DEPRESSION SCREENING IN DIABETES
SELF-MANAGEMENT EDUCATION AND SUPPORT:
ACKNOWLEDGING THE ELEPHANT IN THE ROOM
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ABSTRACT

PURPOSE: Depression is a significant comorbid condition prevalent in people with diabetes and adversely affects health outcomes. The combination of diabetes and depression may account for at least some persons seeming inability to effectively self-manage their diabetes and achieve optimal outcomes. This paper provides a description of tools used in screening for depression and how they can be incorporated within diabetes self-management education (DSME) and ongoing diabetes self-management support (DSMS).

CONCLUSION: Diabetes educators are in a key position to address depression in adults with diabetes, and can help ensure that patients are being screened for depression, referred to appropriate treatment for their depression and receiving quality care for both diseases, including DSME that addresses barriers to self-care.

Key words: diabetes, depression, health education, behavior change.

INTRODUCTION

Depression is a significant comorbid condition prevalent in people with diabetes and adversely affects health outcomes\(^1,2,3\). The combination of diabetes and depression is associated with decrease in functional abilities and self-care. This is especially problematic for individuals with diabetes because diabetes requires ongoing self-management\(^4\). This paper provides a description of tools used in screening for depression and how they can be incorporated within diabetes self-management education (DSME) and ongoing diabetes self-management support (DSMS).

BACKGROUND

Diabetes is a serious illness affecting 25.8 million people (8% of the U.S. population), a leading cause of death, and is associated with $174 billion in healthcare costs\(^5\). According to a recent meta-analysis, the prevalence of major depression among adults with diabetes is 11% and clinically relevant depression is 31%; rates of elevated depression range from 21 to 27% in people with type 1 diabetes and 11% in those with type 2\(^1,2\). The relationship between
depression and diabetes appears to be bi-directional, i.e. those with diabetes are at increased risk for developing depression; and conversely, those with depression are at increased risk for developing diabetes⁶,⁷,⁸,⁹. A substantial, positive, and significant association exists between the incidence of diabetes and untreated depression among adults 55 years of age or older¹⁰. Interdependencies have been reported for diabetes control, psychological factors, and quality of life; all of which are negatively affected by diabetes complications¹¹. It is common for depressive symptoms to cycle (the relapse and remitting nature of the illness) and so layering that over the life-cycle of the person with diabetes results in a rather complicated picture.

People with diabetes exhibit relatively high rates of diabetes-specific distress, affective and anxiety disorders¹¹,¹². Diabetes distress refers to the unique, often hidden emotional burdens and worries that are part of the spectrum of patient experience when managing a severe, demanding chronic disease like diabetes¹³. For the people diagnosed with diabetes, the addition of depression serves to increase symptom burden, diabetes-related complications, unemployment, work-related disability, and healthcare costs¹⁴. Individuals with both diabetes and depression have a 2.3 times greater risk of early mortality than do non-depressed people with diabetes¹¹,¹⁵.

Both type 1 and type 2 diabetes are largely controllable with active management. 95% of which is performed by patients themselves¹⁶. The goals of management are to achieve glycated hemoglobin (Hb A1C) levels of 7.0% or less, and reduce the risk of diabetes related complications and co-morbidities⁵. Comorbid depression is associated with poorer control of blood glucose levels, increased incidence of diabetes complications, and impaired engagement in self-management including ability to take medications as prescribed, follow treatment plans and actively engage in self-care behaviors²,⁴,¹⁷,¹⁸. Taken together, these lead to suboptimal outcomes, increased medical comorbidity, and diabetes-related mortality¹⁹.

Diabetes self-management is crucial to management of the disease and has been shown to mitigate future complications, reduce risk of co-morbidities, and improve overall health²⁰,²¹. Professional guidelines on diabetes care all call for self-management education that facilitates effective self-care and positive behavior change for people with diabetes. DSME is based on behavioral and educational theory and consists of traditional pedagogy, skill-training, and behavior change strategies²². DSME involves five defined steps: 1. assessment; 2. goal setting; 3. planning; 4. implementation; and 5. evaluation/monitoring. It also addresses 7 self-care behaviors which are: healthy eating, being active, monitoring, medication taking, problem solving, healthy coping, and reducing risk²². For severely depressed people with diabetes, management of depression can be seen as a greater priority over the DSME, as emotional and mental wellbeing are prerequisites for effective engagement in self-management and behavior change¹⁶,²³. Within the context of DSME, addressing both diabetes and depression is appropriate for those with moderate or mild depression and at relatively healthier times during the cycle of depression for those with more severe impairment.
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STRATEGIES

Depressive symptoms and diabetes distress are distinct emotional states and have independent relationships to diabetes. A comprehensive approach that distinguishes disease-related distress from clinical depression is an integral part of behavioral management of diabetes. There are several validated screening tools available for both depression and distress. The US Preventive Services Task Force (USPSTF) recommends 'screening adults for depression when staff-assisted depression care supports are in place to assure accurate diagnosis, effective treatment, and follow up' and recommends against routine screening when these care supports are not in place.

DSME begins with an assessment that screens for health and mental status, attitudes about the illness, mood, support (financial, social, and emotional), and diabetes-related quality of life. Depression screening however, has not been formally integrated into this assessment in most DSME practices. This may result from lack of expertise in the area of mental health, confusion as to which instrument to use, limited guidance on where to refer people who are identified as having depression, and/or concern about false positive findings.

Many validated depression screening tools are available for adults (Table 1). Obstacles for their use in DSME may include length, cost, or expertise required for their administration and/or interpretation. In addition, educators may not know where to refer patients or how to locate mental health resources in the community. The PHQ-2 has been reported to be an effective screen for determining what individuals would benefit from a more complete evaluation for depression. The PHQ-2 can be easily incorporated into a diabetes educator’s assessment as it consists of two questions:

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

1. Little interest or pleasure in doing things?
2. Feeling down, depressed, or hopeless?

An affirmative answer to either question is a positive screen and a negative answer to both questions is a negative screen. Listening to what the patient says during the assessment can help clarify whether a score is the result of a situational or true clinical depression. If the patient has a positive screen, the diabetes educator can ask the patient to complete one of the more robust screening tools found in Table 1. The diabetes educator should report the findings to the referring primary care physician. It is most important to have a list of resources available for referral to a mental health professional who can diagnose diabetes distress or depression and to frame that referral so that the patient feels supported. One approach is to explain to the patient that depression is very common among people with diabetes, so a list of resources is available if needed. Framing the referral as common removes some of the stigma that still exists concerning depression and its treatment.
DISCUSSION

There is a great deal of overlap in self-care behaviors that improve outcomes for those who have depression, diabetes or both. For example, aerobic exercise has been found to be comparable to antidepressant medication in effectiveness for reducing mild to moderate depression.
and physical activity is among the self-care behaviors essential to diabetes control. Lifestyle modification interventions that include healthy eating and exercise have been proven effective for depressed individuals with diabetes. Problem solving and coping skills are among the self-care behaviors targeted in the American Association of Diabetes Educators (AADE) self-care behaviors and both have important implications with respect to depression.

Best practice for DSME and DSMS is provision of care that is patient-centered, culturally sensitive, and appropriate for the patient’s age, socioeconomic status, and ethnicity. The acceptability of help addressing depression has been shown to differ among ethnic groups and may be influenced by the receptivity of a patient’s family/support system to the idea of depression treatment. To foster rapport with diverse populations, tools are needed for providing culturally relevant care that includes information tailoring to individual’s cultural context, cultural interviewing, and culturally competent evidence-based practices for quickly building rapport.

Integration of care across healthcare providers, families, and the community in which the person lives, lowers costs and is associated with better outcomes for depression and diabetes. Community resources may include accessible and convenient areas for exercise, affordable fresh food, and access to local pharmacists. In addition, telephonic and web-based interventions are showing promise as tools to reduce depression and anxiety among populations with diabetes.

CONCLUSION

Depression and diabetes distress are likely underlying factors accounting for a proportion of patients who have difficulty with effective self-management of their diabetes, and are unable to attain optimal outcomes. People with diabetes should be screened for depression when systems are in place for good management and follow-up. Integrating depression screening tools into DSME is likely to be the most effective means for assuring their routine use. DSME and DSMS can and should be adapted to meet the needs of the patient, including working collaboratively with the patient to develop an education plan and set goals that aim to optimize self-care of both their diabetes and depression. DSME and DSMS can and should be adapted to the needs of individuals with diabetes who are mildly or moderately depressed. The most effective means to these ends involve care coordination, facilitation of improved behavior change, referral to appropriate social services, and psychosocial support; and involvement of mental health professions when needed.

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