Psychosocial Care for People with Diabetes
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Learning Objectives

- Describe psychosocial issues associated with diabetes, which range from normative diabetes-related distress to diagnosable mental health disorders.
- Identify paradigms for implementing psychosocial services into team-based care.
- List screening tools for assessing symptoms of psychosocial issues within routine care.
- Indicate appropriate referral and treatment options for people impacted by both sub-clinical and clinical psychological distress.

Psychosocial Care: Life and Disease Course Perspectives

<table>
<thead>
<tr>
<th>Phase of living with diabetes</th>
<th>Continuum of psychosocial issues and behavioral health disorders in people with diabetes</th>
<th>Additional information and tools to support team-based care strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Behavioral health disorder prior to diagnosis</td>
<td>Nonclinical (normative) symptoms/behaviors</td>
<td>Nonclinical (normative) symptoms/behaviors affecting medical condition</td>
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<tr>
<td></td>
<td>Clinical symptoms/diagnosis</td>
<td>Clinical symptoms/diagnosis affecting medical condition</td>
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<tr>
<td>Diabetic diagnosis</td>
<td></td>
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<td>Psychological factors</td>
<td></td>
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<tr>
<td>Referral outside of the medical home, or interdisciplinary team</td>
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<tr>
<td>Concurrent, non-integrated behavioral care</td>
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<td>Adjustment disorders</td>
<td></td>
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<tr>
<td>Mood and anxiety disorders</td>
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<tr>
<td>Psychological factors</td>
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Implementing Team-Based Psychosocial Care

<table>
<thead>
<tr>
<th>Collaborative Care Mode (CCM)</th>
<th>Embedd Behavioral Specialist</th>
<th>Referral to Behavioral Provider</th>
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<tbody>
<tr>
<td>In primary care</td>
<td>In primary care and diabetes specialty clinics</td>
<td>Referral outside of the medical practice</td>
</tr>
<tr>
<td>Integrated behavioral care carried out by behavioral health care manager, with psychiatrist consultant</td>
<td>Behavioral care carried out by a psychologist or social worker embedded within the clinical practice site</td>
<td>Concurrent, non-integrated behavioral care provided by behavioral specialist or mental health practice</td>
</tr>
<tr>
<td>Weekly team meetings include PGP, CM, psychiatrist consultant</td>
<td>Behavioral specialist participates as consultant and/or engages with practice as member of interdisciplinary team</td>
<td>Arrangement of formal methods of communication (e.g. medical records sharing, formal methods for behavioral provider ongoing progress feedback to referring physician)</td>
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<tr>
<td>Use of a dashboard and metrics for individual patient progress monitoring</td>
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</tbody>
</table>

Disclosures

Research support from Dexcom, Inc for investigator-initiated project
Consultant to Johnson & Johnson Diabetes Institute and Lilly Innovation Center
Mental and Behavioral Health: CMS is finalizing payments for codes that describe specific behavioral health services furnished using the psychiatric Collaborative Care Model, which has demonstrated benefits in a variety of settings. In this model, patients are cared for through a team approach, involving a primary care practitioner, behavioral health care manager, and psychiatric consultant. CMS is also finalizing payment for a new code that broadly describes behavioral health integration services, including payments for other approaches and for practices that are not yet prepared to implement the Collaborative Care Model.

Cognitive Impairment Care Assessment and Planning: CMS finalizes payment to physicians to perform cognitive and functional assessment and care planning for patients with cognitive impairment (e.g., for patients with Alzheimer’s). This is a major step forward for care planning for these populations.

Case Study

Introduction
- Mrs. R is a 66-year-old librarian.
- She was diagnosed 8 years ago.
- Over the past 2 years A1Cs ~ 9-10.5%.
- She notes feeling powerless to achieve better blood sugar values. She has been missing her medication doses, and she has now stopped monitoring her blood glucose altogether.
- She also has hypertension, hypercholesterolemia.

Case Study (Cont’d)

What could you screen for in this person?
A. Diabetes distress, depression, anxiety
B. Disordered eating
C. Depression and cognitive impairment
D. Cognitive Impairment
E. All of the Above

Case Study (Cont’d)

What could you screen for in this person?
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Screening Recommendations
1. Include routine psychosocial assessment as part of ongoing diabetes care using a collaborative, person-centered approach.
2. Psychosocial issues should be understood through a life-course lens, understanding that life circumstances and therefore the needs of the person with diabetes, will change over time.
3. Screening and follow-up should include attitudes, expectations, mood, general and diabetes-related quality of life, resources, and psychiatric history.

Screening Recommendations (Cont’d)
4. Upon screening, symptoms that reach the level of clinical significance require referral to appropriate care providers.
5. Routinely screen for diabetes-related distress, depression, anxiety, and disordered eating behaviors.
6. Older adults should be considered a high priority population for screening & treatment.
When to Screen

• At diagnosis
• Regularly scheduled visits
• Changes in medical status
• During hospitalization(s)
• When new-onset complications occur
• Whenever problems are identified with:
  – Glucose control
  – Self-management
  – Quality of life

Standards of Medical Care in Diabetes. Diabetes Care 2017; 40 (Suppl. 1): S39–40

When to Refer to a Mental Health Provider

• Self-care impaired after tailored diabetes education to ensure knowledge, skill, and resources to perform self-care
• Evidence of persistent diabetes distress, on observation or through discussion during clinical encounter
• Positive screen on a validated screening tool (for depression, anxiety)
• Symptoms or suspicions of disordered eating behavior, an eating disorder, or disrupted patterns of eating specific to the care regimen
• Intentional omission of insulin or oral medication to cause weight loss

Continued...

When to Refer (cont’d)

• Serious mental illness is previously documented or suspected
• Youth and families with behavioral self-care difficulties, repeated hospitalizations for diabetic ketoacidosis, or significant distress
• Screen positive for cognitive impairment
• Declining or impaired ability to perform diabetes self-care behaviors
• Before undergoing bariatric or metabolic surgery and after surgery for 1yr

Diabetes Distress

• Significant negative emotional reaction
  – Diagnosis of diabetes
  – Worry and fear regarding health, longevity, complications
  – Financial and behavioral burden of living with diabetes
  – Onset of complications
  – Impact on lifestyle of self-management demands
  – Lack of social support or resources for managing diabetes

Diabetes Distress: Prevalence and Impact

• 18–45% with an incidence of 38–48% over 18 months
• High levels of diabetes distress significantly impact medication-taking behaviors
• Linked to higher A1C, lower self-efficacy, poorer dietary and exercise behaviors
• One-third of adolescents with diabetes develop diabetes distress (associated with declines in self-management behaviors and suboptimal blood glucose levels)
• Parents of children with type 1 diabetes prone to diabetes distress, which impacts their ability to provide support for their child

Gonzales et al. Diabetes Care 2011; 34:2222–2227
Diabetes Distress: Survey Instruments

- Diabetes Distress Scale (DSS)
- PAID-Peds
- PAID-Teen Version
- PAID-Parent Revised Version

Diabetes Distress: Treatment

- Develop a step-by-step action plan to address key concerns
- Provide continuing emotional and instrumental support: reduce burden of care whenever possible through shared responsibility taking
- Follow up with feedback about health status and constructive feasible strategies to improve outcomes
- If setting goals, make sure they are “SMART:”
  - Specific
  - Measurable
  - Achievable
  - Realistic
  - Time-limited in duration

Depression Impact

- Affects one in four people with type 1 or type 2 diabetes
- Associated with self-care
- Associated with diabetes complications
- Increases risk for obesity, sedentary lifestyle, smoking
- Increases health care service utilization and costs
- Increases risk for type 2 diabetes

Association of Depression with Diabetes Self-Care

<table>
<thead>
<tr>
<th>Self-Care Activities (Past 7 Days)</th>
<th>Major Depression (%)</th>
<th>No Major Depression (%)</th>
<th>Odds Ratio</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Healthy eating ≤ 1x week</td>
<td>17.2</td>
<td>8.8</td>
<td>2.1</td>
<td>1.59-2.72</td>
</tr>
<tr>
<td>5 servings of fruit &amp; vegetables ≤ 1x week</td>
<td>32.4</td>
<td>21.1</td>
<td>1.8</td>
<td>1.43-2.17</td>
</tr>
<tr>
<td>High-fat foods 6x week</td>
<td>15.5</td>
<td>11.9</td>
<td>1.3</td>
<td>1.01-1.73</td>
</tr>
<tr>
<td>Physical activity (30 min) ≤ 1x week</td>
<td>44.1</td>
<td>27.3</td>
<td>1.9</td>
<td>1.53-2.37</td>
</tr>
<tr>
<td>Specific exercise session ≤ 1x week</td>
<td>62.1</td>
<td>45.8</td>
<td>1.7</td>
<td>1.43-2.12</td>
</tr>
<tr>
<td>Smoking: yes</td>
<td>16.1</td>
<td>7.7</td>
<td>1.9</td>
<td>1.42-2.51</td>
</tr>
</tbody>
</table>

Association with Diabetes Complications

Depression is associated with:
- Retinopathy (.17)*
- Nephropathy (.25)*
- Neuropathy (.29)*
- Sexual dysfunction (.32)*
- Macrovascular complications (.20)*

(* Weighted R values)
Depressive Symptomatology

- Symptoms, but not meeting criteria for Major Depressive Disorder (MDD)
  - Depressed mood
  - Diminished interest
  - Lack of energy
  - Concentration difficulties
  - Changes in appetite/weight
  - Psychomotor retardation/agitation
- Common among people with diabetes
- Associated with poor self-care, complications, and mortality

Depression: Who to Screen

Routine screening recommended for persons with:
- Prediabetes (particularly overweight patients)
- Type 1 and Type 2 diabetes
- Gestational diabetes
- Postpartum diabetes

Depression: Referral

Referrals for treatment of depression should be made to mental health providers with experience in:
- Cognitive behavioral therapy (CBT)
- Problem-solving therapy

Pharmacotherapy should also be considered if symptoms interfere with effective self-care behaviors. Referral to a psychiatrist familiar with diabetes is preferred.

Anxiety

Anxiety: Common Disorders

- Generalized anxiety disorder (GAD)
- Body dysmorphic disorder
- Obsessive compulsive disorder (OCD)
- Specific phobias, particularly needle phobia and fear of hypoglycemia
- Posttraumatic stress disorder (PTSD)

Anxiety: Who to Screen

- Exhibiting anxiety or worries that interferes with self-management behaviors regarding:
  - Diabetes complications
  - Insulin injections or infusion
  - Taking medications
  - Hypoglycemia
- Express fear, dread, or irrational thoughts and/or show anxiety symptoms:
  - Avoidance behaviors (including medical care)
  - Excessive repetitive behaviors
  - Social withdrawal
Anxiety: Who to Screen (Cont’d)

- Preoccupation with an imagined defect in appearance that interferes with social, occupational, or other areas of function – body dysmorphic disorder
- Exhibits excessive diabetes self-management behaviors to achieve glycemic targets, reports repetitive negative thoughts about inability to prevent poor health outcomes, and/or has related thoughts and behaviors that interfere with daily living – OCD

Anxiety: Survey Instruments

- State-Trait Anxiety Inventory (STAI) and for Children (STAIC)
- Beck Anxiety Inventory (BAI)
- Hypoglycemia Fear Survey – II (HFS-II)
- Children’s Hypoglycemia Index (CHI)

Anxiety: Referral and Treatment

- In hypoglycemia unawareness (can co-occur with fear of hypoglycemia)
  - Treat using Blood Glucose Awareness Training (BGAT) to help re-establish awareness and reduce fear
- In OCD
  - Referral to a mental health professional familiar with OCD treatment should be considered if diabetes re-education is not effective in reducing obsessive thoughts, behaviors, or feelings of general anxiety

Disordered Eating Behavior

Disordered Eating: Behaviors and Impact

- In type 1 diabetes, insulin omission causing glycosuria in order to lose weight is the most commonly reported disordered eating behavior. People with type 2 diabetes treated with insulin, also frequently report intentional omission.
- In type 2 diabetes, bingeing (excessive food intake with an accompanying sense of loss of control) is most commonly reported.
- Persons with disordered eating, disrupted eating patterns, and eating disorders have higher rates of diabetes distress and FoH than those without these symptoms

Disordered Eating: Who to Screen

- Unexplained hyperglycemia and weight loss
- Self-report of excessive caloric restriction and/or excessive physical activity
- Expression of significant dissatisfaction with body size, shape or weight
- Report of loss of control over eating
- Repeated unsuccessful dieting attempts
Disordered Eating: Survey Instruments

• Eating Disorders Inventory-3 (EDI-3)
• Diabetes Eating Problems Survey (DEPS-R)
• Diabetes Treatment and Satiety Scale (DTSS-20)

Disordered Eating: Referral and Treatment

• Review of the medical regimen is recommended to identify potential treatment-related effects on hunger/caloric intake
• If night eating syndrome (recurrent eating at night) is diagnosed, changes to the medication regimen are required until maladaptive eating patterns are modified
• Adjunctive medication such as glucagon-like peptide 1 receptor agonists may help
  – Meet glycemic targets
  – Regulate hunger and food intake
  – Potential to reduce uncontrollable hunger

Disordered Eating: Referral and Treatment

• Bulimia, the most commonly reported symptom in persons with diabetes, should be evaluated in the context of treatment, especially insulin dose.
• If a diagnosis of Bulimia Nervosa is established via clinical interview by a qualified professional, use of anti-depressant and anti-anxiety medications is often effective when accompanied by psychotherapy.
• In severe cases of Bulimia or Anorexia, hospitalization may be necessary to stabilize diabetes and mental health.

Older Adults

• Older adults with diabetes:
  – 73% increased risk of all types of dementia
  – 56% increased risk of Alzheimer’s dementia
  – 127% increased risk of vascular dementia
• People ≥65 years of age should receive screening annually for mild cognitive impairment or dementia

Bariatric Surgery

• Increased risk of:
  – Depression and other major psychiatric disorders
  – Body image disorders, sexual dysfunction and suicidal behavior
• People presenting for bariatric surgery should be assessed by a professional familiar with weight-loss interventions and post-bariatric surgery behavioral requirements
• Postponement of surgery should be considered until psychosocial issues are resolved or stabilized
• Consider ongoing mental health services to help patients adjust post-surgery

Summary

• Described psychosocial issues that are common in people with diabetes, ranging from normative diabetes specific distress to diagnosable mental health disorders.
• Presented implementation models for integrating psychosocial services into team-based care.
• Reviewed screening recommendations and tools for use within routine care.
• Described appropriate referral and treatment recommendations for people impacted by both sub-clinical and clinical psychosocial distress.
Position Statement

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

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