

Diabetes Distress and Burnout

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Learning Objectives

- By the end of this discussion, participants will be able to:
 - Discuss psychological impact of Type 1 diabetes
 - Identify diabetes distress from mental health diagnoses.
 - Describe the impact of diabetes distress and burnout on diabetes self-management.
 - Analyze strategies for evaluating symptoms of diabetes distress, depression, and anxiety.
 - Discuss concept of diabetes distress and burnout and their outcomes on diabetes care.



Diabetes and Depression

Snoek, Bremmer, & Hermanns (2015)

- Cause of depression in diabetes poorly understood
 - Possibly bi-directional
 - Might share common biological determinants
- Depression prevalence ~21%, onset 25-31
 - Risk factors: lower education, social defeat, loneliness
 - Psychological: neuroticism, early life stressors, minor depressive complaints
 - Biological: genetic risk, medications, drugs, physical illness
 - Any chronic illness is risk factor for depression
- Depression 2x as likely with DM
 - Might be causally related or coincidental
- Risk factors might not be same for Type 1 vs 2
 - More complicated course increases risk of depression
 - Screening Type 2: low distress/anxiety at time of diagnosis, increasing over 12 months
- Depressive symptoms may amplify diabetes-distress
 - Bidirectional association
 - Raised A1C is a predictor for diabetes distress but not depression
 - Reciprocal: diabetes-distress and glycemic control
 - Increasing emotional distress in patients with unsatisfactory A1C and associated risk of progression/complications
 - Predictors: female, negative life events, comorbidities
 - Depression and diabetes distress are overlapping constructs
 - Type 2: onset of depression most often precedes diabetes
 - Type 1: DM precedes depression

Depression (continued)



- Depression is barrier for treatment adherence
 - Depression and self-care behaviors (healthy eating, exercise, low calorie intake, low-fat foods) stronger for DM-distress and depressive symptoms than clinical depression
 - Related to clinical features of depression: low energy, motivation, negative outcome expectancies
- Depression associated with worse glycemic control
 - Might be direct adverse effect via dysregulation of stress hormones
 - Might be mediated via impaired self-care behavior: poor diabetes control
- Some studies: glycemic control more strongly affected by DM-distress
- Differential effects: not all depression symptoms equally important
 - Anhedonia: strongest predictor for poor glycemic control
 - Depressed mood/anxiety not as strongly related
 - Depressed mood/somatic symptoms, appetite problems, psychomotor slowing are best predictors
- Therapy for depression in DM: larger improvement of glycemic control than pharmacological interventions
 - Diabetes education/behavioral activation
 - Stress management techniques

Diabetes Distress

- Increased distress in medical patients (normal response to burden of diagnosis, treatment, symptoms, and social implications)
 - Challenges habitual coping strategies, with 70% reaching good adjustment
 - For 30%, adjustment phase is longstanding or unsuccessful
 - Risk of distress increases risk: 20% for hypertension, 50% for cancers, 60% for myocardial infarction, 30% for Diabetes
 - Differences suggest role for disease characteristics: prognosis, symptom burden, treatment requirements
- Diabetes-specific measures can help identify unique sources of stress, acknowledge perspective, and help in communication
 - ATT39: 39 attitude statements
 - Problem Areas in Diabetes (PAID): 40+ (1 SD) had discriminant validity
 - Diabetes Distress Scale
 - High scores suggest more problems adjusting to emotional/behavioral demands of diabetes
 - Strong correlations with self-report depression measures (variance unexplained)
- Severe diabetes-distress in 10-30% of patients with diabetes

Diabetes and Anxiety

Adams, et al. (2022)

- Approximately 19.5% with DM meet criteria for anxiety disorder, compared to 10.9% of population
 - Hypoglycemia can contribute to symptoms associated with panic disorder and PTSD
 - DM self management requires repetition and overcontrol, which can contribute to development of Obsessive-Compulsive Disorder.
 - Symptoms of anxiety and depression can interact and often go undetected.
 - Healthcare utilizes the Patient Health Questionnaire 9 (PHQ-9) and Generalized Anxiety Disorder 7 (GAD-7)
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Diabetes Burnout

Barnard, Lloyd, & Holt (2012)

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- Not as well studied as diabetes distress
 - Symptoms:
 - Feeling overwhelmed or defeated by diabetes
 - Feeling angry or frustrated
 - Feeling that diabetes controls their life
 - Worries about not managing DM well enough but unable to change
 - Feeling stuck
 - Avoiding DM tasks that provide feedback
 - Feeling alone or isolated
 - Results in feelings focused on the diagnosis, whereas depression and anxiety impact broader biopsychosocial perspectives

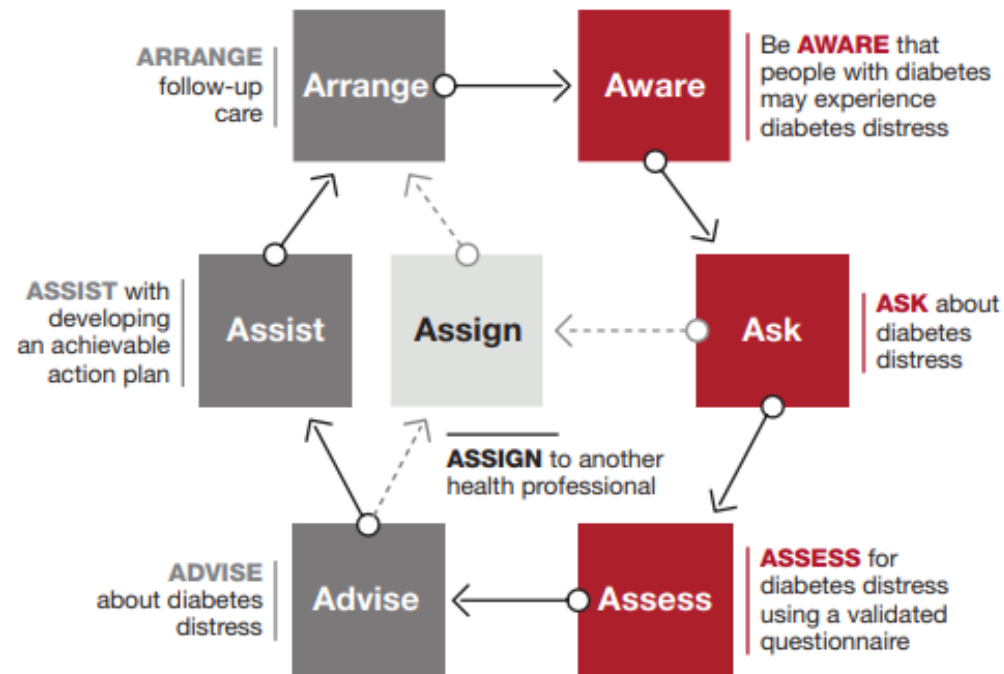
7 A's Model (American Diabetes Association, 2020)

7 A's Model: Diabetes Distress

This dynamic model describes a seven-step process that can be applied in clinical practice. The model consists of two phases:

- How can I identify diabetes distress?
- How can I support a person who experiences diabetes distress?

Apply the model flexibly as part of a person-centered approach to care.



AWARE

- Be aware that these difficulties can present in many ways:
 - Elevated A1C or unstable blood glucose
 - Missing clinic appointments
 - Not engaging in diabetes self-management
 - Ineffective strategies for managing stress
 - Negative life events or chronic stress unrelated to diabetes
 - Responding to diabetes discussions passively or aggressively

ASK

- Open-ended questions provides an opportunity to explain challenges.
- Examples:
 - What is most challenging about having diabetes?
 - What aspects of having diabetes concern you most?
 - How is your diabetes getting in the way of other things?
- Provides opportunity to:
 - Discuss emotional, behavioral, or social difficulties.
 - Express how diabetes may be contributing or interfering with diabetes management or life.

PROBLEM AREAS IN DIABETES—PEDIATRIC (PAID-Peds) SURVEY

The following statements describe diabetes-related issues that may or may not be a concern for you. For each item, choose the ONE answer that best describes how much you agree or disagree with that statement.

DURING THE PAST MONTH...

	Agree	→	Neither Agree nor Disagree	→	Disagree
1. I feel sad a lot when I think about having diabetes.	Ⓐ	Ⓛ	Ⓒ	Ⓜ	Ⓓ
2. I feel like diabetes has taken over my life.	Ⓐ	Ⓛ	Ⓒ	Ⓜ	Ⓓ
3. I feel like it is my fault when my blood sugar is out of range.	Ⓐ	Ⓛ	Ⓒ	Ⓜ	Ⓓ
4. It bothers me to think so much about what I eat.	Ⓐ	Ⓛ	Ⓒ	Ⓜ	Ⓓ
5. I worry all the time about how diabetes will affect me when I am older.	Ⓐ	Ⓛ	Ⓒ	Ⓜ	Ⓓ
6. I feel upset when my blood sugar is out of range.	Ⓐ	Ⓛ	Ⓒ	Ⓜ	Ⓓ
7. I am too tired of having diabetes to take care of it.	Ⓐ	Ⓛ	Ⓒ	Ⓜ	Ⓓ
8. I feel left out when I can't eat things other kids/teens are eating.	Ⓐ	Ⓛ	Ⓒ	Ⓜ	Ⓓ
9. I am annoyed when I have to stop what I am doing to check my blood sugar.	Ⓐ	Ⓛ	Ⓒ	Ⓜ	Ⓓ
10. I am tired of trying to figure out my insulin dose at every meal.	Ⓐ	Ⓛ	Ⓒ	Ⓜ	Ⓓ
11. I feel embarrassed about having diabetes.	Ⓐ	Ⓛ	Ⓒ	Ⓜ	Ⓓ
12. My friends and/or family act like the "diabetes police" (for example, always reminding me to eat right, check blood sugars, or take insulin).	Ⓐ	Ⓛ	Ⓒ	Ⓜ	Ⓓ
13. I am tired of remembering to give insulin shots or to bolus.	Ⓐ	Ⓛ	Ⓒ	Ⓜ	Ⓓ
14. It seems like no matter how hard I try, my blood sugars are out of control.	Ⓐ	Ⓛ	Ⓒ	Ⓜ	Ⓓ
15. I feel like I don't fit in with other kids/teens my age because of my diabetes.	Ⓐ	Ⓛ	Ⓒ	Ⓜ	Ⓓ
16. I am annoyed by having to rotate injection sites or pump infusion sites.	Ⓐ	Ⓛ	Ⓒ	Ⓜ	Ⓓ
17. I feel angry a lot when I think about having diabetes.	Ⓐ	Ⓛ	Ⓒ	Ⓜ	Ⓓ
18. My friends and family do not understand what it is like to have diabetes.	Ⓐ	Ⓛ	Ⓒ	Ⓜ	Ⓓ
19. I worry about going low, especially during physical activities (for example, sports, playing outside, dance class).	Ⓐ	Ⓛ	Ⓒ	Ⓜ	Ⓓ
20. My parents worry about me and my diabetes too much.	Ⓐ	Ⓛ	Ⓒ	Ⓜ	Ⓓ

ASSESS

Problem Areas in Diabetes (PAID) Screening

ADVISE

- Explain and normalize diabetes distress or burnout
- Acknowledge the significant efforts exerted to manage diabetes.
- Normalize negative emotions about diabetes.
- Redirect self-blaming (“I can never do it right”) into focusing on what they are doing right.
- Offer opportunities to ask questions.
- Make a joint plan about ways to obtain support
- Refer for health psychology or counseling services

Final tips & takeaways

- Diabetes can contribute to diabetes distress and burnout, as well as anxiety and depression.
- These symptoms negatively impact diabetes self management and can contribute to diabetes burnout.
- Caregivers can provide support when discussing diabetes burnout and distress.
- Patients may be referred for counseling through their healthcare team, social workers, insurance provider, or community services.

References

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Thank you

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