

Management of Psychosocial Issues in the Context of Living with Diabetes

- ▶ Dr Nicole Bereolos, PhD, MPH, MSCP, CDCES, FADCES
- ▶ April 20, 2022
- ▶ Private practice, North Texas

Disclosures to Participants

- ▶ **Requirements for Successful Completion:**

- ▶ For successful completion, learners must participate in the entire activity and complete and submit a course evaluation at the end of the educational activity.

- ▶ **Conflicts of Interest and Financial Relationships Disclosures**

- ▶ **Presenters:**

- ▶ Nicole Bereolos, PhD, MPH, MSCP, CDCES, FADCES- No conflicts of interest

- ▶ **Disclosure and Mitigation of Relevant Conflicts of Interest:** None - there are no conflicts of interest.

- ▶ **Off-label Use:** Learners will be notified of any off-label/investigational discussion.



- Clinical health psychologist
- Certified Diabetes Care & Education Specialist
- PhD - UNT - clinical health psychology/
behavioral medicine
- MPH - UNTHSC - health behavior
- MSCP - master's clinical psychopharmacology
- Has private practice (insurance-based) in North TX
- 2020-23 Editorial Board for *Diabetes Spectrum*
- 2019-20 Advisor for *Diabetic Living*
- 2018-2021 ADCES Board of Directors
- living with T1D since 1992

Learning Objectives

At the end of this presentation, participants will be able to:

- ▶ Describe the signs and symptoms of depression, diabetes burnout/distress, disordered eating in the person with diabetes
- ▶ Identify evidence-based assessment tools that can be utilized by the DCES in the evaluation of depression, diabetes distress, anxiety, and disordered eating in the person with diabetes
- ▶ Examine current treatments for the psychosocial factors of living with diabetes
- ▶ Identify 3 best practice tips for assisting the person with diabetes to manage psychological distress and behavior change

What We Already Know!!!

- ▶ Diabetes is really challenging!!
- ▶ PWD are 2x more likely to experience depression (CDC, 2021)
- ▶ PWD are 20% more likely to experience anxiety (CDC, 2021)
- ▶ Those with type 1 DM are 2x more likely to have disordered eating (ADA)
- ▶ Majority of PWD have diabetes distress at some point (Fisher et al, 2015)
- ▶ Behavioral health treatment is still stigmatized (Vidourek & Burbage, 2019)

A Great Handout

► DiaTribe, Feb 2018

► Adam Brown

42

Factors that affect Blood Glucose

FOOD

- ↑↑ 1 Carbohydrate quantity
- ↑ 2 Carbohydrate type
- ↑ 3 Fat
- ↑ 4 Protein
- ↑ 5 Caffeine
- ↓↑ 6 Alcohol
- ↓↑ 7 Meal timing
- ↑ 8 Dehydration
- ? 9 Personal microbiome

MEDICATION

- ↓ 10 Medication dose
- ↓↑ 11 Medication timing
- ↓↑ 12 Medication interactions
- ↑↑ 13 Steroid administration
- ↑ 14 Niacin (Vitamin B3)

ACTIVITY

- ↓ 15 Light exercise
- ↓↑ 16 High-intensity & moderate exercise
- ↓ 17 Level of fitness/training
- ↓↑ 18 Time of day
- ↓↑ 19 Food and insulin timing

BIOLOGICAL

- ↑ 20 Too little sleep
- ↑ 21 Stress and illness
- ↓ 22 Recent hypoglycemia
- ↑ 23 During-sleep blood sugars
- ↑ 24 Dawn phenomenon
- ↑ 25 Infusion set issues
- ↑ 26 Scar tissue / lipodystrophy
- ↓↓ 27 Intramuscular insulin delivery
- ↑ 28 Allergies
- ↑ 29 A higher BG level (glucotoxicity)
- ↓↑ 30 Periods (menstruation)
- ↑↑ 31 Puberty
- ↓↑ 32 Celiac disease
- ↑ 33 Smoking

ENVIRONMENTAL

- ↑ 34 Expired insulin
- ↓↑ 35 Inaccurate BG reading
- ↓↑ 36 Outside temperature
- ↑ 37 Sunburn
- ? 38 Altitude

BEHAVIOR & DECISIONS

- ↓ 39 More frequent BG checks
- ↓↑ 40 Default options and choices
- ↓↑ 41 Decision-making biases
- ↓↑ 42 Family and social pressures

The arrows show the general effect these 42 factors seem to have on blood glucose based on scientific research and/or our experiences at diaTribe. However, not every individual will respond in the same way, so the best way to see how a factor affects you is through your own data: check your blood glucose more often with a meter or wear a CGM and look for patterns.

diaTribe

Read more about the 42 Factors at diaTribe.org/42FactorsExplained
Sign up for diaTribe's updates at diaTribe.org/Join



Why Some PWD Go “off-track”?

- ▶ LACK OF EDUCATION
 - ▶ FEAR
 - ▶ GUILT
 - ▶ COST
 - ▶ STAGES OF CHANGE
 - ▶ LITERACY LEVELS
 - ▶ PROVIDER ATTITUDE
- PERCEIVED BURDEN
 - LOW SELF-EFFICACY
 - SELF-CARE NOT PRIORITIZED
 - ILLNESS IDENTITY (ESP TEENS)

Diabetes Distress (DD)

- ▶ refers to the worries, concerns and fears among individuals with diabetes over time as they struggle with managing a chronic, progressive condition like diabetes.
- ▶ is of significant clinical concern due its high prevalence and its clinically significant relationship with disease management, medication adherence, glycemic control, and quality of life.
- ▶ part of living with and managing diabetes over time
- ▶ is distinct from clinical depression
- ▶ Can be episodic or continuous
- ▶ is highly responsive to clinical attention

Diabetes Distress

- ▶ Feeling overwhelmed with the burden of managing a chronic condition
- ▶ Afraid & anxious about the unknown and potential onset of co-occurring/related conditions
- ▶ Feeling discouraged/defeated when best efforts do not yield desired results

DD vs MDD

Factors

DD

- ▶ Etiology
 - ▶ Duration
 - ▶ Treatment provider
 - ▶ Type of treatment
- ▶ Diabetes behaviors
 - ▶ Episodic
 - ▶ Diabetes-specialist
 - ▶ Motivational interviewing/solution-focused

MDD

- None
- Episodic
- Behavioral Health Specialist
- Medication/counseling/TMS

Assessing Diabetes Distress

- ▶ Type 1-diabetes distress Scale (T1-DDS) - for those 19y/o+ with t1D
- ▶ Addresses:
 - ▶ Powerlessness - feeling discouraged
 - ▶ Management distress - disappointment with self-care efforts
 - ▶ Hypoglycemia distress - concerns about hypoglycemic events
 - ▶ Negative social perception distress - concerns about negative judgment
 - ▶ Eating distress - concerns eating is out of control
 - ▶ Physician distress - disappointment with current HCP's
 - ▶ Friend/family distress - perception that too much focus on diabetes amongst by loved ones
- ▶ Diabetes distress scale (dds) - for those 19 y/o+ with T2D
- ▶ Addresses:
 - ▶ emotional burden - feeling overwhelmed about managing demands of diabetes
 - ▶ regimen distress - feeling they are failing by not managing diabetes well
 - ▶ interpersonal distress - feeling they are not receiving sufficient support
 - ▶ physician distress - worries about healthcare & obtaining sufficient support from HCP's

Screening Tools

- ▶ PHQ-9 (PHQ-2)
- ▶ CES-D
- ▶ GAD-7
- ▶ HADS
- ▶ GDS (Geriatric Depression Scale)
- ▶ *BDI-ii
- ▶ *BAI
- ▶ Diabetes Distress Scale -
<https://diabetesdistress.org/access-dds>
- ▶ PAID - Problem Areas in Diabetes
- ▶ CAGE/AUDIT-C

Unhealthy Eating Patterns

- ▶ Omitting insulin to lose weight (diabulimia)
- ▶ Binge eating - focus is lack of control
- ▶ “Fear” of carbohydrates
- ▶ “fear” of dining out, trying new foods
- ▶ Treatment goals=focus on small change, success, stress management, reframe negative statements (progress can be very slow)

Diabulimia

eating disorder characterized by intentionally withholding insulin to result in weight loss

insulin restriction results in high levels of glucose in the blood that spill over into the urine, leading to the excretion of the calories from glucose

as many as a third of women with type 1 diabetes report insulin restriction, with higher levels among those between the ages of 15 and 30

Nationwide inpatient programs focused on Diabulimia

www.diabulimiahelpline.org - 425-985-3635

Recovery toolkit – We are Diabetes



Strategies for Behavior Change

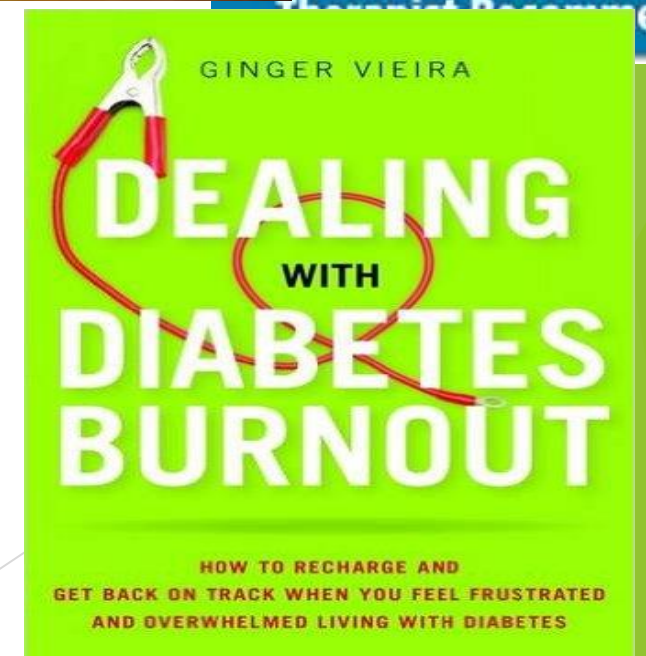
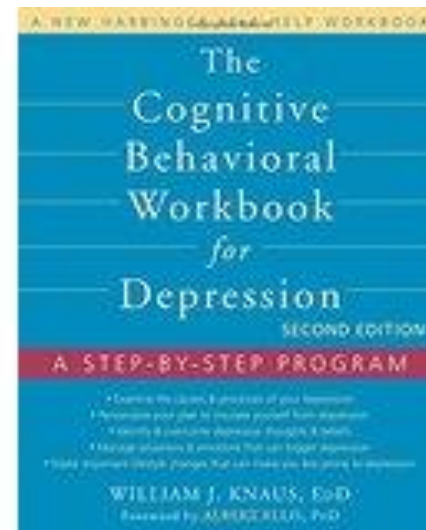
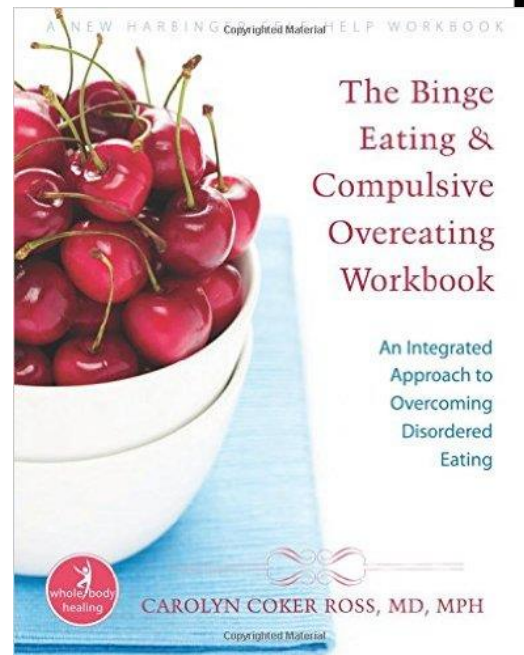
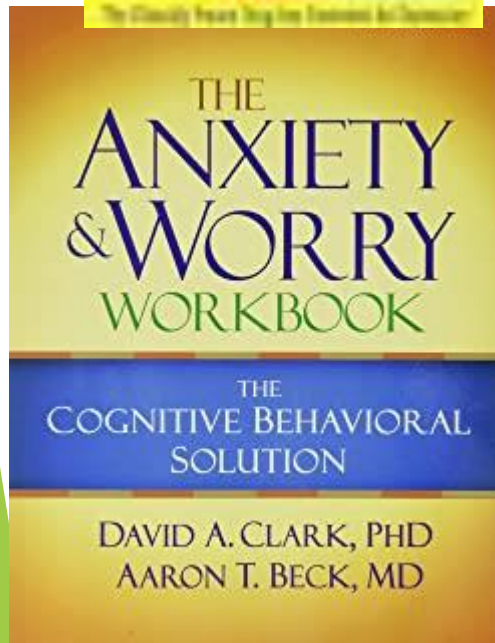
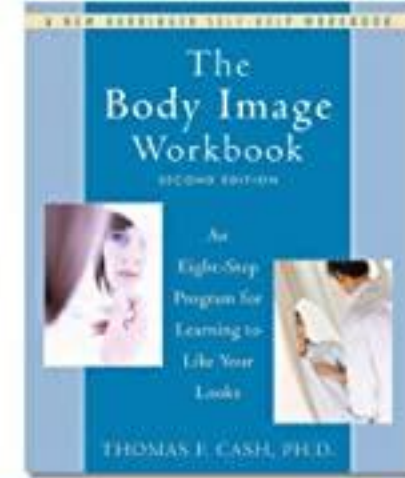
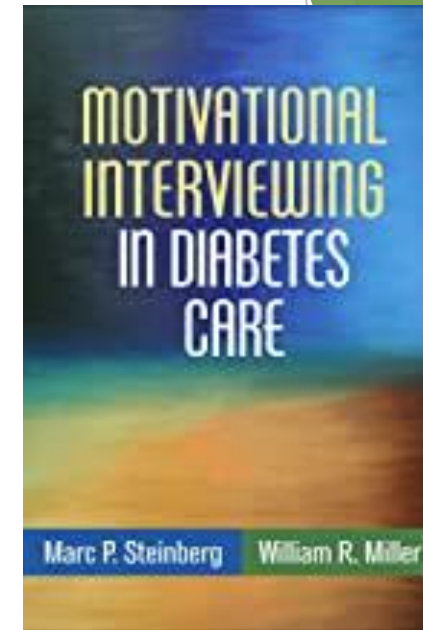
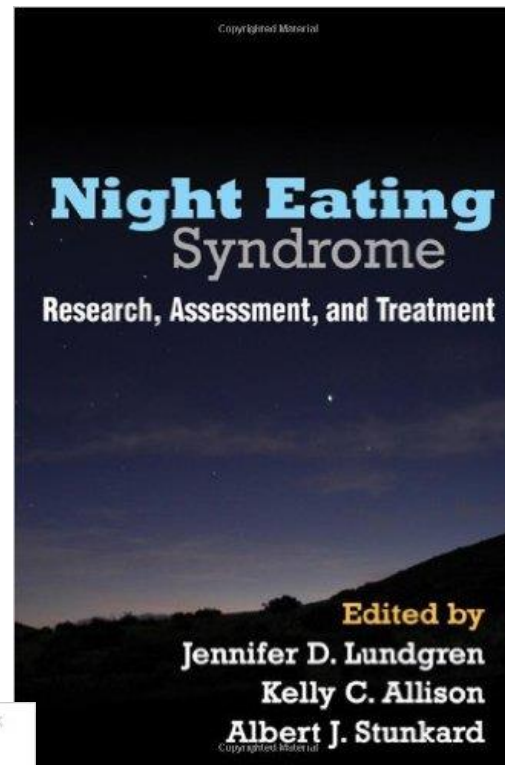
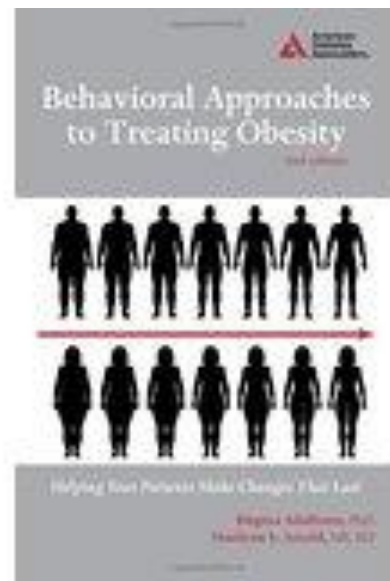
- ▶ Normalize feelings/behaviors
- ▶ Be supportive
- ▶ Be aware of your own language
- ▶ Talk about what they ARE doing not what they are not
- ▶ Be the cheerleader
- ▶ Work within THEIR framework
- ▶ Help them to recognize the many factors they can control
- ▶ Normalize the utility of Behavioral Health Providers early
- ▶ What is your body language saying?
- ▶ Being aware of HCP privilege
- ▶ Be mindful of provider burnout

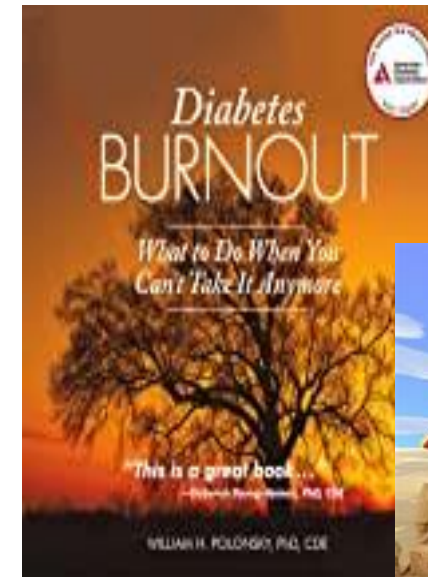
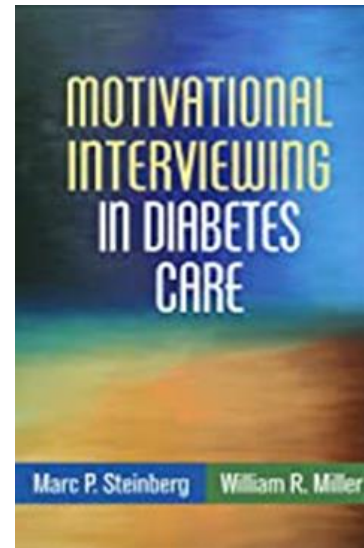
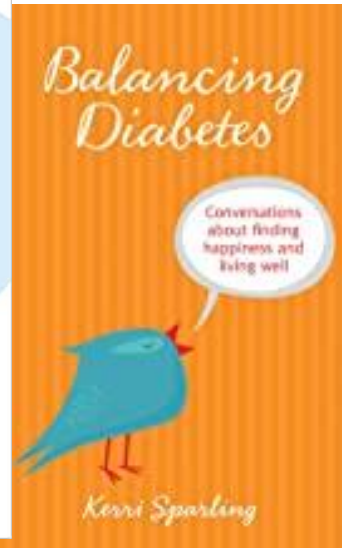
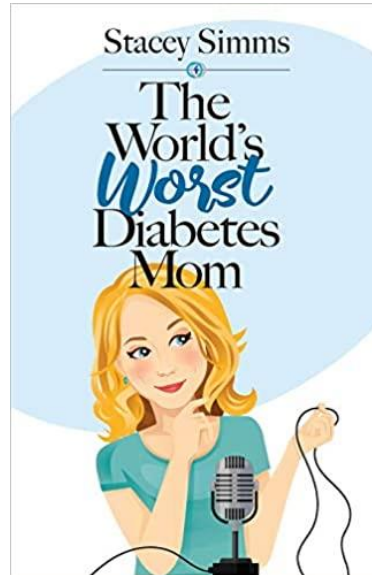
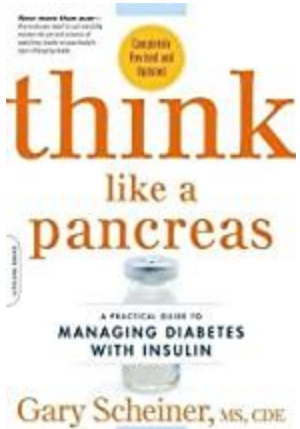
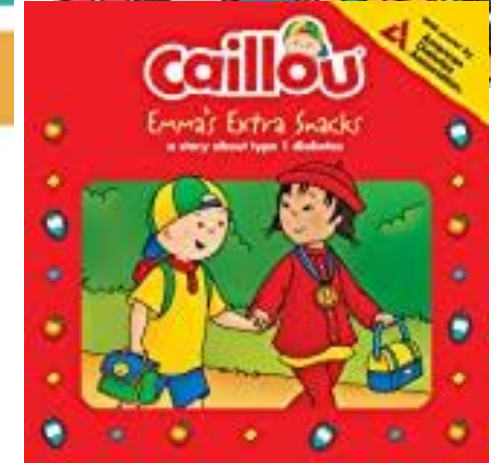
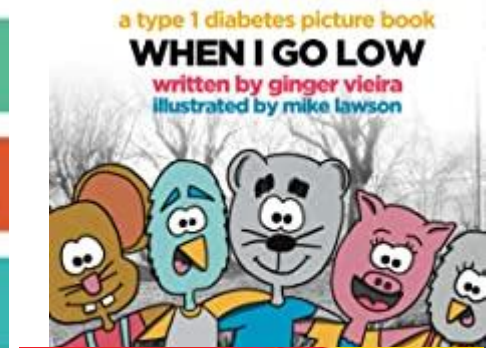
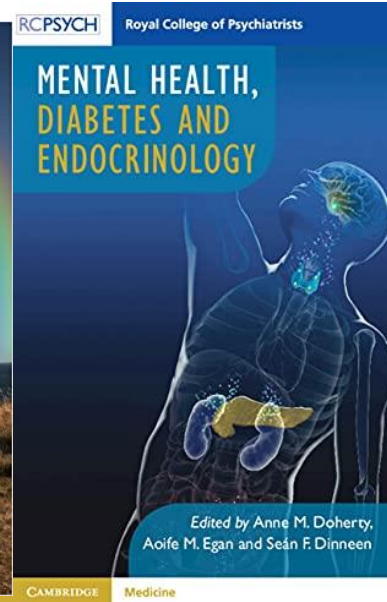
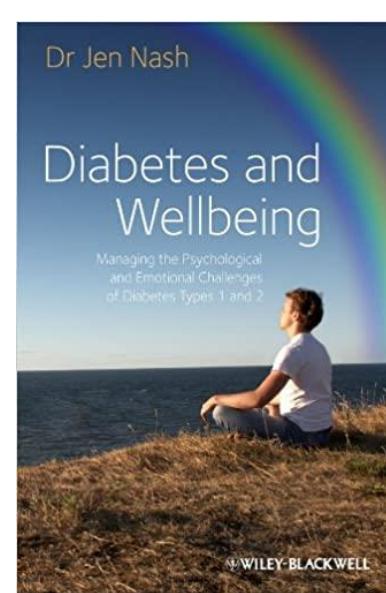
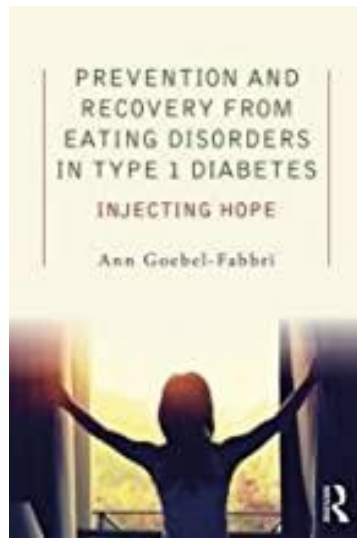
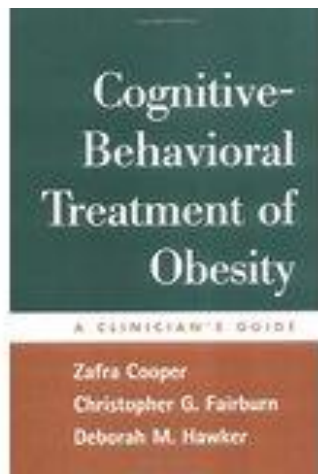
Strategies for Behavior Change

- ▶ Allow the PWD set the agenda even if different than your own
- ▶ Set them up for SUCCESS - doable goals
- ▶ Use examples in practice that are relatable to the PWD
- ▶ Don't be afraid to ask
- ▶ Discuss change that is realistic and feasible given the SDH factors
- ▶ Build self-efficacy, be their rockstar/champion

Examples of Healthy Coping

- ▶ Fulfilling health care obligations (keeps appointments, takes medication)
- ▶ Expressing emotions
- ▶ Seeking help; looking for answers
- ▶ Demonstrating basic problem-solving skills
- ▶ Incorporating physical activity into one's life
- ▶ Being proactive
- ▶ Demonstrating self-efficacy
- ▶ Overcoming barriers
- ▶ Having an adaptive coping style
- ▶ Being motivated
- ▶ Being optimistic





M. Heyman, PhD, CDCES (in press) Diabetes Sucks and How You Can Handle It: Guide to Managing Emotional Challenges of T1D

When to Refer to Behavioral Health Specialist

- ▶ Possibility of self-harm or harm to others (SI/HI)
 - ▶ Disregard to diabetes self-management
 - ▶ Stress affecting work-life-health balance
 - ▶ Severe mental illness
 - ▶ Signs of unhealthy eating habits/insulin omission
 - ▶ Better to refer early than wait for a problem
 - ▶ Behavioral specialists are a complement to what you are already doing!!
-
- ▶ Make sure the referral is not perceived as a punishment
 - ▶ Encourage the use of a behavioral health provider at diagnosis. Normalize It!!!

Common Referral Questions

PWD won't wear diabetes-related tech

Fear of hypoglycemic events

Fear of trying new foods

Fear of going "high" so limit CHO intake

Weight management

Insulin omission

Not taking medications consistently

Communication problems with partners

(Young-Hyman et al, 2016)

Phase of living with diabetes		Continuum of psychosocial issues and behavioral health disorders in people with diabetes	
		Nonclinical (normative) symptoms/behaviors	Clinical symptoms/diagnosis
	Behavioral health disorder prior to diabetes diagnosis	None	<ul style="list-style-type: none"> • Mood and anxiety disorders • Psychotic disorders • Intellectual disabilities
	Diabetes diagnosis	Normal course of adjustment reactions, including distress, fear, grief, anger, initial changes in activities, conduct, or personality	<ul style="list-style-type: none"> • Adjustment disorders *
	Learning diabetes self-management	Issues of autonomy, independence, and empowerment. Initial challenges with self-management demonstrate improvement with further training and support	<ul style="list-style-type: none"> • Adjustment disorders* • Psychological factors affecting medical condition**
	Maintenance of self-management and coping skills	Periods of waning self-management behaviors, responsive to booster educational or supportive interventions	<ul style="list-style-type: none"> • Maladaptive eating behaviors • Psychological factors** affecting medical condition
	Life transitions impacting disease self-management	Distress and/or changes in self-management during times of life transition***	<ul style="list-style-type: none"> • Adjustment disorders * • Psychological factors ** affecting medical condition
	Disease progression and onset of complications	Distress, coping difficulties with progression of diabetes/onset of diabetes complications impacting function, quality of life, sense of self, roles, interpersonal relationships	<ul style="list-style-type: none"> • Adjustment disorders * • Psychological factors ** affecting medical condition
	Aging and its impact on disease and self-management	Normal, age-related forgetfulness, slowed information processing and physical skills potentially impacting diabetes self-management and coping	<ul style="list-style-type: none"> • Mild cognitive impairment • Alzheimer or vascular dementia
		<p>↑</p> <p>All health care team members (e.g., physicians, nurses, diabetes educators, dieticians) as well as behavioral providers</p>	<p>↑</p> <p>Behavioral or mental health providers (e.g., psychologists, psychiatrists, clinical social workers, certified counselors or therapists)</p>
		Providers for psychosocial and behavioral health intervention	

Peer Support Communities

- Beyond Type 1/Beyond Type 2 - multiple languages
- DiabetesSisters
- College Diabetes Network
- #DSMA
- #DOC
- diatribe
- Children with Diabetes (Friends for Life)

BEYOND TYPE 2



COLLEGE
DIABETES
NETWORK

DiabetesSisters 

Beyond Type 1

Community Based Resources

- ▶ Crisis Centers/Mobile Units
- ▶ Case Management Services
- ▶ Faith Based
- ▶ Local substance abuse treatment programs
- ▶ Outpatient mental health professionals - ideally who are knowledgeable about DM
 - ▶ State association for psychologists or licensed professional counselors
 - ▶ Consult hospital based social worker
 - ▶ Certified eating disorders specialist (www.iaedp.org)
 - ▶ ADA/ APA - https://professional.diabetes.org/mhp_listing

National Mental Health Resources

- ▶ SAMHSA's National Helpline, 1-800-662-HELP (4357) (24/7)
- ▶ NAMI helpline, 1-800-950-NAMI (6264) (M-F 10a-10p ET)
- ▶ Mentalhealth.gov
- ▶ Depression and Bipolar Support Alliance
- ▶ Suicide Prevention Line - 800-273-8255
- ▶ Trevor Lifeline - LGBTQ+ youth - 866-488-7386
- ▶ Veteran Crisis Line - 800-273-8255
- ▶ Anxiety Disorders Association of America
- ▶ 1-800-SUICIDE
- ▶ Celebrate Recovery
- ▶ Catholic Charities
- ▶ Salvation Army

Case Study

- ▶ 55 year-old Hispanic (Mexican) American female living with T2DM
- ▶ Hypertension, hypothyroid, fibromyalgia, history of ovarian cancer
- ▶ Caring for aging parent with Vascular Dementia and has young adult son who is in and out of jail since being a teen; work full-time as a store manager
- ▶ insomnia, generalized joint pain, lethargy, no longer going to church, loss hope
- ▶ .7% increase in A1C that she attributes to forgetting her weekly diabetes-related injectable
- ▶ What are some questions you'd ask to help you assess?

Case Study #2 -

- ▶ 22 y/o, college senior, plan to graduate 12/21, parents divorced, no siblings
- ▶ T1D on CGM and MDI
- ▶ Recently lost 60 pounds going from 210-150 lb (intentional)
- ▶ Living in apt alone in college, closest family 2 hours away
- ▶ Refers to over 140 mg/dl as “high” (a1c=high 5, low 6%)
- ▶ High anxiety over many things
- ▶ Not want to be a burden & people pleaser

References

- ▶ Kent D, Haas L, Randal D, et al. Healthy Coping: Issues and Implications in Diabetes Education and Care. *Population Health Management*. 2010;13(5):227-233.
- ▶ Jiang, X., Jiang, H., Li, M, Lu, Y, Liu, K., & Sun, X (2019). The mediating role of self-efficacy in shaping self-management behaviors among adults with type 2 diabetes. Evidence Based nursing, 21 March 2019, <https://doi.org/10.1111/wvn.12354>
- ▶ Sturt, J., Dennick, K., Hessler, D., Hunter, B.M., Oliver, J., Fisher, L. Effective interventions for reducing diabetes distress: systematic review and meta-analysis. *International Diabetes Nursing*, 2015, 12, 40-55.
- ▶ Fisher, L., Gonzales, J.S., Polonsky, W.H. The confusing tale of depression and distress in patients with diabetes: A call for greater clarity and precision. *Diabetic Medicine*, 2014, 31, 764-772.
- ▶ Hessler D., Fisher L., Glasgow RE., Strycker LA., Dickinson LM., Areal PA., Masharani U. Reductions in regimen distress are associated with improved management and glycemic control over time. *Diabetes Care*, 2014, 37, 617-624.
- ▶ Diabetes and mental health. (2021). CDC. Retrieved from <https://www.cdc.gov/diabetes/managing/mental-health.html>
- ▶ Eating Disorders. (n.d.). American Diabetes Association. Retrieved from <http://www.diabetes.org/living-with-diabetes/treatment-and-care/women/eating-disorders.html>
- ▶ Fisher, L., Polonsky, W. H., Hessler, D. M., Masharani, U., Blumer, I., Peters, A. L., Bowyer, V. (2015). Understanding the sources of diabetes distress in adults with type 1 diabetes. *Journal of Diabetes and Its Complications*, 29(4), 572-577.
- ▶ Brown, A (2018). 42 factors that affect blood glucose. Retrieved from <https://diatribe.org/42factors>
- ▶ Vidourek, R. & Burbage, M. (2019). Positive mental health and mental health stigma: A qualitative study assessing student attitudes. *Mental Health & Prevention*, 13, 1-6.
- ▶ Beverly, et al. Understanding Physicians' Challenges When Treating Type 2 Diabetic Patients' Social and Emotional Difficulties: A qualitative study. *Diabetes Care*. 2011;34(5):1086-1088.
- ▶ Fisher, et al. When is Diabetes Distress Clinically Meaningful?. *Diabetes Care*. 2012 Feb;35(2):259-264.
- ▶ Li C, et al. Undertreatment of Mental Health Problems in Adults With Diagnosed Diabetes and Serious Psychological Distress: BRFSS, 2007. *Diabetes Care*. 2010;33(5):1061-1064.
- ▶ Kent D, Haas L, Randal D, et al. Healthy Coping: Issues and Implications in Diabetes Education and Care. *Population Health Management*. 2010;13(5):227-233.
- ▶ Rubin & Peyrot. Psychological Issues and Treatments for People with Diabetes. *J Clin Psychol*, 2001; 57(4): 457-478.
- ▶ Young-Hyman D, de Groot M, Hill-Briggs F, Gonzalez JS, Hood K, Peyrot M. Psychosocial Care for People With Diabetes: A Position Statement of the American Diabetes Association [published correction appears in *Diabetes Care*. 2017 Feb;40(2):287] [published correction appears in *Diabetes Care*. 2017 May;40(5):726]. *Diabetes Care*. 2016;39(12):2126-2140. doi:10.2337/dc16-2053

Questions?

nbereolos@gmail.com
[@DrNBereolos](#)