Diabetes Distress:
The Reciprocal Relationship between Diabetes and Mental Health

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Disclosure

- I have no relevant financial relationships to report.
Goals:

1) Define Diabetes Distress,
   - Causal factors, impact on a patient, their loved ones, and on diabetes management.

2) Review relationship between Diabetes Distress and Mental Illness.
   - How to Assess for diabetes distress and mental illness

3) Treatment Recommendations for diabetes distress
   - How Mental Health Colleagues can help
Part 1
Diabetes Distress

Having diabetes is like someone handing you four balls and telling you to juggle perfectly. Then it’s telling you that once you acquire that skill you will now juggle every day for the rest of your life and that there are variables that are going to influence your ability to juggle, you just don’t know what and when. If you stop doing this, you will get sick and the people who care about you will become upset and tell you to start juggling again.

American Association of Diabetes Educators (2017)
Diabetes Distress

- **Diabetes Distress:** (aka diabetes burden or burn-out) an emotional state where people experience feelings such as stress, guilt, or denial that arise from living with diabetes and the burden of self-management.
Diabetes Distress: The emotional burden of living with and managing diabetes
Diabetes Distress

- Symptoms of Diabetes Distress include feeling:
  - Drained mentally and physically
  - Angry, scared, depressed about diabetes
  - That diabetes controls their lives.
  - Fearful of serious long-term complications

- But, mostly it results in...
Feeling Overwhelmed

- Cholesterol
- Alc
- Microalbumin
Origin of the term

Whenever our actions have unpredictable outcomes, we can become distressed.

In this case it is specific to diabetes, so it is referred to as diabetes distress.
The Diabetes Distress Cycle:

Unmanaged Diabetes

Give up:
(Ex: I won't check my sugar/won't take meds)

Emotional toll of Diabetes Distress

Tension, Fatigue, Overwhelmed:
Burnout
Diabetes Distress and Unmanaged Diabetes

Ok ok! I admit it!

Half the numbers in my log book are made up
Diabetes Distress

Diabetes Distress and A1c

$r = +0.58$
Part 2
Diabetes and Mental Illness

Rates of Diabetes Distress:

- 18% of people with diabetes had high or very high levels of psychological distress compared with 12% of people without diabetes.

- More females (22%) than males (15%) with diabetes had high or very high levels of psychological distress.

NHS (2004-2005)
Assessment of Diabetes Distress

The Diabetes Distress Scale (DDS)

- helps clinician and pt. gain an understanding of pt.
  emotional state. (2 versions: 2 item screening or 17 item)

- The scale addresses four areas of concern:
  1) emotional burden of having diabetes
  2) relationship a pt. with diabetes has with his/her physician
  3) pt. ability to follow the diabetes regimen
  4) interpersonal issues a pt. with diabetes might face with family/friends.

Polonsky & Fisher Univ San Diego and UC San Fran
Assessment of Diabetes Distress

**Diabetes Distress Screening Scale**
(on a scale of 1-6, where 1 is not a problem and 6 is a very serious problem)

1) Feeling overwhelmed by the demands of living with diabetes

1) Feeling that I am often failing with my diabetes routine.
Diabetes Distress and Depression

"I'm disappointed."
"I'm discouraged."

"I'm discontent."

"I'm despairing."

"I'm desperate!"

SLIPPERY SLOPE OF DEPRESSION
Diabetes and Mental Illness

What is the overlap - Diabetes & Mental Health
Diabetes and Mental Illness

- Psychological conditions affect a larger proportion of individuals with diabetes compared to the general public

- 30% of children develop psychiatric symptoms/diagnoses within 3 months of diagnosis of diabetes

Diabetes and Mental illness

**Bidirectional Association**: Diabetes and psychiatric disorders both influence each other in multiple ways.

- Ex: Depressed individual have a 60% increased risk of developing diabetes.
- Patients with diabetes have a 50-100% increased risk of developing depression

**Missed Opportunities**: Up to 45% of cases of mental disorders go undetected among patients being treated for diabetes

Balhara, 2011
Diabetes and Mental Illness

- Why review the relationship between diabetes and mental illness?

- All of the psychological conditions about to be reviewed have been found to be associated with decreased diabetes self-care behaviors in adults.

Depression

- Diagnosis can be difficult due to symptom overlap (Poor energy, Weight loss)
- 10%-26% prevalence of depression in teens, 21.3-27% in adults with diabetes
- Antidepressants could be a risk factor for developing T2D
- Greatly higher risk for suicidality (suicide by insulin)
- Symptoms of depression can reduce treatment adherence, but when depression is treated, both mood levels and blood glucose improves
Assessment of Depression

- Beck Depression Inventory (BDI)
- Geriatric Depression Scale (GDS)
- Suicide Assessment
Anxiety

- Adults with Diabetes have a 20% increased prevalence of anxiety disorders than those without.

- PTSD has been shown to predict the onset of T2D.

- Anxiety may include: fear of complications of diabetes (hypoglycemia, blindness, coma, amputation, death).

- Anxious family may complicate care.

- Phobias may increase risk and complications (ex: fear of needles, insulin pumps, glucose monitors, etc.).

Substance Abuse

- Increase in alcohol, tobacco, and drug use
- Smoking: is an independent modifiable risk factor for the development of diabetes
- Alcohol: emergence of hypoglycemia
Eating Disorders

- Symptoms may include: restricted caloric intake, distorted body image, binge eating and/or purging, etc.

- 2.4 times more likely in teens, 5.3-14% in adults with diabetes

- Eating Disorders may be result of fears of diabetes complications and overcompensating for dietary instructions
Psychotic Disorder

- Risk of T2D in pt. with schizophrenia is 2-4x that in the general population
- Related to unhealthy lifestyle, poor nutrition, lack of exercise, medication
- Recent finger pointing at conventional and ‘atypical’ antipsychotics
  - ADA recommends screening pts for diabetes prior to/just after initiation of antipsychotic meds
- Some meds cause weight gain which then increases risk of diabetes

Neurological Symptoms

- Dementia: patients with dementia may no longer be able to manage their diabetes
- Delirium: could be manifestation of hypoglycemic episodes or diabetic ketoacidosis
Other Psychological Factors

Social Relationships:

“As you can see, your wife left a few messages reminding you to check your blood sugar.”

Support vs. Nagging
Social Relationships:

Spousal efforts to persuade a patient to follow a healthy diet and criticism of food choices were associated with next day decrease in dietary adherence.

Wiebe, Helgeson, and Berg (2016)
Part 3: Treatment

- Diabetes and Behavior:
  - Diabetes is a unique chronic disease, as the patient's behavior and even viewpoint impact outcome.

- Psychiatric symptoms have a tremendous impact on adherence to the treatment of diabetes.
Consider a patient’s experience:

- Mary has had T1D for over 40 years. After reviewing the Diabetes Distress Scale, she remarked that no doctor had ever told her she was doing a good job of managing her illness. “Despite the fact that I’m on a pump and a glucose monitor and I take meticulous care of both of those devices and monitor constantly throughout the day…all of those efforts don’t equate into good results. In fact, the opposite is true, that sometimes when I am trying my hardest to be vigilant, everything goes haywire.”
Addressing Diabetes Distress

- Provide Support and Empathy

- Address the areas of self-care and diabetes management that are most challenging
  - Consider open ended vs. close ended questions to ensure comprehension

- Compliment and encourage patients on their diabetes management
“I think diabetes is affecting my eyesight. I have trouble seeing the consequences of poor food choices.”
Treatment

How to Assist a patient with Diabetes Distress:

- Provide diabetes education, blood glucose awareness training, and create and plan
- Provide resources and educate about additional levels of support (groups, MH providers)
Working Collaboratively

“The greatest effects on depression and diabetes outcomes have been seen in psychotherapeutic interventions combined with diabetes self-management”

Recommendations: Refer to Mental Health

How Mental Health Can Help:
- Improve behaviors such as medical adherence and self-management
- Smoking Cessation
- Reducing emotional distress
- Improving patient knowledge
- Enhancing problem solving skills
- Family therapy, assisting family to be supportive and helpful

Clay, 2017
Better detection/screening for diabetes distress is essential to improving diabetes self-care

Future multidisciplinary/interdisciplinary management approaches are critical in the identification, treatment, and follow-up in our diabetes patients

Greater “perceived control” over diabetes is associated with better self-management.

- So, if you have time to work on that with your patients great….but if not...

Gonzalez, Tanenbaum and Commissariat (2016)
Refer to Mental Health

- Psychotherapy
  - Effective with depression and diabetes
  - Can address learned helplessness
  - Can help with needle phobia
  - Behavior plan to reward adherence
  - Coping Skills Training
  - Help increase positive, active coping methods
  - Behavioral interventions for lowering BMI and weight
Collaboration of Medical and Mental Health

- The American Psychological Association (APA) and American Diabetes Association (ADA) have teamed up to create a training program for psychologists to work with patients with diabetes,

- APA and ADA have a registry where you can locate psychologists trained in working with patients with diabetes.
Together, we can help patients get from diabetes distress.
To Living Well with Diabetes
Resources

- American Diabetes Association: Mental Health Provider Directory:
  https://professional.diabetes.org/mhp_listing

- Diabetes Distress Scale:
  http://www.diabetesed.net/page/_files/diabetes-distress.pdf

- Diabetes Prevention Program:
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