIMH, 2018) rates depression as one of the most diagnosed mental disorders. The Center for Disease Control and Prevention estimate that overall incidence of depression ranges between 14- 26% among adults in the US and that this has been rising.[7]

The global Coronavirus (COVID-19) pandemic of 2020 has resulted in depression prevalence rates in the U.S. reaching historic highs, with 49% of Americans reporting symptoms and signs of depression, as measured by the Patient Health Questionnaire (PHQ-4), a standardized measure of anxiety and depression. Symptoms that were sustained over several weeks show no signs of fading, representing a 12% increase compared to the same time period in 2019. (NIMH, 2018).[8] In a recent survey study that included 1,441 respondents from during the COVID-19 pandemic and 5,065 respondents from before the pandemic, depression symptom prevalence was more than 3-fold higher during the COVID-19 pandemic than before.[9]

Unrecognized and untreated depression can lead to decreased quality of life (QOL), comorbidities with poor outcomes, increased risk of mortality, increased economic burden, and increased risk of suicide.[10] Screening is a key factor in diagnosing and treating depression. It is important to screen patients who may be at risk or exhibit signs of depression and doing so routinely may help patients feel less stigmatized or judged.[11,12] The US Preventive Services Task Force (USPSTF) recommends screening all patients routinely, and then further evaluating those who score above a specified level.[13]

Major depressive disorder (MDD) presents with five or more of the following symptoms, present most of the day, almost every day for a minimum of two consecutive weeks:

1. Depressed mood- sadness, emptiness
2. Loss of interest or pleasure in most or all activities
3. Insomnia or hypersomnia
4. Change in appetite or weight
5. Psychomotor impairment or agitation
6. Low energy
7. Poor concentration
8. Thoughts of worthlessness or guilt
9. Recurrent thoughts about death or suicide

At least one of the presenting symptoms is depressed mood or loss of interest or pleasure in doing things. The symptoms lead to substantial distress or impaired psychosocial functioning and are not the direct result of substance use or a general physical medical disorder. These symptoms can also be indicative of bipolar disorder or post-traumatic stress disorder (PTSD) and should be differentiated through history.

Persistent depressive disorder (dysthymia) is a form of depression that is characterized by depressive symptoms that last for at least two years, with depressed mood present for most of the day, for more days than not, and the depressed mood is accompanied by two or more of the following symptoms:

1. Decreased or increased appetite
2. Insomnia or hypersomnia
3. Low energy
4. Poor self-esteem
5. Poor concentration
6. Hopelessness

Clinical red flags to initiate targeted screening include:[14]

- Insomnia
- Fatigue
- Recent life changes or stressors
- Fair or poor self-rated health
- Unexplained physical symptoms
- Chronic pain
    - Estimates suggest 50-66% of patients with depression have chronic pain.[15,16,17]
- Suicidal ideation
    - A medical emergency and hospitalization should be considered.

Subjective Findings and History

Risk factors may include genetic, medical, environmental, and social factors:

- Prior depressive episode
- Family history
- Female gender
- Childbirth (e.g., post-partum depression)
- Childhood trauma
- Stressful life events
- Poor social support
- Serious medical illness
- Dementia
- Elderly
- Substance abuse

Symptoms may include mood, cognitive, neurovegetative, or somatic symptoms:

- Sadness, emotional distress, emotional numbness, anxiety, or irritability.
- Loss of energy, changes in sleep, appetite, or weight.
- Headache, abdominal or pelvic pain, back pain, or other physical complaints.

A common mnemonic used to help remember common symptoms of depression is:

SIG E CAPS

- **S**leep disturbance
- **I**nterest/Pleasure reduction
- **G**uilt feelings or thoughts of worthlessness
- **E**nergy changes/fatigue
- **C**oncentration/attention impairment
- **A**ppetite/weight changes
- **P**sychomotor disturbance
- **S**uicidal thoughts

Objective Findings

- Can be non-specific and broad. Of note, the Diagnostic & Statistical Manual (DSM-V) does not include these physical signs as an integral part of the clinical picture of depression, consequently leaving the diagnosis of depression to subjective criteria and perceptions.
- A 2021 study suggest that inflammation, stress, environmental exposures, chronic inflammatory or autoimmune conditions, T2 diabetes and arthritis may play a critical role in the physiology of depression. Elevated CRP, and interferon-alpha have been suggested as screening tools.[18]
- The Hamilton Depression Rating Scale and the Montgomery-Asberg Depression Rating Scales use certain physical signs as an integral part of their scoring measures.[19] Consider:

- Psychomotor impairment, diminished gestures and expressions.
- The patient may appear tired, self-concerned, bored, inattentive and display a loss of interest in the surroundings.
- Anxiety which may be expressed by severe restlessness and agitation, muscle tension, or wringing of hands.
- Frequent weeping, moaning, or sighing.
- Repeating phrases expressive of misery in a monotonous and stereotyped way.
- Tachycardia, dry tongue/mouth, sweaty palms and/or bodily extremities, cold clammy skin, pallor, pupillary dilatation, tremor, and the fluctuations in blood pressure with wide pulse pressure.

Assessment

- Thorough Physical Examination (PE).
- Consideration of labs to rule out other causes of symptoms: CBC, electrolytes, comprehensive metabolic panel, liver function tests, thyroid panel, EKG, EEG.

There are several short, validated depression screening tools that are readily available for practitioners to use and include: the PHQ-9, the PHQ-2, the Beck Depression Inventory for Primary Care, and the WHO-5. All of these can be self-administered by patients during or prior to a visit and are available in multiple languages. The PHQ-9 has shown to be the most accurate and can also be used to monitor response treatment and can be found here:[20,21] https://patient.info/doctor/patient-health-questionnaire-phq-9

Diagnosis

Assessment should be made for co-existing morbidities, including other mental health conditions. Many behavioral health conditions can exist concurrently as well as along with substance abuse issues. Mental health and substance abuse together is considered a "dual diagnosis". If mental illness is suspected, suicidal ideation should be assessed. Suicide is the 10th leading cause of death in the U.S. More than 90% of those who die by suicide had one or more mental health disorders.[22]

Plan

Effective treatments for depression include pharmacotherapy and psychotherapy, along with IH treatments and physical support of co-morbid conditions. Chronic depression is associated with poorer treatment response, highlighting the importance of early identification and treatment. Effective treatment requires careful monitoring of treatment adherence and clinical response together with changes in treatment if the clinical response is poor.[23] This is no different from the approach to patients with chronic medical conditions. The use of outcome screening tools are important in following the patient's progress (listed in Clinical Resources below).

The primary care and/or IH provider is often a gateway to expert care and can provide patients with the resources they need to access a specialist. Recognizing and referring patients with serious health conditions is a fundamental role of all medical providers. The recommended treatment of mental and behavioral health conditions is a team based therapeutic model. Team consultation, assessment and management of these patients can provide them with the best possible medical care. Regardless of the therapeutic intervention, current treatment guidelines stress the importance of building a strong therapeutic alliance.[25]

Current clinical guidelines suggest two primary types of treatment: pharmacological (e.g., selective serotonin reuptake inhibitors; SSRIs) and non-pharmacological (e.g., psychotherapeutic intervention).[24,25]

The National Health Interview Survey (NHIS) Adult Core and Alternative Medicine Supplement data conducted by Centers for Disease Control and Prevention showed that respondents who endorsed at least 1 neuropsychiatric symptom (anxiety, depression, insomnia, hypersomnia, headaches, memory problems, or attentions deficits) were more likely (43.8% vs 29.7%) to seek out Integrated Healthcare (IH) treatments in the last year and that the prevalence of employing IH therapies increased with the number of neuropsychiatric symptoms endorsed.[26,27] Evidence is still lacking for IH therapies for depression and future research with improved quality is necessary to draw stronger conclusions.[28]

Mental illness is treatable. Most people diagnosed with a serious mental illness can experience relief from their symptoms by actively participating in an ongoing individual treatment plan. Patients who are currently under the medical supervision of other licensed providers and are taking medications for behavioral health conditions should be encouraged to remain on these. Patients taking antidepressants can experience mild to severe side effects and these should be discussed and managed. Sometimes multiple medication trials are necessary to find one that works well with minimal side effects.

Mind-Body Therapies:

- Cognitive behavioral therapy (CBT)[29,30,31]
- Psychodynamic psychotherapy
- Interpersonal psychotherapy
- Motivational interviewing

Diet:

- Dietary changes, including fiber supplementation[32]

Herbal Medicine (Western):[33]

- Based on available data, black cohosh, chamomile, chasteberry, lavender, passionflower, and saffron appear useful in mitigating anxiety or depression with favorable risk-benefit profiles compared to standard treatments.[34]

Herbal Medicine (Traditional East Asian Medicine):

- Meta-analysis demonstrates potential benefits for several traditional formulas; most caution interpretation due to low quality trials.
    - Wen Dan Tang[35]
    - Chai Hu Family formula[36]
    - Wu Ling San[37]
    - Shu Gan Jie Yu[38]
- QiGong: A 2109 meta-analysis suggests benefits for MDD.[39]
- TaiChi: A 2020 meta-analysis suggests benefits for MDD but cautions firm conclusions due to low quality trials.[40]

Integrative Naturopathic care:[41,42,43]

Supplements and Nutrients:

- St. John's Wort (Hypericum)[44,45]
- Omega-3 fatty acids[46,47]
- Rhodiola rosea (roseroot)
- Crocus sativus (saffron)[48,49]
- Folate
- S-adenosyl-L-methionine (SAMe)
- Lemon balm (Melissa officinalis L)[50]
- Curcumin[51]
- Supplementation of L-acetylcarnitine, alpha-lipoic acid, N-acetylcysteine, L-tryptophan[52]
- Phytoestrogens in postmenopausal women[53]
- Biotin and probiotics[54,55]
- Medical foods such as L-methylfolate[56]

Pharmaceuticals (Prescription):
Selecting a medication should be based on multiple factors including:

- Patient response to antidepressants during prior depressive episodes
- Safety
- Side effect profile
- Specific depressive symptoms
- Comorbid illnesses
- Concurrent medications and potential drug-drug interactions
- Family (e.g., first-degree relative) history of response to antidepressants
- Ease of use (e.g., frequency of administration)
- Patient preference
- Cost

Evidence-based pharmacological treatments are available for first-line treatment of MDD and for management of inadequate response and should be tailored to the specific needs of the patient. Treatment continuity is one of the main challenges in treating patients with MDD. There is some evidence that indicates that for first line therapy, second-generation antidepressants and cognitive behavioral therapy (CBT) have similar effectiveness regarding symptomatic relief in patients with mild to severe MDD. Patients treated with second generation antidepressants do experience more adverse events and may discontinue the medication due to these events. This highlights the need for shared and informed decision-making which may help enhance treatment adherence and improve treatment outcomes for patients with MDD.

- Antidepressants: (monotherapy or combination therapy[56,57,58,59]
    - Selective serotonin reuptake inhibitors (SSRIs) (the most widely prescribed)[60]
    - Serotonin-norepinephrine reuptake inhibitors (SNRIs)
    - Atypical antidepressants
    - Serotonin modulators
    - Tricyclic antidepressants
    - Monoamine oxidase inhibitors (MAOIs)
- Other treatments:
    - Ketamine infusion or inhaled esketamine (Spravato)[61,62]
    - Electroconvulsive therapy (ECT)
    - Transcranial magnetic stimulation (TMS)[63,64]
    - Psychedelic treatments[65,66,67]

Physical Modalities (Western):

- Light Therapy, including green light use[68]

Movement and Exercise:

- Regular exercise[69]
- Yoga[70,71]
- Hatha Yoga[72]

Acupuncture (excluding pharmocoacupture):
Most of the acupuncture research for mood disorders has not focused on clinical depression. To date, of the ~150 English language RCTs (Medline Search Oct 2024), only 25 have focused on clinical depression (e.g. major depression, major depressive disorder). Most conditions investigated include a variety of sub-categories of depression, for example, seasonal affective disorder, stroke-related, and Women's Health related conditions associated with depressive states. This EBA Summary has focused on the assessment of acupuncture for the management of clinical depression. Based on the evidence the following conclusions are offered:

- The current guideline for clinical depression issued by the American Psychological Association suggests acupuncture when psychotherapy or pharmacotherapy is either "ineffective or unacceptable to the patient".[73]

Acupuncture combined with medication:

The evidence is promising to suggest effectiveness of adjunctive acupuncture for the treatment of clinical depression.

- Recent systematic reviews (with meta-analysis) suggest that acupuncture combined with SSRIs is more effective than SSRI medication alone [in the short-term].[74,75,76,77,78,79]
    - All reviews, except one[83] caution interpretation of findings due to low quality RCTs.
- The largest clinical trial to date (n=755) reports benefit and cost-effectiveness of acupuncture (12 Tx's over 3mths) adjunctive to usual care.[80,81]

Acupuncture as an alternative to medication:

The evidence is mounting, but insufficient to determine the effectiveness of acupuncture as an alternative to SSRI medications for the treatment of clinical depression.

- Some reviews suggest that acupuncture may confer a small benefit compared to medication alone.[81,83,84]
    - Most caution interpretation of findings due to low quality RCTs.[81,84,82]
- The most recent review (English language RCTs only n=9) suggests no difference when assessing acupuncture to UC.[80]

Referrals

Collaborative consultation should occur before considerations of any changes or additions to an existing treatment plan. Providing resources and referrals are crucial to good medical care, so a team can be formed, and an interdisciplinary approach can be utilized. Special populations such as geriatric or pregnant patients[83], patients on hemodialysis,[84,85] and children should be referred to a specialist to monitor for contraindications and treatment interactions.

If a patient exhibits any of the following clinical features, an immediate referral is warranted:

- Suicidal or homicidal behavior or ideation (with a specific plan and intent)
- Psychotic features (e.g., delusions or hallucinations)
- Catatonia
- Poor judgment that places the patient or others at imminent risk of being harmed.
- Grossly impaired functioning (e.g., food or fluid refusal leading to malnutrition and dehydration)

A referral should be made to professionals specializing in treating behavioral/mental health/substance abuse conditions, especially in recalcitrant or severe cases, acute states, in cases where there is a current or history of suicidal or homicidal ideation, or if the patient presents with a dual diagnosis. This might include an emergency department, psychologist, behavioral health consultants, psychiatrist, case manager, licensed social worker (LSW), or other counselor who may have experience in treating or finding appropriate resources for the patient.

The National Alliance for Mental Illness (NAMI) provides extensive resources and has local emergency and suicide helplines listed for all areas of the United States (U.S.) at www.NAMI.org. In addition, all states have differing laws in regard to reporting suicidal or homicidal ideation to local authorities.

Resources for Clinicians

National Association for Mental Illness (NAMI) – resources for primary care providers: https://www.nami.org/Home

Integrative Behavioral Health Project. Partners In Health: Mental Health, Primary Care And Substance Use Interagency Collaboration Tool Kit. 2nd Edition, 2013.
http://www.ibhpartners.org/ The Integrative Behavioral Health Project provides is a virtual toolkit for primary care providers to "to provide hotlinks to screening tools and resources recommended for use in primary care". Their complete electronic resource guide, "Integrated Behavioral Health Screening Tools for Primary Care" is available at:
http://www.ibhpartners.org/get-started/behavioral-health-data-sharing-toolkit/

SAMHSA-HRSA Center for Integrated Health Solutions. Integrating Behavioral Health into Primary Care:
http://www.integration.samhsa.gov/integrated-care-models/behavioral-health-in-primary-care

The Canadian Network for Mood and Anxiety Treatments. Task Force Reports - Treatment Strategies for Comorbidity. https://www.canmat.org/

Depression Evaluation Tools for Clinicians:[86]

- Clinically Useful Depression Outcome Scale (CUDOS) (unlimited use)
- Beck Depression Inventory (BDI-II) (copyrighted and requires a fee)
- Patient Health Questionnaire (PHQ-9) (Pfizer copyright; unlimited use)
- Quick Inventory of Depressive Symptomatology (QIDS) (unlimited use)

Resources for Patients

Suicide and Crisis Lifeline: **Call or Text 988**
Crisis Text Line: **Text Home to 741741**
National Suicide Prevention Lifeline at **800-273-TALK (800-273-8255)**
National Association for Mental Illness https://www.nami.org/Home

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