



City Health Information

November 2007

The New York City Department of Health and Mental Hygiene

Vol. 26(9):59-66

REVISED
MAY 2008

DETECTING AND TREATING DEPRESSION IN ADULTS

- Primary care physicians can effectively detect and manage depression.
- Routinely screen for depression using a simple 2-question tool (PHQ-2).
- Depression can be treated. Medication and psychotherapy, alone or in combination, can help most patients.

Almost 1 out of every 6 adults (1 in 4 women and 1 in 10 men) are affected by depression at some point during their lifetimes, but only 25% are adequately treated.^{1,2} Local data from the 2004 New York City Health and Nutrition Examination Survey (NYC HANES) indicate that 7.5% of adults in NYC may suffer from major depressive disorder, but only a third are in treatment.³ Post-partum depression affects 10% to 20% of women in the United States, and has a negative impact on maternal, infant, and family health.⁴ Children of depressed mothers are at higher risk for behavioral, anxiety, mood, and substance abuse disorders that may begin early in life and persist throughout adolescence and adulthood.⁵⁻⁸

Depression is one of the most commonly seen conditions in primary care.⁹ Primary care physicians (PCPs) and other non-psychiatrists can effectively screen for and manage depression. Between 5% and 10% of patients screened for depression will meet the diagnostic criteria for a current episode of depression. One recent study found that among older patients who committed suicide, 20% had visited their PCP on the same day as their suicide, 40% had seen their doctor within the previous week, and 70% had done so within the previous month.¹⁰

RECOGNIZING DEPRESSION

While some patients might say “Doctor, I think I might be depressed,” most cases of depression in primary care are recognized through observation and active listening during an office visit. Many patients, especially older adults, do not realize that they may be suffering from depression. In one study, 69% of patients diagnosed with clinical depression reported unexplained physical symptoms (e.g., headache, pain) as their chief complaint.¹¹

hopeless

feeling sad

can't concentrate

appetite problems

no energy

Table 1. Medical and Psychiatric Conditions That Often Occur With Depression

Alcohol Use Disorder:	Alcohol use can worsen depression and complicate its treatment. Adults with an alcohol use disorder in the past 12 months were more than twice as likely to have experienced a major depressive episode during that period compared to those without an alcohol use disorder. ¹²
Anxiety Disorders:	Anxiety often coexists with depression. Co-occurring anxiety and depression are associated with greater impairment and severity of symptoms. In co-occurring anxiety and depression, the choice of specific pharmacologic and psychotherapy treatments may be different. ¹³
Nicotine Dependence:	People with depression are twice as likely to smoke as those without mental illness. ¹⁴ The odds of having major depression are more than three times greater in those with nicotine dependence versus those who are not dependent. ¹⁵
Myocardial Infarction:	Patients are at increased risk for major depression following a heart attack. One in three patients experienced depression in the hospital or within one year of discharge following admission for acute myocardial infarction. ¹⁶
Diabetes:	Patients with diabetes are twice as likely to have depression. ¹⁷
Stroke:	Depressive symptoms are common following stroke. ¹⁸ Stroke severity, physical disability, and cognitive impairment are associated with depression. ¹⁹
Alzheimer's Disease:	About half of people with Alzheimer's disease have clinically significant depressive syndromes, with about one-quarter having major depression. ²⁰
HIV:	Depression often co-occurs with HIV. In HIV-infected adults receiving medical care, 36% screened positive for major depression. ²¹

Physicians should always be alert to the possibility that a patient might have depression, especially patients with a prior personal or family history of mood disorders or chronic medical illness. Other medical and psychiatric conditions often coexist with depression (Table 1).

While performing a review of systems and taking a social history, be attentive to clues suggesting depression, especially in patients with chronic or severe physical illnesses. Asking questions in an open-ended manner about a patient's level of functioning, energy, motivation, and any work or social difficulties can reveal depression while avoiding stigmatization.

Screen for depression by using a simple 2-question tool, the Patient Health Questionnaire-2 (PHQ-2).^{22,23} If the patient's response to both questions is "no," the screen is likely negative. If the patient responds "yes" to either question, or if you are still concerned about the possibility of depression, further evaluation is warranted.

PHQ-2 – Screen for depression by asking the following 2 questions:

Over the past 2 weeks, have you been bothered by:

- Little interest or pleasure in doing things?
- Feeling down, depressed, or hopeless?

A "yes" to either question requires further evaluation.

DIAGNOSIS OF DEPRESSION

Further evaluation of depression can be facilitated by using the Patient Health Questionnaire (PHQ-9).²⁴ This 9-item questionnaire is available in many languages, can be completed by the patient (or trained office staff) before or during an office visit, and can reliably assist in detecting and quantifying the severity of depression (Table 2). It is useful to go over the responses to the nine items with the patient during the visit while exploring other symptoms and history. Patients should be asked about any past history of and treatment for depression, other mental health conditions (e.g., anxiety), and substance or alcohol use.²⁵ Patients should also be assessed for medical conditions and medications that can cause depression.

It is also important to assess suicide risk and to ask about any personal or family history of bipolar disorder or manic episodes; treating patients with an antidepressant alone may cause a manic episode in those with undiagnosed bipolar disorder.²⁶ Clinical criteria for diagnosing a major depressive episode are provided in Table 3.²⁷

Assessing Suicide Risk

Patients with depression may be at increased risk for suicide; detecting suicidal risk can be life-saving. Asking a patient about suicidal thoughts or plans does not initiate such ideas or foster action. On the contrary, patients may be relieved if they are asked directly about their thoughts and feel that you are interested in their situation.²⁸

TABLE 2. PATIENT HEALTH QUESTIONNAIRE (PHQ-9)*

**Over the last 2 weeks, how often have you been bothered by any of the following problems?
(use “✓” to indicate your answer)**

	Not at all	Several days	More than half the days	Nearly every day
1. Little interest or pleasure in doing things	0	1	2	3
2. Feeling down, depressed, or hopeless	0	1	2	3
3. Trouble falling or staying asleep, or sleeping too much	0	1	2	3
4. Feeling tired or having little energy	0	1	2	3
5. Poor appetite or overeating	0	1	2	3
6. Feeling bad about yourself — or that you are a failure or have let yourself or your family down	0	1	2	3
7. Trouble concentrating on things, such as reading the newspaper or watching television	0	1	2	3
8. Moving or speaking so slowly that other people could have noticed. Or the opposite — being so fidgety or restless that you have been moving around a lot more than usual	0	1	2	3
9. Thoughts that you would be better off dead, or of hurting yourself in some way	0	1	2	3

add columns: + +
TOTAL:

(Health care professional: For interpretation of TOTAL please refer to scoring card below.)

10. If you checked off any problems, how difficult have these problems made it for you to do your work, take care of things at home, or get along with other people?
 Not difficult at all _____ Somewhat difficult _____
 Very difficult _____ Extremely difficult _____

***PHQ-9 QUICK DEPRESSION ASSESSMENT**
For initial diagnosis:

1. Patient completes PHQ-9 Quick Depression Assessment.
2. Add score to determine severity.
3. **Consider Major Depressive Disorder** if there are at least 5 ✓s in the shaded section (1 of which corresponds to Question #1 or #2).
Consider Other Depressive Disorder if there are 2–4 ✓s in the shaded section (1 of which corresponds to Questions #1 or #2).

Note: Since the questionnaire relies on patient self-report, all responses should be verified by the clinician. A definitive diagnosis is made on clinical grounds, taking into account how well the patient understood the questionnaire, as well as other relevant information from the patient. Diagnoses of major depressive disorder or other depressive disorder also require impairment of social, occupational, or other important areas of functioning (Question #10) and ruling out normal

bereavement, a history of a manic episode (bipolar disorder), and a physical disorder, medication, or other drug as the biological causes of the depressive symptoms.

To monitor severity over time for newly diagnosed patients or patients in current treatment for depression:

1. Patients may complete questionnaires at baseline and at regular intervals (e.g., every 2 weeks) at home and bring them in at their next appointment for scoring, or they may complete the questionnaire during each scheduled appointment.
2. Add up ✓s by column. For every ✓: “Several days” = 1; “More than half the days” = 2; “Nearly every day” = 3.
3. Add together column scores to get a TOTAL score.
4. Refer to the PHQ-9 Scoring Card (at right) to interpret the TOTAL score.
5. Results may be included in patients’ files to assist you in setting up a treatment goal and determining degree of response, as well as guiding treatment intervention.

PHQ-9 SCORING CARD FOR SEVERITY DETERMINATION

for health professional use only

Scoring — add up all checked boxes on PHQ-9

For every Not at all = 0; Several days = 1; More than half the days = 2; Nearly every day = 3.

Interpretation of Total Score

Total Score	Depression Severity
1–4	None
5–9	Mild depression
10–14	Moderate depression
15–19	Moderately severe depression
20–27	Severe depression

This PHQ-9 questionnaire is also available at www.depression-primarycare.org/clinicians/toolkits/materials/forms/phq9/

*Copyright © Pfizer Inc. All rights reserved. Developed by Drs. Robert L. Spitzer, Janet B. Williams, and Kurt Kroenke

TABLE 8. DRUGS FOR DEPRESSION

Antidepressant*	Therapeutic Dose Range (mg/day)	Initial Suggested Dose	Titration Schedule**	Advantages	Disadvantages
Selective Serotonin Reuptake Inhibitors (SSRIs)					
Citalopram (Celexa®)	20–60	20 mg in morning with food (10 mg in elderly or those with comorbid panic disorder)	Maintain 20 mg for 4 weeks before dose increase. If no response, increase in 10 mg increments every 7 days as tolerated.	Probably helpful for anxiety disorders. Possibly fewer cytochrome P450 interactions. Generic available.	
Escitalopram (Lexapro®)	10–40	10 mg	Increase to 20 mg if inadequate response after 4 weeks.	s-enantiomer more potent than racemic. 10 mg dose often effective.	
Fluoxetine (Prozac®)	10–80	20 mg in morning with food (10 mg in elderly and those with comorbid panic disorder)	Maintain 20 mg for 4–6 weeks and 30 mg for 2–4 weeks before dose increases. Increase in 10–20 mg increments at intervals of 7 days. If significant side effects occur within 7 days, lower dose or change medication.	Helpful for anxiety disorders. Long half-life; good for poor adherence, missed doses. Less frequent discontinuation symptoms. Generic available.	Slower to reach steady state. Sometimes too stimulating. Possibly more cytochrome P450 interactions.
Paroxetine (Paxil®)	10–50 (40 in elderly)	20 mg once daily, usually in morning with food (10 mg in elderly and those with comorbid panic disorder)	Maintain 20 mg for 4 weeks before dose increase. Increase in 10 mg increments at intervals of approximately 7 days, up to a maximum of 50 mg/day.	FDA-approved for most anxiety disorders. Generic available.	Sometimes sedating. Occasionally more anticholinergic-like effects. Possibly more cytochrome P450 interactions. May have more discontinuation symptoms.
(Paxil CR®)	25–62.5 (50 in elderly)	25 mg once daily (12.5 mg in elderly and those with comorbid panic disorder)	Increase by 12.5 mg at weekly intervals, maintain 25 mg for 4 weeks before dose increase.	Controlled-release (CR) may cause less gastrointestinal distress than immediate-release form.	
Sertraline (Zoloft®)	25–200	50 mg once daily, usually in morning with food (25 mg for elderly)	Maintain 50 mg for 4 weeks. Increase in 25–50 mg increments at intervals of 7 days as tolerated. Maintain 100 mg for 4 weeks before next dose increase.	FDA-approved for anxiety disorders, including PTSD. Safety shown after myocardial infarction.	
Serotonin and Norepinephrine Antagonist					
Mirtazapine (Remeron®)	15–45	15 mg at bedtime (7.5 mg for those in need of sedation).	Increase in 15 mg increments (7.5 mg in elderly) as tolerated. Maintain 30 mg for 4 weeks before further dose increase.	Few drug interactions. Less or no sexual dysfunction. Less sedation as dose increased. May stimulate appetite. Generic available.	Sedation at low dose only. May initially stimulate appetite.

Adapted with permission from Oxman T. Re-Engineering Systems for Primary Care Treatment of Depression: The Respect Depression Care Process. The Depression Initiative & Primary Care. Dartmouth Medical School. 2006: Version 9.11:28-29.

Antidepressant*	Therapeutic Dose Range (mg/day)	Initial Suggested Dose	Titration Schedule**	Advantages	Disadvantages
Norepinephrine- and Dopamine-Reuptake Inhibitor					
Bupropion [†] (Wellbutrin SR [®] , Wellbutrin XL [®])	300–400	150 mg in morning	Increase to 150 mg BID after 7 days. Increase to 200 mg BID if insufficient response after 4 weeks. 8 hours between doses and initially not at bedtime. With hepatic disease only 100 mg total per day.	Stimulating. Less or no sexual dysfunction. Generic available.	At higher dose may induce seizures in people with seizure-disorder. Stimulating. Usually BID dosing (sustained-release, SR), unless more expensive extended-release (XL).
Serotonin- and Norepinephrine-Reuptake Inhibitors					
Duloxetine (Cymbalta [®])	40–120	40–60 mg per day in single or BID dose as tolerated	Norepinephrine effect occurs at 60 mg and higher. 60 mg adequate target dose. Up to 120 mg has been used, but no clinical advantage demonstrated.	Also approved for diabetic peripheral neuropathic pain. Used for stress urinary incontinence.	May increase blood pressure. BID dosing. Nausea. Avoid in any hepatic impairment or severe renal failure.
Venlafaxine (Effexor [®] , Effexor XR [®])	75–375	75 mg with food; if anxious or medically frail, 37.5 mg	Dose should be divided BID or TID unless extended release (XR). For XR, give 37.5 mg in a.m. then increase to 75 mg in a.m. after 1 week, 150 mg in the a.m. after 2 weeks. If partial response after 4 weeks, increase to 225 mg in the morning. Norepinephrine effect only occurs above 150 mg.	XR taken QD. Helpful for anxiety disorders. Possibly fewer cytochrome P450 interactions.	May increase blood pressure at higher doses. BID dosing unless use XR. Expensive. More lethal in overdose (with other drugs & alcohol) than SSRIs but not tricyclics (TCAs).
Primarily Norepinephrine-Reuptake Inhibitors (TCAs)[‡]					
Desipramine (Norpramin [®] , Pertofrane [®])	100–300 (25–100 in elderly)	50 mg in the morning	Increase by 25–50 mg every 3–7 days to initial target of 150 mg for 4 weeks.	More effect on norepinephrine than serotonin, less sedating. Generic available.	Anticholinergic, side effects. Caution with BPH. [§] Can exacerbate cardiac conduction problems or CHF.
Nortriptyline (Aventyl [®] , Pamelor [®])	25–150	25 mg (10 mg in frail elderly) in the evening	Increase in 10–25 mg increments every 5 days as tolerated to 75 mg. Dosing too high may be ineffective. Obtain serum drug levels after 4 weeks if not effective.	Availability of reliable, valid blood levels. Lower orthostatic hypotension than other TCAs. Generic available.	Anticholinergic side effects. Caution with BPH. [§] Can exacerbate cardiac conduction problems or CHF.

*There are more antidepressants than those listed in this table; however, this list provides a reasonable variety of drugs that have different side effects and act by different neurotransmitter mechanisms.

For pregnancy, TCAs and SSRIs (particularly fluoxetine, for which there are more data) are not associated with congenital malformations or developmental delay. SSRIs in the third trimester are associated with a slight decrease in gestational age and correspondingly lower weight, and occasionally with neonatal withdrawal symptoms. Diarrhea, drowsiness, and irritability are occasionally seen in breastfed infants of mothers taking antidepressants. The risks of maternal depression on child development should be balanced against the effects of antidepressants on an individual basis.

**For SSRIs, generally start at the beginning of the therapeutic range. If side effects are bothersome, reduce doses and increase more slowly. In medically frail patients or those sensitive to medications, start lower. For all antidepressants, allow 4 weeks at a therapeutic dose in order to assess response. If a patient has a partial or slight response, the dose should be increased. If no response or symptoms worsen, then consider switching to another antidepressant of a different class.

†Generally avoid bupropion in patients with a history of seizures, significant central nervous system lesions, or recent head trauma.

‡Tricyclic antidepressants (TCAs) have lower costs but somewhat higher discontinuation rates compared to SSRIs, due to side effects, and are more lethal in overdose. TCAs may be contraindicated in patients with certain physical comorbidities such as recent myocardial infarction, cardiac conduction defects, urinary retention, narrow angle glaucoma, orthostatic hypotension, and cognitive impairment.

§ Benign prostatic hyperplasia (hypertrophy).

|| Congestive heart failure.

TABLE 3. SUMMARY OF DSM-IV CRITERIA FOR MAJOR DEPRESSIVE EPISODE

- Five (or more) of the following symptoms have been present during the same 2-week period, nearly every day, and represent a change from previous functioning; at least 1 of the symptoms is either (1) depressed mood or (2) loss of interest or pleasure:
 - Depressed mood most of the day.
 - Markedly diminished interest or pleasure in all, or almost all, activities most of the day.
 - Significant weight loss when not dieting, or weight gain, or decrease or increase in appetite.
 - Insomnia or hypersomnia.
 - Psychomotor agitation or retardation.
 - Fatigue or loss of energy.
 - Feelings of worthlessness or excessive or inappropriate guilt.
 - Diminished ability to think or concentrate, or indecisiveness.
 - Recurrent thoughts of death, recurrent suicidal ideation without a specific plan, or a suicide attempt or specific plan for committing suicide.
- The symptoms cause clinically significant distress or impairment in social, occupational, or other important areas of functioning.
- The symptoms do not meet criteria for a mixed episode (both depression and mania during the same episode), are not due to the direct physiological effects of a substance or a general medical condition, or are not better accounted for by bereavement.

Adapted with permission from the *Diagnostic and Statistical Manual of Mental Disorders*, 4th ed. text rev. Washington, DC: American Psychiatric Association; 2000.

When the response to Question 9 on the PHQ-9 is positive, evaluate the patient’s risk for suicide by further assessing any potential suicidal thoughts and plans (Table 4), and by considering other risk factors:²⁹

- Prior suicide attempts (highest risk of future suicide).
- Significant comorbid anxiety, or psychotic symptoms, or active substance use.
- Access to firearms.
- Living alone or poor social supports.
- Male and elderly.
- Recent loss or separation.
- Hopelessness.
- Preparatory acts (procuring means, putting affairs in order, warning statements, giving away personal belongings, suicide notes).
- Family history of affective disorder, suicide, alcoholism.

Elicit Potential Suicidal Ideation

Begin by eliciting your patient’s feelings about being alive, using questions such as “Have you ever felt that life is not worth living?” or “Did you ever wish you could go to sleep and just not wake up?” Based on his or her response, proceed to more specific questions, such as “Do you ever imagine that others would be better off without you?” and “Are you having thoughts about killing yourself?”

Elicit the Presence or Absence of a Suicide Plan

If a patient displays suicidal ideation, ask if he or she has a suicide plan. This includes asking how, where, and when suicide would be attempted. If your patient is actively thinking of suicide or has made attempts in the past—and particularly if he or she has a plan for committing suicide—arrange an immediate consultation with a psychiatrist or other qualified mental health professional. Actively thinking

about suicide constitutes a medical emergency that may necessitate calling 911.

Together, the primary care physician and psychiatrist can decide which safety measures and treatments, including hospitalization, are needed. (See Table 5 for more information on managing a suicidal patient.)

When to Refer to a Psychiatrist

Referral to a mental health specialist should be considered

TABLE 4. SUICIDE RISK ASSESSMENT AND ACTION PLAN

Risk assessment	Risk level	Action
No current thoughts of hurting or harming self, and no other major risk factors.	Low risk	Continue follow-up visits and monitoring.
Current thoughts of harming or killing self, but neither plans nor previous attempts, or other major risk factors.	Intermediate risk	Refer for urgent mental health assessment. Assess suicide risk carefully at each subsequent visit and involve the family in providing support and oversight.
Current thoughts of harming or killing self, with plans; and/or access to firearms; and/or acute anxiety.	High risk	Emergency management by a mental health specialist. Arrange a safe means for transport to the nearest emergency room.

Adapted with permission from Intermountain Health Care. Depression 2006 Update. p.11. Available at: <https://kr.ihc.com/ext/Dcmnt?ncid=51061767>

TABLE 5. MANAGEMENT OF POTENTIALLY SUICIDAL PATIENTS³⁰

The following recommendations have been developed to aid physicians in assisting potentially suicidal patients:

Be attentive. The patient needs to believe that someone understands his or her distress and takes it seriously. It is essential that patients not feel ignored or that their concerns are being dismissed or minimized. Listen carefully and offer empathic statements.

Remain calm and do not appear threatened. This helps the patient to feel secure and facilitates a productive doctor-patient conversation.

Stress a partnership approach. Let the patient know that he or she shares responsibility for choosing the treatment approach. Explain that the acute mental distress and hopelessness will subside with appropriate treatment.

Discuss suicide in a calm, reasoned manner. Emphasize that suicidal feelings are a symptom of a treatable condition, worsen when patients are under stress, and are often temporary. Avoid judgmental statements.

Emphasize that suicide causes a great deal of pain to family members. Explain that this pain may last for many years.

for depressed patients with a history of any of the following:

- Psychotic or manic symptoms.
- Suicidal ideation or attempts.
- Substance abuse or dependence.
- Severe psychosocial problems.
- Severe personality disorder.
- Poor response to antidepressant medication.

MANAGEMENT OF DEPRESSION BY PRIMARY CARE CLINICIANS
Treatment Approaches

Once a diagnosis is made, effective management may include patient education, self-management support, treatment, and ongoing monitoring. Self-management goals include:

- Taking medications regularly.
- Spending time with people who are supportive.
- Engaging in regular physical activity.
- Making time for enjoyable or relaxing activities.

Depression may be treated with psychotherapy, pharmacotherapy, or both. Either or both modalities can be used for patients presenting with mild episodes of major depressive disorder (MDD). Patients with moderate to severe MDD should generally be prescribed antidepressant medication, and may also benefit from psychotherapy.²⁵ Factors affecting choice of treatment include severity of symptoms, psychosocial stressors, comorbid conditions,

TABLE 6. USING PHQ-9 FOR DIAGNOSTIC ASSESSMENT AND INITIATING TREATMENT

PHQ-9 Symptoms* and Impairment	PHQ-9 Severity	Provisional Diagnosis	Treatment Recommendations
1 to 4 symptoms, functional impairment	< 10	Mild or minimal depressive symptoms	<ul style="list-style-type: none"> • Reassurance and/or supportive counseling • Patient self-management • Recommend physical activity • Educate patient to call if his or her condition deteriorates
2 to 4 symptoms, including questions #1 and/or #2, plus functional impairment	10–14	Moderate depressive symptoms (minor depression)**	<ul style="list-style-type: none"> • Watchful waiting • Supportive counseling • If no improvement after one or more months, use antidepressant or brief psychological counseling
≥ 5 symptoms, including questions #1 and/or #2, plus functional impairment	15–19	Moderately severe symptoms Major depression	<ul style="list-style-type: none"> • Patient preference for antidepressants and/or psychological counseling
≥ 5 symptoms, including questions #1 and/or #2, plus functional impairment	≥ 20	Severe symptoms Major depression	<ul style="list-style-type: none"> • Antidepressants alone or in combination with psychological counseling • Refer patient to psychiatrist

* Count the total number of symptoms in shaded sections of PHQ-9 from Table 2.
**If symptoms present for > 2 years, chronic depression, or functional impairment is severe, remission with watchful waiting is unlikely, and immediate active treatment is indicated for moderate depressive symptoms (minor depression).

Adapted with permission from Oxman T. Re-Engineering Systems for Primary Care Treatment of Depression: The Respect Depression Care Process. The Depression Initiative & Primary Care. Dartmouth Medical School. 2006: Version 9.11:18.

TABLE 7. INITIAL RESPONSE AFTER 4–6 WEEKS OF AN ADEQUATE DOSE OF AN ANTIDEPRESSANT

PHQ-9	Treatment Response	Treatment Plan
Drop of ≥ 5 points from baseline.	Adequate	No treatment change needed. Follow-up in 4 weeks.
Drop in 2–4 points from baseline.	Possibly Inadequate	May warrant an increase in antidepressant dose.
Drop of 1 point or no change or increase	Inadequate	Increase dose, augment, or switch. Consider informal or formal psychiatric consultation, adding psychological counseling.

INITIAL RESPONSE TO PSYCHOLOGICAL COUNSELING AFTER 3 SESSIONS OVER 4–6 WEEKS

PHQ-9	Treatment Response	Treatment Plan
Drop of ≥ 5 points from baseline.	Adequate	No treatment change needed. Follow-up in 4 weeks.
Drop in 2–4 points from baseline.	Possibly Inadequate	Probably no treatment change needed. Share PHQ-9 score with psychotherapist.
Drop of 1 point or no change or increase	Inadequate	With depression-specific psychological counseling (CBT, PST, IPT*), discuss with therapist, consider adding antidepressant. For patients satisfied in other type of psychological counseling, consider starting antidepressant. For patients dissatisfied with psychological counseling, review treatment options and preferences.

* CBT—Cognitive-Behavioral Therapy; PST—Problem Solving Treatment; IPT—Interpersonal Therapy.

- The goal of acute phase treatment is remission of symptoms so that patients will have a reduction of the PHQ-9 to a score < 5 .
- Patients who achieve this goal enter into the continuation phase in treatment. Patients who do not achieve this goal remain in acute phase treatment and require some alteration (dose increase, augmentation/switch/combination treatment).
- Patients who do not achieve remission after two adequate trials of antidepressant and/or psychological counseling by 20 to 30 weeks should have a psychiatric consultation for diagnostic and management suggestions.

Adopted with permission from Oxman T. Re-Engineering Systems for Primary Care Treatment of Depression: The Respect Depression Care Process. The Depression Initiative & primary Care. Dartmouth Medical School. 2006: Version 9.11:48.

patient preference, and availability of resources. The PHQ-9 can be used to aid in selection of treatment, as well as assist in diagnosis (Tables 6 and 7).

Some patients are reluctant to see a specialist for psychotherapy, or may prefer not to take medication. Despite patient reluctance, it is critical that you remain engaged with these patients, approach them in a supportive manner, and offer additional treatment or referral as the opportunity arises. When psychosis, suicidal ideation, or severe dysfunction is present, medication will be needed and hospitalization may be necessary. Electroconvulsive therapy may be useful for some patients who do not respond to treatment.

Educating the Patient

Patients often feel confused and ashamed when diagnosed with depression. It is important to try to dispel negative perceptions of the disorder with an explanation of the causes, mechanisms, and impact. Comparing depression to other treatable medical illnesses will help patients feel less stigmatized. For example, you can explain that depression is a physical illness just like hypertension, except that the brain is affected rather than the heart and blood vessels. Inform patients that antidepressant medication helps correct imbalances in brain chemistry.

Provide information about available treatment options, including their effectiveness and, if medication is prescribed, how long the medication will take to show effects, and what the potential adverse effects are. Although some people respond quickly to antidepressants, all patients should be cautioned not to expect immediate symptom relief. Inform patients that it may take as long as 6 weeks before they experience benefits from antidepressants, and often weeks beyond that before the maximum benefits become evident. In some cases, sleep and appetite may improve before depressed mood starts to lift. If patients are made aware of common responses to antidepressants, they will be less likely to discontinue treatment before the medication can take effect.

Nonpharmacological Approaches

Selection of nonpharmacological treatment options is influenced by the severity of depression, patient preferences, and your professional experiences. Therapies for depression can include psychotherapy, increased physical activity, and other self-management techniques. If not using medications, cognitive behavioral therapy (which concentrates on identifying negative thought patterns, and replacing them with positive thought patterns and rewarding activities) and interpersonal psychotherapy (which focuses on current problems and relationships) have the best documented efficacy in the literature; they can be considered initial treatments in patients with mild to moderate depressive disorders.

Exercise can help reduce depressive symptoms^{31,32} and, in one recent randomized, placebo-controlled trial, was found to be comparable to pharmacotherapy in achieving remission in patients with major depressive disorder after 4 months of treatment.³³ While depressed patients may not seem ideal

candidates for exercise programs, dropout rates for exercise programs have been equivalent to dropout rates for other therapies.³⁴ Exercise may also prevent or lessen future depressive episodes, so establishing exercise as a habit can be an important long-term benefit to persons prone to depression.³² In addition, exercise provides many other health benefits that other modes of therapy do not.

Pharmacotherapy

Several classes of medications are effective in treating depression. These include selective serotonin reuptake inhibitors (SSRIs), tricyclic antidepressants, and some of the other newer medications, such as the norepinephrine and dopamine reuptake inhibitor bupropion (Wellbutrin®); the serotonin and norepinephrine antagonist mirtazapine (Remeron®); and the serotonin and norepinephrine reuptake inhibitors venlafaxine (Effexor®) and duloxetine (Cymbalta®).

Since most antidepressants are equally effective, consider the side effects of the medication, safety, and the patient's specific complaints, in addition to pharmacokinetic factors. For example, a patient who complains of insomnia might benefit most from taking a sedating antidepressant such as mirtazapine. Duration, compliance, and dosage of an antidepressant are critical in determining the effectiveness of a therapeutic trial. Patients must take an adequate dosage of the medication for a sufficient period of time; otherwise, it cannot be determined that the medication has failed.³⁵ When available, always try to choose generics first, lowering the cost for both the patient and the health care system. **Table 8** lists some individual agents with information on dosing, titration, and advantages/disadvantages.

Monoamine oxidase inhibitors are not listed; they are now rarely used for depression because of potentially serious adverse effects, and they should be prescribed only by physicians experienced in their use.

The FDA recently added a black box warning on antidepressant product labels about the increased risks of suicidal thinking and behaviors in children, adolescents and young adults ages 18 to 24 during initial treatment (generally the first 1 or 2 months).³⁶ Careful monitoring is recommended for all patients initiating an antidepressant treatment to determine and assess the clinical response, provide reassurance regarding side effects, evaluate suicidal tendencies, and rule out comorbid disorders.³⁷

Adverse Effects

The newer antidepressant medications (SSRIs, bupropion, mirtazapine, and venlafaxine) are easier to dose than older drugs and have more tolerable side effects, allowing for a quicker response, better adherence, fewer office visits, and lower cost.³⁸ During treatment with an SSRI, patients may complain of feeling jittery, an increase in anxiety, nausea or gastrointestinal upset, or sexual problems. Sexual problems include delayed ejaculation in men and anorgasmia in women. Other adverse effects seen with many of the

antidepressants include insomnia or sedation, headaches, or weight changes. Patients should be advised that while the antidepressant benefits may be delayed or appear slowly, adverse effects can occur immediately. However, adverse effects are usually mild and improve with time or can be managed by adjusting or changing medications.

Early adverse effects may cause patients to question the appropriateness of the medication or discontinue it before a therapeutic effect is achieved. Patients should be encouraged to discuss with their physician or pharmacist concerns about dosage as well as ways of coping with adverse effects. Finally, patients should be counseled to avoid alcohol while taking an antidepressant because alcohol may reduce the medication's therapeutic effects and can depress mood. Some antidepressants may also potentiate the effects of alcohol.

Antidepressants can sometimes increase a patient's level of energy and activity before improving mood. While this can enable a person to act on suicidal ideas, the risk is far lower than the risk of suicide with untreated depression. Patients with suicidal thoughts should be counseled to call the physician immediately if such thoughts become more specific, frequent, or intense after initiation of an antidepressant. When antidepressant medication is reduced or stopped, patients can occasionally experience mild and fleeting symptoms (dizziness, nausea, lethargy, headaches) that can easily be avoided by gradually tapering the medication.

Prognosis

Untreated major depressive episodes typically last 6 months or longer and can frequently lead to suicidal ideation. However, improvement is seen in approximately 70% to 80% of properly treated patients.²⁶ To avoid relapses, patients should remain in psychotherapy or continue medication at the same dosage for 9 to 12 months for the first episode of depression; treatment may need to be longer for a second episode. Lifelong maintenance therapy should be considered for patients who have a history of psychotic depression or 3 or more depressive episodes.

Managing depression can be rewarding because treatments are available that can save lives and significantly improve daily functioning and quality of life. With screening, patient education, treatment, and careful monitoring, physicians can provide effective care for their depressed patients.

Most depressed patients will respond well to psychotherapy, pharmacotherapy, and supportive care in the primary care setting. Referral resources for formal psychotherapy or management of severe or complicated cases can be obtained by calling LIFENET at: 1-800-543-3638, or by calling 311. ♦

The DOHMH would like to thank the following external clinical advisors for their contributions:

Allen Dietrich, MD, Professor Community Family Medicine and Pediatrics, Dartmouth Medical School

Thomas Oxman, MD, Professor of Psychiatry and Community and Family Medicine, Dartmouth Medical School

RESOURCES

Referrals

LIFENET telephone numbers and Web site:

(24 hours a day/7 days a week)

In English: 1-800-LIFENET (1-800-543-3638)

In Spanish: 1-800-AYUDESE (1-877-298-3373)

In Chinese: 1-800-ASIAN LIFENET (1-877-990-8585)

For other languages, call 1-800-LIFENET or 311

and ask for an interpreter.

TTY (hard of hearing) call: 212-982-5284

www.mhaofnyc.org/2lifenet.html

American Psychiatric Association Answer Center:

Locate a psychiatrist by e-mail at apa@psych.org,

or call 1-888-35-PSYCH

National Mental Health Association: Find a mental health professional for counseling www.nmha.org

Physician Resources

MacArthur Toolkit on Depression in Primary Care

www.depression-primarycare.org/clinicians/toolkits

HSTAT: Guide to Clinical Preventative Services, 3rd Edition: Recommendations and Systematic Evidence Reviews, Guide to Community Preventative Services

www.ncbi.nlm.nih.gov/books/bv.fcgi?rid=hstat3.chapter.1996

Intermountain Health Care: Management of Depression

<https://kr.ihc.com/ext/Dcmnt?ncid=51061767>

American Psychiatric Association: www.psych.org

Patient Resources

National Institute for Mental Health

www.nimh.nih.gov/publicat/depression.cfm

American Psychiatric Association

www.healthyminds.org

References Available Online: www.nyc.gov/html/doh/downloads/pdf/chi/chi26-9-ref.pdf

RECEIVE CHI BY E-MAIL Each time **City Health Information** is published you will receive a link to the issue in PDF format.

To subscribe, visit www.nyc.gov/html/doh/html/chi/chi.shtml.

DOHMH JOB OPENINGS: We seek doctors, nurses, administrators, social workers, and other public health professionals. Visit www.nyc.gov/health/careers to view openings.



City Health Information



November 2007 The New York City Department of Health and Mental Hygiene Vol. 26(9):59-66

2 Lafayette Street, 20th Floor, CN-65, New York, NY 10007 (212) 676-2188

Michael R. Bloomberg

Mayor

Thomas R. Frieden, MD, MPH

Commissioner of Health and Mental Hygiene

Division of Epidemiology

Lorna E. Thorpe, PhD, Deputy Commissioner

Division of Mental Hygiene

David A. Rosin, MD, Executive Deputy Commissioner

Gerald Cohen, MD, Clinical Director

Dorothy Rick, LCSW, Depression Programs Coordinator

Bureau of Public Health Training

Carolyn Greene, MD, Assistant Commissioner

Peggy Millstone, Director, Scientific Communications

Rita Baron-Faust, CHES, Medical Editor

Peter Ephross, Medical Editor

Quawana Charlton, Editorial Assistant

PRST STD
U.S. POSTAGE
PAID
NEW YORK, N.Y.
PERMIT NO. 6174

Copyright © 2007, 2008 The New York City Department of Health and Mental Hygiene

Email *City Health Information* at: nycdohrp@health.nyc.gov

Suggested citation: Petit J, Cohen G, Lednyak, L. Detecting and treating depression in adults. *City Health Information*. 2007;26(9):59-66 [revised May 2008].

CME/CNE Activity Detecting and Treating Depression in Adults

1. All of the following statements about major depression are true EXCEPT:

- A. It affects 1 in 6 adults during their lifetime.
- B. Most patients with major depression receive adequate treatment.
- C. Many patients don't realize they are suffering from depression.
- D. Primary care physicians can effectively screen for and manage depression.
- E. If a patient's response is positive to item #9 on the PHQ-9 Questionnaire, the patient should be screened for suicidal risk.

2. Which of the following are true about depression and comorbid medical conditions?

- A. Risk of depression increases following a stroke or heart attack.
- B. Patients with diabetes are twice as likely to have comorbid depression.
- C. About one quarter of persons with Alzheimer's Disease have major depression.
- D. All of the above are true.

3. All of the following statements about treating depression are true EXCEPT:

- A. The PHQ-9 questionnaire is useful in measuring severity of depressive symptoms and response to treatment over time.
- B. Some patients may experience a transient increase in anxiety when they start taking an antidepressant medication.
- C. Psychotherapy and pharmacotherapy are both effective in treating mild depression.
- D. Selective serotonin reuptake inhibitors (SSRIs) are more likely to result in fatalities from overdose than tricyclic antidepressants (TCAs).

4. Which of the following are true about co-occurring anxiety and depression?

- A. Many antidepressant medications are effective in treating both depression and anxiety disorders.
- B. Anxiety disorders often co-occur with depression.
- C. Co-occurring anxiety and depression are associated with greater functional impairment and severity of symptoms.
- D. All of the above are true.

5. Sedation is a common side effect of which of the following antidepressant medications?

- A. Bupropion (Wellbutrin SR and others)
- B. Fluoxetine (Prozac)
- C. Mirtazepine (Remeron)
- D. Sertraline (Zoloft)

6. How well did this continuing education activity achieve its educational objectives?

- A. Very well B. Adequately C. Poorly

PLEASE PRINT LEGIBLY.

Name _____ Degree _____

Address _____

City _____ State _____ Zip _____

Date _____ Telephone _____

E-mail address _____

Continuing Education Activity

This issue of *City Health Information*, including the continuing education activity, can be downloaded from the publications section at nyc.gov/health. To access *City Health Information* and Continuing Medical Education online, visit www.nyc.gov/html/doh/html/chi/chi.shtml.

Instructions

Read this issue of *City Health Information* for the correct answers to questions. To receive continuing education credit, you must answer 4 of the first 5 questions correctly.

To Submit by Mail

1. Complete all information on the response card, including your name, degree, mailing address, telephone number, and e-mail address. PLEASE PRINT LEGIBLY.
2. Select your answers to the questions and check the corresponding boxes on the response card.
3. Return the response card (or a photocopy) postmarked **no later than November 30, 2008**. Mail to:

CME Administrator, NYC Dept. of Health and Mental Hygiene,
2 Lafayette Street, CN-65, New York, NY 10277-1632.

To Submit Online

Visit www.nyc.gov/html/doh/html/chi/chi.shtml to submit a continuing education test online. Once logged into NYC MED, use the navigation menu in the left column to access this issue of *City Health Information*. Your responses will be graded immediately, and you can print out your certificate.

Continuing Education Activity

Detecting And Treating Depression In Adults

SPONSORED BY

THE NEW YORK CITY DEPARTMENT OF
HEALTH AND MENTAL HYGIENE (DOHMH)
CITY HEALTH INFORMATION

NOVEMBER 2007 VOL 26(9):59-66

Objectives

At the conclusion of the activity, the participants should be able to:

1. Screen for major depressive disorder.
2. Diagnose major depressive disorder.
3. Assess suicidal ideation.
4. Treat major depressive disorder.

Accreditation

New York City Department of Health and Mental Hygiene (NYC DOHMH) is accredited by the Medical Society of the State of New York to sponsor continuing medical education for physicians. The NYC DOHMH designates this continuing medical education activity for a maximum of 1.00 AMA PRA Category 1 credit(s)[™]. Each physician should only claim credit commensurate with the extent of his/her participation in the activity.

New York City Department of Health and Mental Hygiene is an approved provider of continuing nursing education by the New York State Nurses Association, an accredited approver of continuing nursing education by the American Nurses Credentialing Center's Commission on Accreditation.

Contact hours: 1.00. Code: 6WXLFX-PRV-075.

Participants are required to submit name, address, and professional degree. This information will be maintained in the Department's CME program database. If you request, the CME Program will verify your participation and whether you passed the exam.

We will *not* share information with other organizations without your permission, except in certain emergencies when communication with health care providers is deemed by the public health agencies to be essential or when required by law. Participants who provide e-mail addresses may receive electronic announcements from the Department about future continuing education activities as well as other public health information.

Participants must submit the accompanying exam by November 30, 2008.

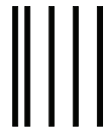
CME Faculty:

Jorge Petit, MD (Course Director)
Gerald Cohen, MD

CNE Faculty:

Denise Paone, RN, D.H.Ed
Eric Chong, RN, L.Ac, MOM (CNE Provider Unit)

All faculty are affiliated with the NYC DOHMH. The faculty does not have any financial arrangements or affiliations with any commercial entities whose products, research, or services may be discussed in this issue.



NO POSTAGE
NECESSARY
IF MAILED
IN THE
UNITED STATES

BUSINESS REPLY MAIL

FIRST-CLASS MAIL PERMIT NO.2379 NEW YORK NY

POSTAGE WILL BE PAID BY ADDRESSEE

CME ADMINISTRATOR
NYC DEPARTMENT OF HEALTH
AND MENTAL HYGIENE
2 LAFAYETTE ST, CN - 65
NEW YORK, NY 10277-1632

