

PSYCHOSOCIAL EFFECTS OF MANAGING CGMS

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DEPARTMENT OF PEDIATRICS



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Diabetes Management of the School-Aged Child

Provided by Texas Children's Hospital

Provider #18-267764-A

February 2nd, 2019 | The Woodlands, TX | 8:00-5:00 pm

CONTINUING NURSING EDUCATION

Texas Children's Hospital is an approved provider with commendation of continuing nursing education by the Texas Nurses Association - Approver, an accredited approver with distinction, by the American Nurses Credentialing Center's Commission on Accreditation.

REQUIREMENTS FOR SUCCESSFUL COMPLETION

To receive contact hours for this continuing education activity, the participant must:

- Attend activity the entire activity
- Sign the attendance sheet
- Complete post survey evaluation online

Once successful completion has been verified, a "Certificate of Successful Completion" will be awarded for 4.8 contact hour(s). For web link issues, email cne@texaschildrens.org

LEARNING OUTCOME: At the conclusion of this course, the nurse will be able to provide improved care for the school age child as a result of increased knowledge about diabetes, ways to treat them, and the appropriate management of identified barriers.

CONFLICTS OF INTEREST

Explanation: A conflict of interest occurs when an individual has an opportunity to affect or impact educational content with which he or she may have a commercial interest or a potentially biasing relationship of a financial nature. All planners and presenters/authors/content reviewers must disclose the presence or absence of a conflict of interest relative to this activity. All potential conflicts are resolved prior to the planning, implementation, or evaluation of the continuing nursing education activity. All activity planning committee members and presenters/authors/content reviewers have submitted Conflict of Interest Disclosure forms.

The activity's Nurse Planner has determined that the following presenter, Dr. Siripoom McKay, have a conflict of interest. Those conflicts of interest have been appropriately resolved. No other planning committee member, presenter, or content reviewer has a conflict of interest.

JOINT PROVIDER STATEMENT

This CME/CNE activity has been jointly provided by Texas Children's Hospital collaboratively with Baylor College of Medicine.

OUTLINE

- Psychological aspects of diabetes management
 - Mental health outcomes of children/adolescents living with diabetes
 - CGM use and adjustment and adherence
- Diabetes management in the school setting
 - Challenges of diabetes management at school and the impact on mental health
 - Promoting positive coping and adjustment in the school setting
- Practical Application and Recommendations
 - Strategies to enhance communication and set expectations with parents
 - Facilitate adjustment and increase motivation to manage diabetes at school
 - Positive Psychology and Resiliency

MENTAL HEALTH OUTCOMES AND DIABETES

- Greater incidence of:
 - Depression
 - 14% of youth with diabetes report mild depression
 - 8.6% of youth with diabetes report moderate to severe depression
 - Prevalence of depression is 2-3x greater in youth with diabetes compared to youth without diabetes
 - Anxiety
 - Psychological distress
 - Eating disorders



MENTAL HEALTH OUTCOMES AND DIABETES

- Depression and anxiety correlated with:
 - less frequent BG checks
 - poorer glycemic control
 - increased diabetes related hospitalizations
 - poorer treatment adherence
- Children with recurrent DKA more likely to have psychiatric disorders
- Poor glycemic control associated with anxiety, poor self-esteem and diabetes distress

2000 ISPAD guidelines stated, “Psychosocial factors are the most important influences affecting the care and management of diabetes”



POTENTIAL ADVANTAGES OF CGM USE

- Increased diabetes related self-efficacy
- Decreased anxiety regarding unexpected hypoglycemia
- Increased flexibility of daily living
- Adolescents may perform diabetes self-management in the classroom without need to see a school nurse or health aide
- Enhanced motivation for improved glycemic control



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POTENTIAL CHALLENGES WITH CGM USE

- Overwhelming amounts of glucose data
- Disruptions to the student or classroom caused by frequent CGM alarms
- Parent conflict about glycemic control
- May promote overreaction to transitory glucose fluctuations
- Increases salience of diabetes in school and social settings
- Possible increase in social stigma
- Increase in burden of diabetes management
- Seen as “cure all” and no need for calibration



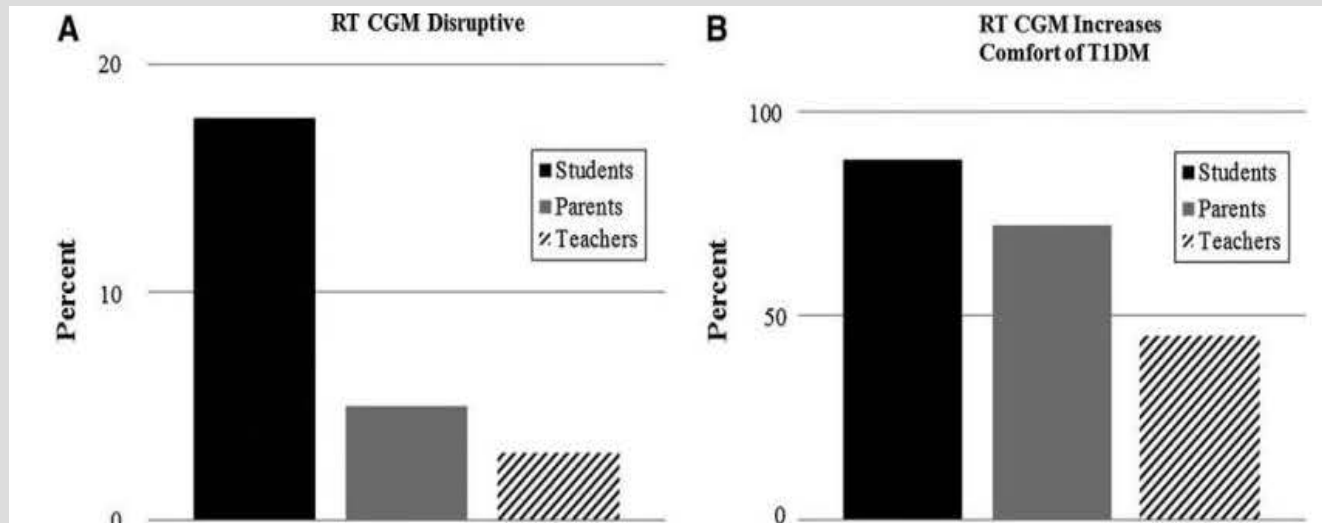
OUTCOMES OF CGM USE: MIXED

- CGM associated with (Markowitz et al., 2012):
 - MORE trait anxiety and MORE negative affect in youth (Markowitz et al., 2012)
 - LESS state and trait anxiety in adults
 - HIGHER rates of depression in the CGM group per parent/proxy report
- CGM use associated with increased family conflict (Husted et al., 2011)
- Feelings of safety, reduced fear of hyper/hypoglycemia (Polonsky & Hessler, 2013; Barnard et al., 2014)
- Improvement in physical health component of QOL, but not mental health component of QOL (Riveline, 2011)



CGM IN THE CLASSROOM

- CGM is helpful in the school according to
 - 70% of parents
 - 75% of students
 - 51% of teachers
- Students reported CGM to be more disruptive than their parents or teachers
- Parents, students and teachers report CGM increased comfort with diabetes management at school



Benassi, K. & Drobny, J., & Aye, T. (2013)

PRACTICAL APPLICATIONS: CASE EXAMPLES



- “Alex”
 - 9yo boy
 - Diagnosed DM 2.5 years ago
 - Uses Dexcom G6 CGM
 - School concerns related to stigma



- “Sally”
 - 11yo girl
 - Diagnosed DM 1 year ago
 - Uses Dexcom G6 CGM
 - School concerns related to alarms

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PRACTICAL APPLICATIONS: CASE EXAMPLES



- “June”
 - 15yo girl
 - Diagnosed DM 4 years ago
 - Has Dexcom, no longer using
 - Challenges with parental access during and outside of school



- “Courtney”
 - 9yo girl
 - Diagnosed DM 2 years ago
 - No CGM – hopes to “prove” herself
 - Challenges with communication between parent, school and TCH endo clinic

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PRACTICAL APPLICATIONS: PROMOTING POSITIVE COPING AND ADJUSTMENT IN SCHOOL

- Strategies to facilitate adjustment and adherence
 - Increase the use of labeled praise for positive behaviors, and to "catch" children doing good
 - Focus praise on controllable behaviors instead of BG
 - Language – avoidance of “bad” and “good” BG
 - Collaborative approach

Case Example – “Alex”



PRACTICAL APPLICATIONS: INCREASING MOTIVATION

- Principles from Motivational Interviewing
 - Express empathy. Highlight the collaborative process
 - Support self-efficacy
 - Roll with resistance
 - Develop discrepancy
 - Elicit change talk

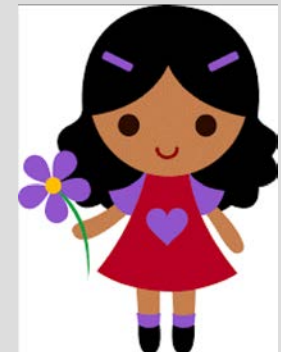
Case Example: “June”



PRACTICAL APPLICATIONS: COMMUNICATING WITH PARENTS AND STUDENTS

- Parental challenges:
 - Fear of hyper/hypoglycemia
 - Feel upset when child's numbers are "off track" or OOR
 - Worry child is not taken care of when not in their care paired with access to CGM
- Communication strategies/skills
 - G-I-V-E
 - F-A-S-T
 - Open communication and planning

Case Example – "Courtney"



PRACTICAL APPLICATIONS: COMMUNICATING WITH PARENTS AND STUDENTS

- Behavioral Plan

Goals: **Check Blood sugar at least three times a day

Rewards: If child check's blood sugar **at least three times a day**, she gets to play on her phone that evening.

Consequences: If child does not check at least three times, or misses blood sugar check, she loses access to phone that evening

| Day | Stickers | | | |
|-----------|----------|--|--|--|
| Monday | | | | |
| Tuesday | | | | |
| Wednesday | | | | |
| Thursday | | | | |
| Friday | | | | |
| Saturday | | | | |
| Sunday | | | | |

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PRACTICAL APPLICATIONS: COMMUNICATING WITH PARENTS AND STUDENTS

- Behavioral Contract

1. Parent/caregiver will adjust their dexcom app settings so they only get an alert if BG drops below _____ or goes above _____.
2. If an alert sounds overnight, parent/caregiver will respond by _____.
3. If parent/caregiver receives an alert for low BG during the day, they will wait _____ to allow _____ time to treat the low before checking in.
4. If parent/caregiver receives an alert for high BG during the day, they will wait _____ to allow _____ time to treat the high before checking in.

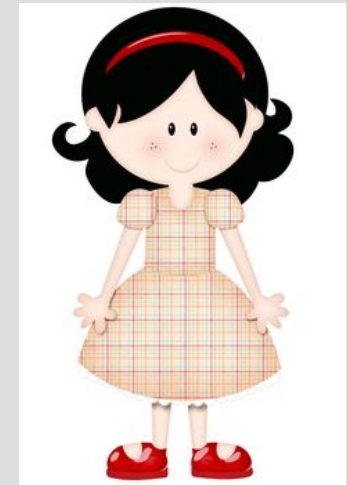
Case Example: “June”



POSITIVE PSYCHOLOGY AND RESILIENCY

- Resilience – an individual’s capacity to maintain psychological and/or physical well-being in the face of stress
 - Resilience correlated with less distress and increased QOL
 - Resilience Skills: benefit finding, fitting in with friends, diabetes acceptance, emotional processing, and emotion expression
- The role of HOPE – facilitates positive adjustment
- Meaning Making and Post-Traumatic Growth

Case Example: “Sally”



AFFILIATION STATEMENT



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Baylor
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Medicine

Texas Children's Hospital is affiliated with Baylor College of Medicine in the areas of pediatrics, pediatric surgery, and obstetrics and gynecology. Currently and throughout the 60-year partnership, Texas Children's serves as Baylor's primary pediatric training site, and more than 1,500 Baylor faculty are the division chiefs and staff physicians of Texas Children's patient care centers.



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COMMENTS/QUESTIONS?