Suicide and Mental Health Needs in Students with Diabetes

Anna Egan, PhD, ABPP
Licensed Psychologist

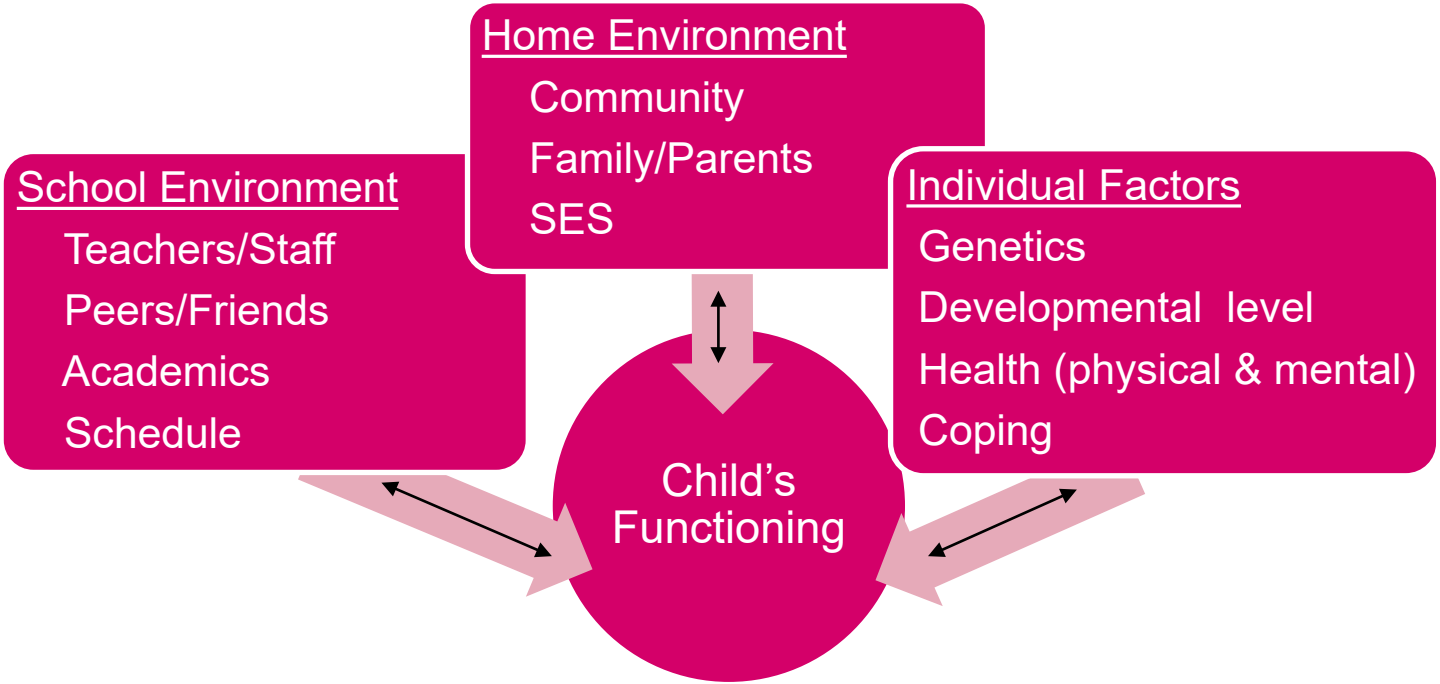
Conflict of Interest

None

Goals & Objectives

- Identify mental health symptoms that youth with diabetes may experience (e.g., depression, anxiety, and suicidal ideation)
- Detect unhealthy coping behaviors in children with diabetes
- Describe resources available to children and families

Overview



Overview

- To have well-controlled diabetes, one must have:
  - Continuous monitoring (bg, carb ingestion, exercise)
  - Math skills (carb counting, dosing, correction)
  - Problem solving skills (responding to variations in bg)
  - Flexibility (stopping plans and addressing bg or symptoms)
  - Support (from parents, school personnel, friends, medical)

- Problems in these areas or other stressors can result in impaired functioning in multiple domains for kids

Overview

- Aggressive (Physically lashing out when asked to perform a diabetes task)
- Argumentative (“I don’t need to go to your office, I can check my BG at my locker”)
- Avoidance
  - Of the nurse or diabetes management (“I forgot to check my BG before lunch”)
  - Of class (always in the nurse’s office) (“I’m not feeling well again, I need to check my BG”)
- Dismissive (“I don’t care what my BG is”)
- Lying (“My BG is 128”, but a review of the meter shows it is 428)
- Refusing (“You can’t make me check”)
- Upset/Frustrated (“I hate diabetes”)
- Parent involvement (over or under involvement) (parent needs to be notified of everything or parent can’t be reached for anything)

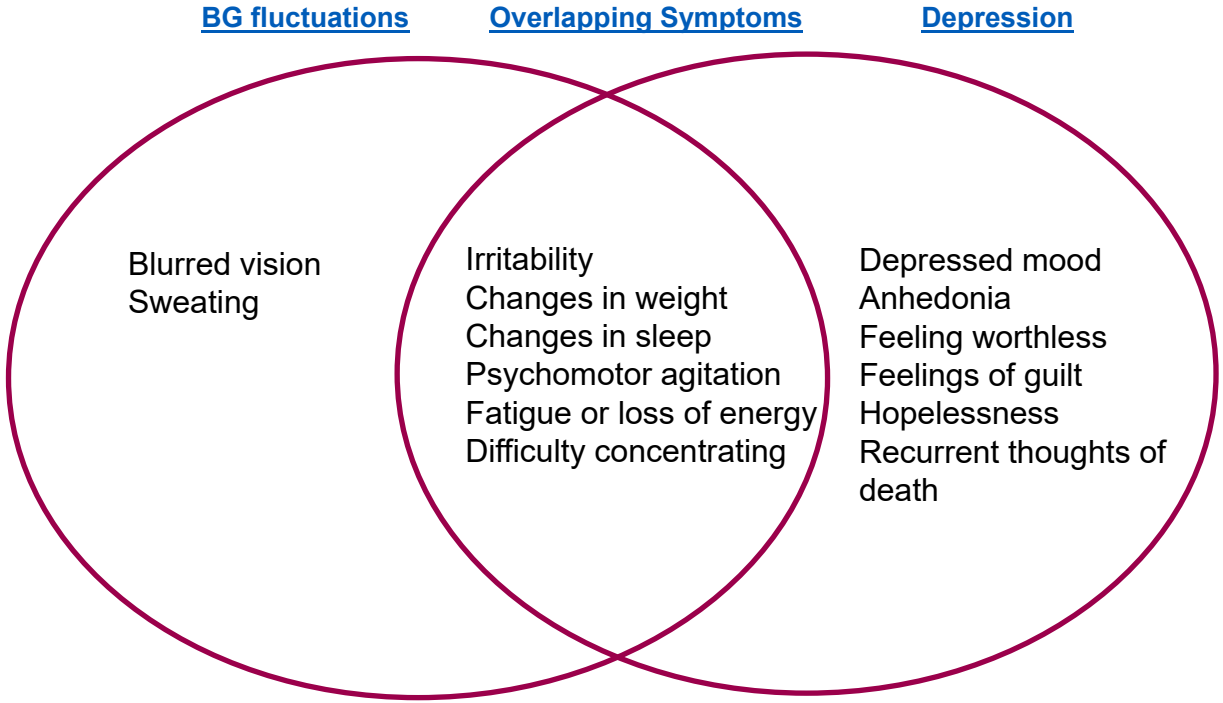
Psychological Functioning

- Research Findings
  - Children with diabetes have two-fold greater prevalence of depression
  - Adolescents with diabetes have a three-fold greater prevalence of depression than those without diabetes (estimated rates between 20-33%)
  - Youth with T1DM followed over 10 years:
    - 47.6% had a psychiatric disorder (depression, conduct, anxiety)
    - 27.5% (over half) had depression
    - Highest incident rates of problems were during the first year of diagnosis

Psychological Functioning

- Fluctuations in BG overlap with depression so poorly controlled diabetes can look like depression
- Difficulty managing diabetes (e.g., hormone changes, lack of support) can lead to frustration and depression
- Genetic factors (e.g., family history of depression)
- Environmental factors (e.g., end of a relationship, financial difficulties)

Psychological Functioning



Psychological Functioning

- Research Findings: Poor outcomes for youth with depression and diabetes

  - Reduced adherence to treatment
  - Higher hospital admissions
  - Low self esteem
  - Ineffective or poor coping style

  Poor glycemic control

  More diabetic complications

  Negative self-perception

Anxiety and Diabetes Management

Anxiety and Diabetes Management

What we know about anxiety

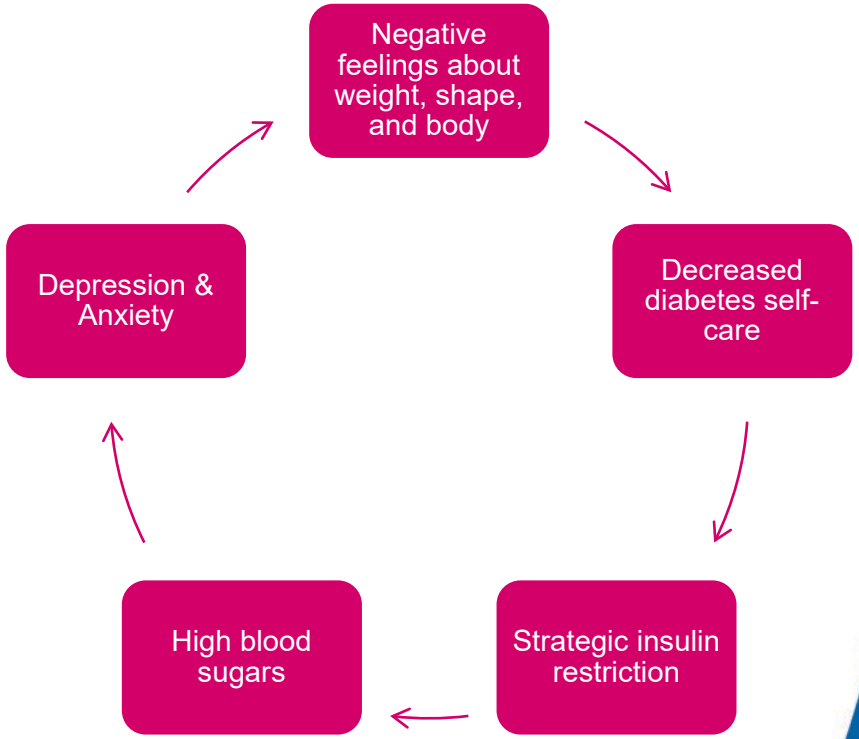
- Fear: Emotional response to a real or perceived threat (e.g., hypoglycemic episode)
- Anxiety: Anticipation of a future treat
- Anxiety is very common and in children, symptoms often overlap with depression

Research study

- 13.4% reported state anxiety (in the moment)
  - Associated with hemoglobin A1c (higher anxiety higher A1c)
- 17% reported trait anxiety (in general)
  - Associated with bg monitoring frequency (high levels of anxiety associated with decreased bg checks)

Eating/Body Image and T1DM

- Diabulimia—omitting insulin with goal of losing weight
- Studies show that up to 30% of kids with T1DM experience disordered eating and body image concerns
- Rates are higher with females then males



Suicide Risk (in general)

- Youth Risk Behavior Survey CDC, 2018
  - 31.5% felt sad or hopeless 2+ weeks
  - 17.2% seriously considered suicide
  - 13.6% made a plan
  - 7.4% attempted suicide
  - Less than 2.4% saw a medical provider for the attempt
- Rates of completed suicide in 10-24 year olds in MO and KS have significantly risen in recent years

Suicide Risk (in T1DM)

- Research shows current risk of suicidal ideation to be between 8-13% for last 3-12 months and 26% for lifetime.
- At children's mercy (publication pending), 24% of youth with T1DM screened positive for recent SI
- Unique concern—insulin is need to survive, but it means easy access for intention overdosing.

Suicide Risk: Screening

Columbia Suicide Severity Rating Scale (CSSRS or Columbia) - 3 questions

- **Have you wished you weren't alive anymore?**

  -Assessing thoughts?

- **Have you had thoughts about killing yourself?**

  - Assessing plans?

- **Have you ever done anything to try to kill yourself?**

  – Assessing Actions?

Neurocognitive Functioning

- Just having T1DM is associated with difficulties in neurocognitive functioning
  - Meta-analyses of 24 studies showed poorer performance in the areas of visual-spatial ability, motor speed, writing, reading, sustained attention, memory, and IQ (full scale, performance, & verbal)

- Factors associated with increase difficulty in neurocognitive functioning:
  - Length of time since diagnosis
  - Diagnosis before age 5
  - Metabolic control
  - Co-morbid psychological diagnoses
  - Number of hypoglycemic episodes

Executive Functioning (EF)

- Two domains of EF:
  - Behavioral Regulation—the ability to inhibit, shift, and sustain emotional control
  - Metacognition—the abilities to initiate, plan, organize, & monitor, and working memory

- These skills are necessary for:
  - insulin management
  - bg monitoring
  - monitoring of dietary intake
  - adjustment of activity level

EF Impairment (ADHD)

- Research in this area:
  - Parent report of child EF predicts child's adherence to diabetes regimen (age does not matter; if you have poor EF, you have poor management)
  - The level of a child EF is associated with treatment adherence and self-management (higher EF associated with better adherence)
  - Some research shows gender effects; boys with EF deficits have worse treatment adherence and glycemic control

Identifying Problems

- Possible reasons for problems at school:
  - Difficulty adjusting to diabetes diagnosis (even if they have been diagnosed for years)
  - Lack of understanding about diabetes management
  - Real/perceived
    - interference with peer/social functioning
    - lack of support from school personnel
    - interference with school functioning
  - Pre-existing or recently developed concerns with behavior, fear/anxiety, mood difficulties
  - Issues the child brings from home/community that is not known to the school personnel

Coping

- Coping strategies are methods (thoughts or actions) a person uses to deal with stressful situations.
- All people use coping strategies; some strategies are just more “helpful” than others
- When does coping become unhealthy or unhelpful
  - It is interfering with functioning in a prominent area
  - It is causing distress
  - It can be contributing to immediate or long-term health concerns

What does healthy adjustment look like?

- Few dramatic/extreme changes in mood or behavior
- Use of coping strategies (writing, reading, talking, exercise, etc.)
- Open communication (acknowledge of frustrations, sadness)
- Seeking support

Managing Concerning Behaviors

- Set reasonable goals and build upon them once children are successful
  - Make goals specific, measurable, achievable, results-focused, and time- bound (SMART)
  - Example, if the goals was initially: “Check your bg at school” change it to: “Check your bg at in the nurse’s office at school, every day 20 minutes before lunch”
  - Put the goal in writing, monitor it with a chart, acknowledge small progress and have rewards for making progress

- Develop a collaborative relationship--If something isn’t working, ask for input from the child (or others)
  - Most kids will tell you what they need
  - The argumentative kids will tell you all the reasons the things you suggest won’t work, but often (not always) are more cooperative when they are asked to help problem solve or when a discrepancy in their behavior is noted

Treatment/Intervention

- What can you do to help?
  - Match expectations to the individual child's abilities (expectations may be lower than same age peers or younger peers)
  - Identify problems early
  - Set reasonable goals and build upon them once children are successful
  - Develop a collaborative relationship--If something isn't working, ask for input from the child (or others)
  - If you see concerns, talk to someone about it: the child, parent, or teacher/counselor

Treatment/Intervention

- Other Interventions:
  - Incorporate psychological diagnoses or behavior plan into 504 plan (have accommodations prepared)
  - Psycho-educational assessment or formal IEP may be needed
  - Therapy (Individual/Family)
  - Medication
  - Hospitalization

Managing Concerning Behaviors

- What is generally NOT helpful:
  - lecturing (they won't listen, it damages the working relationship, parents and/or doctors may have already tried that approach unsuccessfully)
  - Pointing out long-term consequences of behavior (children/adolescents think in the here and now; Fear does not cause a change in behavior)
  - Ignoring it (50% of the time the problem won't go away)

Resources

- Support groups (Children's Mercy, JDRF)
- Websites (ADA, Children with Diabetes)
- Therapy options (parent can contact insurance)
- Suicide prevention hotline (800-273-8255)

If we have time…

- Questions
- Case Examples

Where to find more information and examples

www.diabetes.org

www.childrenwithdiabetes.com

www.jdrf.org

Children's Mercy KANSAS CITY

Resources

- Children's Diabetes Center

http://www.childrensmercy.org/ Search Diabetes>Endocrinology and Diabetes>Clinical Services>Diabetes Team

- American Diabetes Association Safe at School Campaign

http://www.diabetes.org/living-with-diabetes/parents-and-kids/diabetes-care-at-school/

- National Diabetes Education Program

http://ndep.nih.gov/publications/PublicationDetail.aspx?PubId=97#main

Children's Mercy KANSAS CITY