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LETTERS TO THE EDITORS

Depression and suicide in patients with diabetes

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Diabetes is associated with psychiatric disorders including depression and suicidal behavior.[1-3] The relationship between depression and diabetes has been recognized many years ago.[3] A recent meta-analysis of 44 studies suggests that the prevalence of depression was significantly greater in individuals with type 1 or type 2 diabetes in comparison to people without diabetes.[2]

Studies indicate a bidirectional relationship between diabetes and depression: individuals with diabetes are more likely to have comorbid depression and patients with depression are at increased risk to have comorbid diabetes.[1] Probably, diabetes and depression share some underlying biological mechanisms, such as hypothalamic-pituitary-adrenal axis abnormalities and inflammation.[4]

Comorbidity of diabetes with depression is associated with a reduced quality of life, insufficient self-care, a sedentary lifestyle, and significant medical issues including poor glycemic control, poor adherence to treatment of diabetes, greater rates of cardiovascular events and cardiac mortality.[2,4] It has been observed that acute hyperglycemia leads to changes in mood, including heightened irritability and feelings of reduced wellbeing.[5]

Considerable evidence suggests that diabetes is associated with suicide ideation, attempts, and deaths.[1] Studies indicate that diabetes increases the risk of suicide death 1.6-3.6 times in comparison to the general population.[1,6] For example, an epidemiological study in Sweden showed that patients with diabetes were 3.4 times more likely to die by suicide in comparison to the general population.[6] Some observations suggest that suicide is more frequent among individuals with type 1 diabetes in comparison to patients with type 2 diabetes.[7]

It should be noted that many individuals with diabetes have access to insulin, tricyclic antidepressants, opioids, or other drugs that are deadly at high doses. Lethal insulin overdoses are frequently suicides.[6]

It has been observed that psychological adjustment to diabetes and metabolic control in patients with type 2 diabetes are influenced by affective temperaments.[8] Affective temperaments may also contribute to the pathophysiology of suicidality in patients with diabetes.[9]

Mental health, primary care, and internal medicine clinicians should screen individuals with diabetes, especially patients with poorly controlled diabetes, for depression and suicidal ideation. Individuals with depression and/or suicidal ideation who do not receive psychiatric treatment need to be referred to mental health clinicians. Acutely suicidal patients need to be referred to emergency psychiatric services.

It is necessary to educate primary care and internal medicine physicians on how to assess patients for depression and suicidality. The knowledge and skills needed to make such assessments should be taught in medical schools and postgraduate medical education programs. It should be noted that even well-trained medical professionals sometimes have difficulties assessing patients for suicidality.

Patients with diabetes are a psychologically vulnerable population. Depression and suicidal behavior in individuals with diabetes are an underappreciated and understudied issue that needs more attention from clinicians, researchers, and public health leaders. The effect of antihyperglycemic medications on mood and behavior needs to be comprehensively investigated. It is to be hoped that this note as well as other publications related to psychological issues and suicide in diabetes will help individuals with diabetes to receive more and better care.

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