

Compliance in Children and Teens with Diabetes

Tracey Craig, M.A.

Importance of Childhood Compliance

- Longitudinal studies show compliance in childhood can:
 - Maximize glycemic control
 - Reduces the risk of premature mortality
 - Reduces the risk of future metabolic crisis
 - Improve long-term health outcomes through the lifespan

Middle Childhood Compliance

- Studies tend to focus more on adolescents with diabetes, so the 6-12 year-old age group is often ignored
 - Good glycemic control in this stage can prevent progression of complications in adolescence onwards, so this group should be studied more frequently
- Developmental Changes in this stage include
 - Behavioral mastery
 - Learning impulse control
 - Learning what is acceptable vs. unacceptable behavior
 - Physical mastery
 - Developing coordination needed to complete daily tasks, play sports, use instruments, etc.
 - Social mastery
 - Learning what friendship means
 - Developing attachments outside the family

Challenges

- Child has poor impulse control
- Child behaves unacceptably
- Child has difficulty mastering testing
- Child wants to participate in sports, band, and other activities that mean time away from home
- Child wants to spend the night with peers or vacation with peers

Solutions

- Model impulse control check for underlying neurological issues
- Set and enforce consistent boundaries
- Consider developmental stage, don't rush independence
- Discuss what needs to be done to ensure child can manage adherence, including working with school officials to help them understand the child's needs
- Talk with host parents about expectations

Best Predictors of Compliance in Middle Childhood

- Parental support and monitoring throughout preadolescence
 - Don't expect kids this age to independently adhere to. Studies show children in this stage who test their own sugar have poorer metabolic control
- Family cohesion
 - Children whose families are warm, supportive, and close show better adherence
- *Less* parental restrictiveness
 - Parental restrictiveness was associated with *poor* glycemic control.
 - Restrictive/authoritarian parenting that uses coercive tactics can result in anger, frustration, feelings of helplessness for the child

Adolescent Compliance

- Obstacles to Adolescent Compliance
 - Developmental behaviors
 - Adolescent Spontaneity
 - Sense of immortality
 - Sense of exceptionalism
 - Heightened concerns about social context and peers
 - Incomplete knowledge and understanding of treatment regimens and future health risks
 - Flux in family dynamics
 - Parents struggling with setting age-appropriate limits
 - Parents concerned with other life issues
 - Perceived social pressures
 - Adolescents strive to fit in, not stand out

Best Predictors of Compliance in Adolescence

- Encouraging and nonjudgmental family support in the daily tasks of monitoring and insulin administration
 - Encourage compliance rather than coercing it
- Lack of family conflict
 - Adolescents in high-conflict families showed poorer glycemic control
- Good problem-solving skills
 - Guide them through other life problems to foster self-efficacy
- Flexible dietary recommendations
 - Restrictive eating can be difficult for teens, as eating with peers is often a major social event
- Use technology
 - Teens adapt to new technology easily, so prompts such as daily text or social media messages can be helpful
- Good problem-solving skills
 - Guide them through other life problems to foster self-efficacy

Other Factors in Adolescent Care

- Physiological changes in adolescence lead to greater insulin resistance during puberty, so even with compliance management can be difficult
- Psychological resistance is difficult to address
- Home-based, family centered care may be necessary for patients with poor metabolic control
- Until technology improves this will continue to be an at-risk group
 - provide support
 - ease the difficulties of care
 - minimize the intrusion of care on their daily lives