
11. Depression and Cognitive Dysfunction

Depression

Depression is approximately twice as common in patients with diabetes (ranging from 15% to 30%) than in the general population. The odds of major depression is increased in patients with diabetes who also have two or more coexisting chronic conditions, such as hypertension, coronary artery disease, or arthritis. Diabetes and depression increase the risk of death from all causes of mortality.

The effect that treatment of depression has on glycemic control is not well defined in these patients. However, the presence of depression may play an important role by affecting a patient's ability to adapt and manage his or her disease (e.g., take medications, exercise, and make dietary modifications).

How do I screen my patients for depression?

We need to be aware of the high prevalence of depression among patients with diabetes and proactively screen for depression. Various tools are used to screen patients for depression, but evidence favoring any particular tool is lacking. The U.S. Preventive Services Task Force suggests the “two simple questions” approach:

- “Over the past 2 weeks, have you felt down, depressed, or hopeless?”
- “Over the past 2 weeks, have you felt little interest or pleasure in doing things?”

If the patient answers yes to either of these questions, consider asking the follow-up question, “Is this something for which you would like help?” A positive screen should prompt additional questioning to establish a diagnosis and initiate a plan for treatment and follow-up.

What do patients with diabetes need to know about depression?

- Stress that depression is common and is not a sign of weakness or personal failure.
- Inform patients that depression is treatable with medication and/or therapy, although combining both is usually more effective.
- If medications are prescribed, provide specific information about their dosage, timing, and any side effects. Point out that the medications require time to take effect and that if one medication does not help, others can be used.
- Provide information about community resources for low-cost or free mental health resources.
- Even if clinical depression is not present, remind patients that negative emotions (anger, guilt, frustration, sadness) are common among people with diabetes, both initially and throughout their lives. Ask that they let you know if they believe they are depressed or would benefit from counseling.

Cognitive Dysfunction

Cognitive dysfunction has been associated with both type 1 and type 2 diabetes, with a 1.5-fold greater risk of cognitive decline and a 1.6-fold increase in risk of future dementia. In older patients with type 2 diabetes, the risk of Alzheimer's disease is increased.

In type 1 diabetes, impairment in learning and memory, problem solving, and mental and motor speed has been observed. In type 2 diabetes, cognitive dysfunction is seen more consistently in areas of attention and concentration, verbal

memory, visuospatial memory, language, and psychomotor speed.

Cognitive dysfunction can make it difficult for patients with diabetes to follow medical, nutritional, and exercise regimens, which increases the risk of treatment complications: for example, omission of meals, leading to hypoglycemia, or incorrect dosage or timing of insulin injections or oral medications. Patients or their caregivers may not recognize the complications of medical therapy—especially hypoglycemia—and may underreport them to you and other providers. In patients with cognitive dysfunction, the treatment regimen should be simplified so that the patient is able to follow the recommendations safely. In addition, the goal for glycemic control should be adjusted to achieve the best control possible, given the patient's ability to comply, without the risk of hypoglycemia.

If a patient is suspected of having cognitive dysfunction, referral to a mental health care provider is recommended for a definite diagnosis. In addition, provide diabetes education to family members or other caregivers of a patient with cognitive dysfunction to ensure the safety of the patient. Assessing a caregiver's ability to

manage diabetes is important, particularly if the caregiver is elderly or also has health issues. In addition, referral for home health care or to other community resources may be needed.

Which patients with diabetes should be screened for cognitive dysfunction?

Cognitive dysfunction should be considered in all patients with diabetes. In many patients, cognitive dysfunction can be subtle, especially in early stages, and remain undiagnosed. Patients who make repeated errors in medication intake or judgment, who fail to achieve better glycemic control after reasonable efforts, or who seem overwhelmed by disease management should be suspected of having cognitive dysfunction. Many experts recommend screening for cognitive dysfunction in all elderly patients with diabetes because of its higher prevalence in this population and the risks of treatment complications. Tests such as the clock-drawing test and the Mini-Mental State Examination can be quickly administered in a primary care office to screen for cognitive dysfunction.

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