

The Psychological Side of Diabetes



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Objectives



- Explore psychological aspects that impact patients with diabetes
- Differentiate Depression and Diabetes Distress
- Review screening tools to use with patients with diabetes

Psychosocial Factors Affecting Diabetes Self-Care



Socioeconomic and Cultural Factors

Patient Knowledge, Beliefs, and Related Cognitive Factors

- Knowledge
- Health literacy
- Numeracy skills
- Beliefs
- Self-efficacy and perceived control

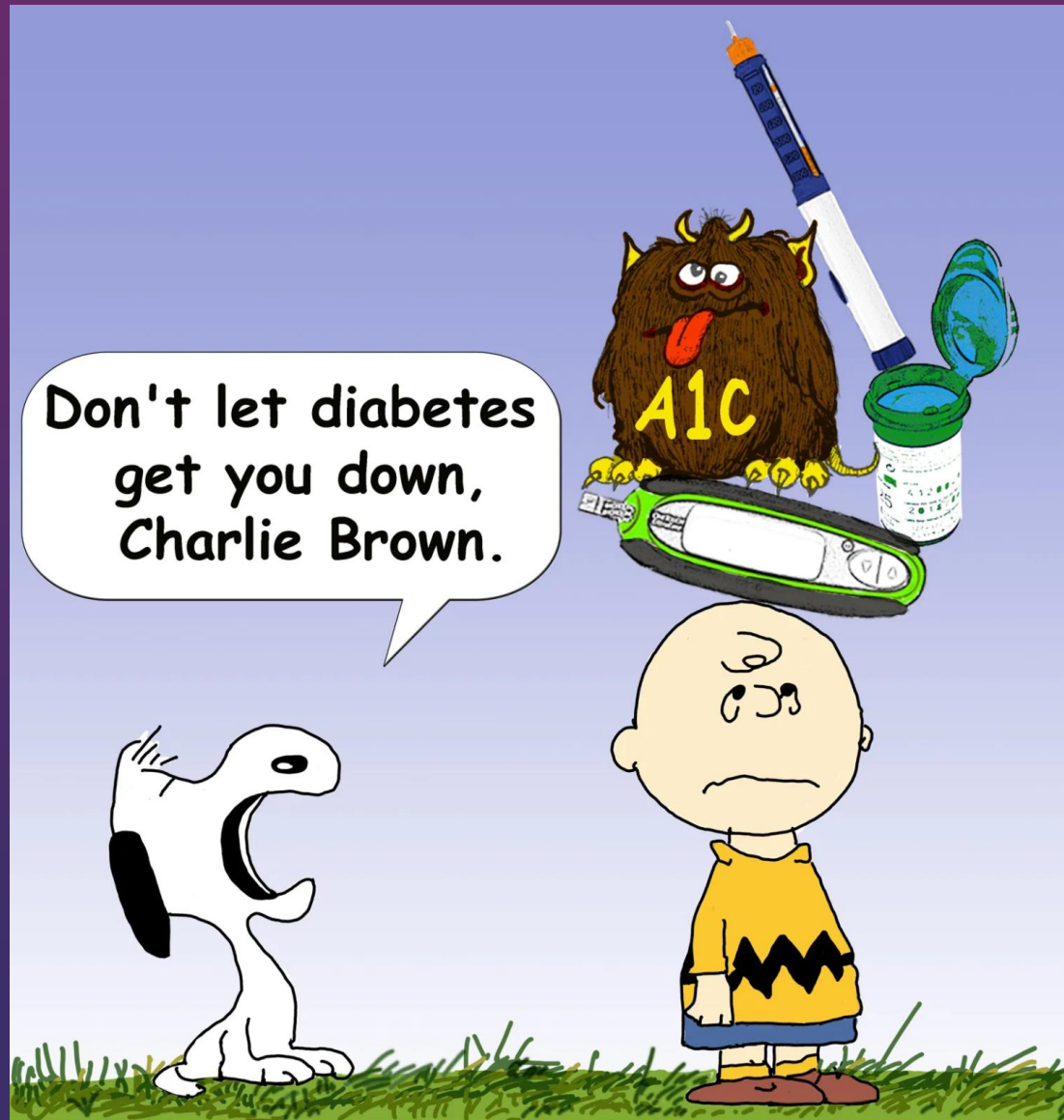
Behavioral Skills, Coping, Self-Control, and Self-Regulation

- Problem solving and coping
- Self-control and self-regulation

Psychological Conditions

- Depression
- Anxiety
- Eating Disorders
- Diabetes Distress

Psychological Conditions



Patient Story



CrossMark

Psychosocial Care for People With Diabetes: A Position Statement of the American Diabetes Association

Deborah Young-Hyman,¹ Mary de Groot,²
Felicia Hill-Briggs,³ Jeffrey S. Gonzalez,⁴
Korey Hood,⁵ and Mark Peyrot⁶

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Negative Emotions related to Diabetes



Guilt

Out of control

Shame

Frustration

Anger

Overwhelmed

Sadness

Alone

Hopelessness

Fear

Embarrassment

Mistrust



"I'm Diabetes, and these are my constant companions: Stereotype, Ignorance and Rudeness."

Depression

Major Depressive Episode (DSM-5)

5+ symptoms occurring nearly every day during a discrete 2-week period that is different from the person's typical level of functioning

- Depressed mood most of the day, nearly every day and/or
- Markedly diminished interest in or pleasure in all, or almost all, activities most of the day, nearly every day
- Significant weight loss or weight gain or change in appetite
- Sleep disturbance (insomnia, hypersomnia)
- Feelings of worthlessness or excessive, inappropriate guilt
- Psychomotor agitation or retardation
- Fatigue or loss of energy
- Diminished ability to think or concentrate, indecisiveness
- Recurrent thoughts of death, recurrent suicidal ideation without a specific plan, or a suicide attempt or a specific plan for committing suicide

Other Common Conditions with Depression



- Major Depressive Disorder
- Persistent Depressive Disorder (Dysthymia)
- Other Specified Depressive Disorder or Unspecified Depressive Disorder
- Bipolar and Related Disorders
- Adjustment Disorders
- Bereavement

Depression and Diabetes



- 1 in 4 individuals with diabetes has elevated symptoms of depression or a depressive disorder
 - T1D: 21.3%
 - T2D: 27%
- Associated with sub-optimal diabetes management (e.g., self-care behaviors, glycemic control), higher complication rates, increased health care use and cost, diminished quality of life, increased disability with lost productivity, and increased risk of death
- History of depression and/or current depressive symptomatology are risk factors for the development of T2D
- Depressive symptoms are more likely to occur when there is a significant change in medical status
- People with diabetes should be screened annually for depression

Screening for Depression

PATIENT HEALTH QUESTIONNAIRE-9 (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

FOR OFFICE CODING 0 + _____ + _____ + _____
=Total Score: _____

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
☐

Interpreting PHQ-9 Scores

Minimal depression	0-4
Mild depression	5-9
Moderate depression	10-14
Moderately severe depression	15-19
Severe depression	20-27

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Diabetes Distress

Diabetes Distress

Negative reactions to the demands and challenges of living with diabetes, including the constant, complicated demands of self-care and the potential or actuality of disease progression

- Prevalence Rate:

T1D: 43%

T2D: 36-42%

DAWN2 data (2011):

- 45% of participants reported diabetes distress
 - 24% of participants reported health care providers asked how diabetes affected their lives
- Influenced by age, gender, culture, type of diabetes, use of insulin, number of complications, and length of time living with diabetes

Diabetes Distress



- Associated with higher A1c, lower diabetes self-efficacy, and poorer engagement in self-care behaviours such as diet and physical activity
- People with diabetes should be screened annually, at least, or at routine visits, when treatment goals are not met, or when diabetes related complications develop

Depression and Diabetes Distress



1. Diabetes Distress is more prevalent than clinical depression in patients with diabetes
2. Diabetes Distress can occur independent from or with clinical depression
3. Depression found in patients with diabetes may be better explained by Diabetes Distress
4. Screening for and treating clinical depression and diabetes distress may differ, but both are important to address in patient care.
5. Depression and Diabetes Distress are both treatable

Screening for Diabetes Distress



Problem Areas in Diabetes (PAID)

Diabetes Distress Scale (DDS)

Problem Areas In Diabetes (PAID) scale

Instructions: Which of the following diabetes issues are **currently** a problem for you? Tick the box that gives the best answer for you. Please provide an answer for each question.

		Not a problem	Minor problem	Moderate problem	Somewhat serious problem	Serious problem
1	Not having clear and concrete goals for your diabetes care?	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
2	Feeling discouraged with your diabetes treatment plan?	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
3	Feeling scared when you think about living with diabetes?	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
4	Uncomfortable social situations related to your diabetes care (e.g. people telling you what to eat)?	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
5	Feelings of deprivation regarding food and meals?	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
6	Feeling depressed when you think about living with diabetes?	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
7	Not knowing if your mood or feelings are related to your diabetes?	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
8	Feeling overwhelmed by your diabetes?	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
9	Worrying about low blood glucose reactions?	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
10	Feeling angry when you think about living with diabetes?	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
11	Feeling constantly concerned about food and eating?	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
12	Worrying about the future and the possibility of serious complications?	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
13	Feelings of guilt or anxiety when you get off track with your diabetes management?	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
14	Not 'accepting' your diabetes?	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
15	Feeling unsatisfied with your diabetes physician?	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
16	Feeling that diabetes is taking up too much of your mental and physical energy every day?	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
17	Feeling alone with your diabetes?	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
18	Feeling that your friends and family are not supportive of your diabetes management efforts?	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
19	Coping with complications of diabetes?	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
20	Feeling 'burned out' by the constant effort needed to manage diabetes?	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4

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Diabetes Distress Scale (DDS)

Emotional Burden	Feeling overwhelmed or fearful of managing the burdens of diabetes over time
Regimen Distress	Concerns of failing with self-care, feeling unmotivated to keep up with diabetes management
Interpersonal Distress	Concerns of not getting enough support about diabetes from loved ones
Physician Distress	Concerns of unclear treatment directions or that worries are not taken seriously enough

DDS

DIRECTIONS: Living with diabetes can sometimes be tough. There may be many problems and hassles concerning diabetes and they can vary greatly in severity. Problems may range from minor hassles to major life difficulties. Listed below are 17 potential problem areas that people with diabetes may experience. Consider the degree to which each of the 17 items may have distressed or bothered you DURING THE PAST MONTH and circle the appropriate number.

Please note that we are asking you to indicate the degree to which each item may be bothering you in your life, NOT whether the item is merely true for you. If you feel that a particular item is not a bother or a problem for you, you would circle "1". If it is very bothersome to you, you might circle "6".

	Not a Problem	A Slight Problem	A Moderate Problem	Somewhat Serious Problem	A Serious Problem	A Very Serious Problem
1. Feeling that diabetes is taking up too much of my mental and physical energy every day.	1	2	3	4	5	6
2. Feeling that my doctor doesn't know enough about diabetes and diabetes care.	1	2	3	4	5	6
3. Not feeling confident in my day-to-day ability to manage diabetes.	1	2	3	4	5	6
4. Feeling angry, scared and/or depressed when I think about living with diabetes.	1	2	3	4	5	6
5. Feeling that my doctor doesn't give me clear enough directions on how to manage my diabetes.	1	2	3	4	5	6
6. Feeling that I am not testing my blood sugars frequently enough.	1	2	3	4	5	6
7. Feeling that I will end up with serious long-term complications, no matter what I do.	1	2	3	4	5	6
8. Feeling that I am often failing with my diabetes routine.	1	2	3	4	5	6

	Not a Problem	A Slight Problem	A Moderate Problem	Somewhat Serious Problem	A Serious Problem	A Very Serious Problem
9. Feeling that friends or family are not supportive enough of self-care efforts (e.g. planning activities that conflict with my schedule, encouraging me to eat the "wrong" foods).	1	2	3	4	5	6
10. Feeling that diabetes controls my life.	1	2	3	4	5	6
11. Feeling that my doctor doesn't take my concerns seriously enough.	1	2	3	4	5	6
12. Feeling that I am not sticking closely enough to a good meal plan.	1	2	3	4	5	6
13. Feeling that friends or family don't appreciate how difficult living with diabetes can be.	1	2	3	4	5	6
14. Feeling overwhelmed by the demands of living with diabetes.	1	2	3	4	5	6
15. Feeling that I don't have a doctor who I can see regularly enough about my diabetes.	1	2	3	4	5	6
16. Not feeling motivated to keep up my diabetes self management.	1	2	3	4	5	6
17. Feeling that friends or family don't give me the emotional support that I would like.	1	2	3	4	5	6

The Quick and Dirty



“What is the **one** thing about your diabetes that drives you crazy or worries you most?”

Other Considerations in Caring for Individuals with Diabetes



- Family Conflict/Issues
- Substance Use
- Neurocognitive Complications
- Overall Quality of Life
- Stigma
- Other Medical Complications and Functional Impairment
- Serious Mental Illness
- Youth-to-Adult Transition
- Aging

When to Refer to Behavioral Health



- On-going self-care problems or diabetes-related stress even after diabetes education
- Positive screen on a validated depression screening tool
- Change in medical status that interferes with social or occupational functioning


QUESTIONS?



References

- American Diabetes Association. 5. Facilitating Behavior Change and Well-Being to Improve Health Outcomes: Standards of Medical Care in Diabetes (2021). *Diabetes Care*, 44(Suppl. 1): S53—S72.
- American Psychiatric Association (2013). *Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition*. Arlington,, VA, American Psychiatric Association.
- Anderson, R. J., Freedland, K. E., Clouse, R. E., & Lustman, P. J. (2001). The Prevalence of Comorbid Depression in Adults with Diabetes: A Meta-Analysis. *Diabetes Care*, 24, 1069-1078.
- De Groot, M., Golden, S. H., & Wagner, J. (2016). Psychological Conditions in Adults with Diabetes. *American Psychologist*, 71, 552-562.
- Fisher, L., Hessler, D. M., Polonsky, W. H., & Mullen, J. (2005). When Is Diabetes Distress Clinically Meaningful? Establishing Cut Points for the Diabetes Distress Scale. *Diabetes Care*, 2012, 35, 259-64.
- Fisher, L., Polonsky, W. H., & Hessler, D. (2019). Addressing Diabetes Distress in Clinical Care: A Practical Guide. *Diabetic Medicine*, 36, 803-812.
- Fisher, L., Polonsky, W. H., Hessler, D. H., Masharani, U., Blumer, I., Peters, A. L. et al. (2015). Understanding the Sources of Diabetes Distress in Adults with Type 1 Diabetes. *Journal of Diabetes Complications*, 29, 572–577.
- Gonzales, J., Tanenbaum, and Commissariat, P. V.. (2016). Psychosocial Factors in Medication Adherence and Diabetes Self-Management: Implications for Research and Practice. *American Psychologist*, 71, 539-551.

References (cont.)



Kroenke, K., Spitzer, R. L., & Williams, J. B. W. (2001). The PHQ-9 Validity of a Brief Depression Severity Measure. *Journal of General Internal Medicine*, 16, 606-613.

Polonsky W. H., Fisher L., Earles J, Dudl, R. J., Lees J, Mullan JT et al. Assessing psychosocial stress in diabetes. *Diabetes Care* 2005; 28: 626–631.

Polonsky, W. H., Anderson, B. J., Lohrer, P. A. et al. (1995). Assessment of diabetes-related distress. *Diabetes Care*, 18, 754-760.

Weissberg-Benchell, J. & Antisdel-Lomaglio, J. (2011). Diabetes-Specific Emotional Distress Among Adolescents: Feasibility, Reliability, and Validity of the Problem Areas in Diabetes-Teen Version. *Pediatric Diabetes*, 12, 341-344.

Young-Hyman, D., de Groot, M., Hills-Briggs, F., Gonzalez, J. S., Hood, K., Peyrot M. (2016). Psychosocial Care for People with Diabetes: A Position Statement of the American Diabetes Association. *Diabetes Care*, 39, 2126-2140.

Resources

Resources: Screening Measures



PHQ-9: Kroenke, K., Spitzer, R. L., & Williams, J. B. W. (2001). The PHQ-9 Validity of a Brief Depression Severity Measure. *Journal of General Internal Medicine*, 16, 606-613. OR www.phqscreeners.org

DDS: Fisher, L., Hessler, D. M., Polonsky, W. H., & Mullen, J. (2012). When Is Diabetes Distress Clinically Meaningful? Establishing Cut Points for the Diabetes Distress Scale. *Diabetes Care*, 2012, 35, 259-64.

Polonsky W. H., Fisher L., Earles J, Dudl, R. J., Lees J, Mullan JT et al. (2005). Assessing psychosocial stress in diabetes. *Diabetes Care*, 28, 626–631. OR www.diabetesdistress.org , www.behavioraldiabetes.org

PAID: Polonsky, W. H., Anderson, B. J., Lohrer, P. A. et al. (1995). Assessment of diabetes-related distress. *Diabetes Care*, 18, 754-760.

Resources: Organizations

National

American Diabetes Association (ADA):	www.diabetes.org
ADA Mental Health Provider Directory:	www.professional.diabetes.org/mhp_listing
ADA DSME Programs:	www.diabetes.org/diabetes/find-a-program
Behavioral Diabetes Institute:	www.behavioraldiabetes.org
Benaroya Research Institute:	www.benaroyaresearch.org
Beyond Type 1:	www.beyondtype1.org
Center for Chronic Illness:	www.thecenterforchronicillness.org
Connect1D:	www.connect1d.org
Diabulimia Helpline:	www.diabulimiahelpline.org
diaTribe:	www.diatribes.org
JDRF:	www.jdrf.org
Taking Control of Your Diabetes:	www.tcoyd.org

Local Support Groups

EvergreenHealth Medical Center (T2D):	www.evergreenhealth.com/diabetes-support
JDRF (T1D):	Virtual Coffee Talk – Pacific Northwest Chapter and Seattle Guild (jdrf.org)
UWM Diabetes Institute (T1D):	(206) 598-4882
Center for Chronic Illness:	www.thecenterforchronicillness.org