Diabetes

Biopsychosocial Assessment and Treatment

in Integrated Primary Care Settings

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Biopsychosocial Factors

Physical

Environmental

Emotional

Cognitive

Behavioral
Biopsychosocial Factors

• Physical
  • Blood glucose levels
    • Hypoglycemic (blood glucose <60 mg/dl)
      • heart rate, headaches, hunger, shakiness, sweating, decreased concentration, mood changes, and confusion
      • Untreated—can lead to coma or death
    • Hyperglycemia (blood glucose >140 mg/dl)
      • Increase thirst, urination frequency
      • Symptoms may not be noticed
      • Can lead to other complications
        • Heart disease, strokes, high blood pressure
        • Blindness, kidney failure, neuropathy
Biopsychosocial Factors

• Physical
  • Overweight and obesity increases risk
    • Overweight
      • 1.6x more likely
    • Obesity with BMI > 40
      • 7.4x more likely
  • Treated with a range of medications
Biopsychosocial Factors

• Emotional and Cognitive Factors
  • Bi-directional relationship with depression
    • Diabetes increases risk of depression
    • Depression increases risk of diabetes

• Anxiety
  • Those with diabetes are more likely to demonstrate anxiety

• Stress
  • Associated with less control over diabetes
Biopsychosocial Factors

• Behavioral
  • Dietary habits
    • Manage carbohydrates with available insulin
    • Limit alcohol
  • Physical activity
  • Tobacco use
  • Glucose monitoring
    • One to seven or more times per day
  • Medication adherence
  • Monitoring
    • Feet, eyes, renal function
Biopsychosocial Factors

• Social/Environmental Factors
  • Social support
    • Food choices
    • Critical vs. supportive
  • Financial
  • Life demands
Using the 5 A’s to Target Diabetes in Integrated Primary Care Settings
Assess

• Determine how patient manages diabetes
  • How often do you measure blood glucose?
  • In a typical week, how often is your blood sugar too high, too low?
    • What patterns have you noticed?
  • Impact of low blood sugar?
  • What medication are you taking? Difficulties?
  • Complementary or alternative treatments?
Assess

• Emotional or cognitive factors
  • Diabetes Distress Scale 2
    • 2-item screening measure
      • Derived from DDS17
    • Classifies those in high or low distress
  • Focus on depression, anxiety, general distress
    • Impact on health behaviors
    • Treatment adherence

• Social Support
  • How do family/work factors support or interfere with diabetes management

• Goals for change
Advising/Agreeing

- Summary of understanding
- Reflect how overwhelming managing can be
- Chronic condition
- Patient has some control
- Collaboratively set goals
Assist

- Close coordination with primary care provider
- Monitoring blood sugar
  - Log blood sugar levels and related factors
    - Time of day, exercise, carbohydrate intake, medication
- Responding to high and low blood sugars
  - Hypoglycemia
    - Drinking something with high glucose
  - Hyperglycemia
    - Individualized
      - Exercise, delaying food intake, emergency medical care
Assist

• Physical activity
  • 150 minutes/week, moderate intensity
  • Resistance training 2x week
  • Need to be sensitive to signs of hypoglycemia
    • Shakiness, confusion, weakness, headache
    • Consider eating a snack right before exercise
    • Check levels during exercise
    • Wear medical alert
    • Carry sources of sugar
Assist

• Eating habits
  • Develop an *individualized plan*
  • One dietary plan not recommended over another
  • **Monitoring carbohydrates** is important
    • Reference nutritional guide
• Promote self-care
  • Foot exams, eye exams

ADA, 2015
Assist

• Emotional distress
  • Target methods for managing emotions
  • Impact on diabetes management behaviors
  • Direct impact on blood sugar

• Social Support
  • Identify supportive person in life
  • Consider community groups and online resources
Arrange

• Identify additional needs
  • Dietary counseling
  • Diabetes education
  • Psychotropic medication evaluation

• Develop referral plan