

Parenting Children With Diabetes

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Perhaps no psychosocial issue has resulted in the production of more popular literature than that of parenting. There are books on parenting infants and toddlers (e.g., *Touchpoints*), adolescents (e.g., *Romance of Risk* and *Get Out of My Life*), difficult children (e.g., *Raising Your Spirited Child* and *Your Defiant Child*), boys (e.g., *Raising Cain* and *Real Boys*), girls (e.g., *Reviving Ophelia* and *Brave New Girls*), and children with specific problems (e.g., *Taking Charge of ADHD* and *The Bipolar Child*). Indeed, there seems to be a parenting book for just about every type of child. Not surprisingly, there are also books about how best to parent children and adolescents with chronic illnesses such as diabetes (e.g., *Raising a Child With Diabetes* and *The Ten Keys to Helping Your Child Grow Up With Diabetes*).

We have learned from seminal articles on family and diabetes^{1,2} that family is an important aspect of life for children and adolescents with diabetes and that parenting is one aspect of family life that can affect and be affected by a child's diabetes. However, recent research³ has debunked the conventional wisdom that parenting directly affects behavior. This research suggests that a child's behavior is the result of the "interrelated effects of parenting, nonfamilial influences, and the role of the broader context in which families live."³

Clearly, different parenting styles affect children differently and, in turn, affect behavior. The effects of various parenting styles on the behavior and psychosocial functioning of children with diabetes remains a complex issue.

Four-Factor Model of Parenting

While one may think that there are

innumerable ways to parent, Maccoby and Martin⁴ identified four core parenting styles. They proposed that parenting is either child-centered or parent-centered and that parents either place a great deal of demand or little demand on their children.⁴ From these two dichotomies emerge four parenting styles: Authoritarian (parent-centered/high demand), Authoritative (child-centered/high demand), Permissive (child-centered/low demand), and Rejecting (parent-centered/low demand).

Child-centered parents focus on what their child needs. For example, if a child-centered mother had a bad day at work and her child did a good job handling a low blood glucose that day, she would focus on reinforcing the child's behavior despite her own negative feelings at the time. A parent-centered mother in the same situation would either ignore the child or admonish the child for bothering her with such trivial matters after she has had a bad day.

Parents' level of demand has to do with the expectations they place on a child. Parents who exercise high demand have high expectations of their children and frequently encourage them to do better. These parents are more likely to set limits and to punish their children for misbehavior. In the case of diabetes, parents who exercise high demand frequently encourage or push their children to take on as much responsibility for their diabetes as could be expected given their developmental stage. In contrast, parents exercising low demand usually ask very little of their children and believe that children need not be pushed to do anything they do not want to do. Low-demand parents of children with diabetes

might allow their children to skip finger sticks for blood glucose measurement because the children show emotional distress just before the finger stick is to occur.

Research has demonstrated that the most positive behavioral and psychological correlates are of child-centered, high-demand parents (i.e., authoritative parenting). Children of authoritative parents tend to be more mature, better behaved, more likely to internalize moral development, and less aggressive, and to have higher levels of self-esteem than children whose parents have other parenting styles.⁴ In addition, adolescents who have authoritative parents are less susceptible to negative peer pressure and more susceptible to positive peer pressure than adolescents who have parents using another parenting approach.^{5,6}

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Child development experts have highlighted the importance of three factors in parenting children and adolescents: control, involvement, and affection.⁷ Clearly, children and adolescents need all three factors throughout their youth. However, it is important to adapt the way these three factors are delivered as children grow and develop.

Unfortunately, research has shown that parenting styles do not change appropriately in response to children's changing developmental needs. The child developmental literature indicates that children need ongoing parental affection and involvement but less parental control as they develop. But Roberts, et al.⁷ have demonstrated that the opposite tends to happen: parental control, involvement, and affection levels all start high when children are young, but involvement

and affection levels drop off while control remains high as children develop.

Although all children need high levels of affection and involvement, these should be delivered differently to younger children than they are to older children. In the case of diabetes, younger children may need a great deal of parental involvement in the physical aspects of caring for their diabetes (e.g., giving shots, drawing up insulin), whereas older children may need a great deal of parental involvement in the form of verbal prompts and cues to facilitate self-management behaviors.

The importance of parental involvement in diabetes care has been demonstrated by findings that greater parental involvement in blood glucose monitoring is associated with better adherence to blood glucose monitoring, which in turn results in better metabolic control.⁸ Greater involvement from parents of children with diabetes compared with that of parents of children without diabetes is imperative because of the additional demands of diabetes treatment regimens.

Punishing Poor Diabetes Management

Parents of children and adolescents with diabetes must decide whether to punish behaviors related to diabetes. This is a difficult decision. It is well established that punishment used for the sole purpose of changing behavior is only effective in the short term. In addition, punishing children for misbehavior of any kind can lead to their developing more “crafty” ways to violate rules.

In the case of diabetes, only one study⁹ has examined the effects of punishing children for diabetes mismanagement. Its results indicated that punishment was unrelated to either adherence to treatment or glycemic control. In addition, clinical experience tells us that most children with diabetes already feel punished for having diabetes, and any parental attempts to punish children for diabetes mismanagement will be met with feelings of resentment and anger. To extrapolate from the general literature on the effectiveness of punishment, it appears that parents may be able to get short-term, but not lasting,

change in their children’s diabetes-related health behaviors through punishment.

Research and clinical experience support the use of alternative parenting strategies for establishing and maintaining behavior change in children with diabetes. These strategies include parental warmth,⁹ parent modeling,¹⁰ diabetes-related behavioral contracting,¹¹ peer-mediated diabetes support,¹² diabetes-related family problem-solving and conflict resolution,^{13,14} and verbal praise and positive reinforcement.¹⁵

Single Parenting and Diabetes

Literature addressing the general psychosocial and behavioral functioning of children and adolescents suggests that living with a single parent places children at risk for numerous problems.¹⁶ Research specific to diabetes has been less conclusive about the impact of living in a single-parent home. Several studies examining the health and behavior of diabetic youths living with single mothers have demonstrated that these youths are no worse off than diabetic young people in a two-parent families.^{17,18} Other studies suggest that diabetic youths who live with single parents are in poorer metabolic control than those in two-parent families.^{19,20}

Most single-parent households are headed by mothers. Although there is a growing number of father-headed, single-parent households, there are still too few to make conclusive statements about the impact of fathers as single parents of children with diabetes.

The contradictory findings from the studies suggest that “single-parent status” is likely too broad an issue to accurately predict health outcomes for children with diabetes. More specific parent-related factors, such as parenting behaviors, may be more useful determinants.

Parent-Child Relationships and Diabetes

While there is ample research supporting the importance of parent-child relationships to diabetes management,^{21,22} Anderson and Coyne²³ have been at the forefront of demonstrating how the parent-child relationship can have a significant impact

on children’s health. They introduced the concept of “miscarried helping,” which can occur when a parent’s efforts to help a child with diabetes backfire and result in an interpersonal conflict between parent and child.

The two main components of miscarried helping include: 1) parents’ emotional investment in being a good helper, and 2) parents’ need for their child to be healthy. Miscarried helping can result in a parent-child relationship that is mired in negative feelings and in poor health outcomes.

Anderson and Coyne²³ outline several strategies to prevent and deal with miscarried helping. For example, health care professionals working with families may describe the miscarried helping concept before it occurs in the hopes of giving parents insight into how their attempts to help their children can become problematic.

Transferring Diabetes Management to Children

One of the critical issues facing parents of children with diabetes is when and how to transfer primary responsibility for diabetes management to their child.²⁴ Wysocki and associates²⁵ examined the psychosocial predictors of when diabetes management is typically transferred from parents to children and the outcomes resulting from this transfer. Their findings revealed that transferring too much responsibility for diabetes management to a child is associated with poor treatment adherence, poor diabetes knowledge, and more hospitalizations.

These findings suggest that clinicians need to be mindful of the potential for negative health outcomes when parents transfer diabetes management to their children. Appropriately transferring diabetes care from parents to child requires consideration of the child’s level of diabetes knowledge, chronological age, cognitive level, and socio-emotional functioning.

Summary

Although a great deal of lay literature and empirical research exists supporting different methods of parenting, a child-centered, high-demand approach appears to result in the most favorable behavioral and psychosocial outcomes for children. Key issues for parents of children with diabetes include avoid-

ance of punishment when dealing with diabetes issues, arrangement of nontraditional households to better facilitate diabetes management, awareness of the potential negative effects of parental overinvestment in helping children with diabetes, and the appropriate transference of diabetes management from parents to older children.

References

- ¹Anderson BJ, Auslander WF: Research on diabetes management and the family: a critique. *Diabetes Care* 3:696–702, 1980
- ²Anderson BJ, Miller J, Auslander W, Santiago JV: Family characteristics of diabetic adolescents: relations to metabolic control. *Diabetes Care* 4:586–594, 1981
- ³Collins WA, Maccoby EE, Steinberg L, Hetherington EM, Bornstein MH: Contemporary research on parenting: the case for nature and nurture. *Am Psychol* 55:218–229, 2000
- ⁴Maccoby EE, Martin J: Socialization in the context of the family: parent-child interactions. In *Handbook of Child Psychology: Volume 4: Socialization, Personality, and Social Development*. Hetherington, EM, Ed. New York, Wiley, 1983, p. 1–101
- ⁵Fulgini A, Eccles J: Perceived parent-child relationships and early adolescents' orientation toward peers. *Dev Psychol* 29:622–632, 1993
- ⁶Mounts N, Steinberg L: An ecological analysis of peer influences on adolescent grade point average and drug use. *Dev Psychol* 31:915–922, 1995
- ⁷Roberts GC, Block JH, Block J: Continuity and change in parents' child-rearing practices. *Child Dev* 55:586–597, 1984
- ⁸Anderson BJ, Ho J, Brackett J, Finkelstein D, Laffel L: Parental involvement in diabetes management tasks: relationships to blood glucose monitoring adherence and metabolic control in young adolescents with insulin-dependent diabetes mellitus. *J Pediatr* 130:257–264, 1997
- ⁹Davis CL, Delamater AM, Shaw KH, LaGreca AM, Eidson MS, Perez-Rodriguez JE, Nemery R: Brief report: parenting styles, regimen adherence, and glycemic control in 4- to 10-year-old children with diabetes. *J Pediatr Psychol* 26:123–129, 2001
- ¹⁰Bandura A: *Social Learning Theory*. Englewood Cliffs, N.J., Prentice-Hall, 1977
- ¹¹Wysocki T: *The Ten Keys to Helping Your Child Grow Up With Diabetes*. Alexandria, Va., American Diabetes Association, 1997
- ¹²LaGreca AM, Auslander WF, Greco P, Spetter D, Fisher EB, Santiago JV: I get by with a little help from my family and friends. *J Pediatr Psychol* 20:449–476, 1995
- ¹³Anderson BJ, Brackett J, Ho J, Laffel LMB: An intervention to promote family teamwork in diabetes management task: relationships among parental involvement, adherence to blood glucose monitoring, and glycemic control in young adolescents with type 1 diabetes. In *Promoting Adherence to Medical Treatment in Chronic Childhood Illness*, Drotar D, Ed. Mahwah, N.J., Erlbaum, p. 347–366, 2000
- ¹⁴Wysocki T, Greco P, Harris MA, White NH: Behavioral family systems therapy with adolescents with diabetes. In *Promoting Adherence to Medical Treatment in Chronic Childhood Illness*, Drotar D, ed. Mahwah, N.J., Erlbaum, p. 367–382, 2000
- ¹⁵Patterson GR: *Coercive Family Process*. Eugene, Oreg., Castalia, 1982
- ¹⁶McLanahan SS, Booth K: Mother-only families. In *Contemporary Families: Looking Forward, Looking Back*, Booth A, Ed. Minneapolis, Minn., National Council on Family Relations, 1994, p. 405–428
- ¹⁷Hanson CL, Henggeler SW, Rodrigue JR, Burghen GA, Murphy WD: Father-absent adolescents with insulin-dependent diabetes mellitus: a population at risk? *J Appl Dev Psychol* 9:243–252, 1988
- ¹⁸Harris MA, Greco P, Wysocki T, Elder CL, White NH: Chronically ill youths from single-parent, blended, and intact families: assessing health-related and family functioning. *Fam Health Sys* 17:181–196, 1999
- ¹⁹Auslander WF, Anderson BJ, Bubb J, Jung KC, Santiago JV: Risk factors to health in diabetic children: a prospective study from diagnosis. *Health Social Work* 15:133–142, 1991
- ²⁰Overstreet S, Goins J, San Chen R, Holmes CS, Greer T, Dunlap WP, Frenzt J: Family environment and the interrelation of family structure, child behavior, and metabolic control for children with diabetes. *J Pediatr Psychol* 20:435–447, 1995
- ²¹Miller-Johnson S, Emery RE, Marvin RS, Clarke WL, Lovinger R, Martin M: Parent-child relationships and the management of insulin-dependent diabetes mellitus. *J Consult Clin Psychol* 62:603–610, 1994
- ²²Wysocki T: Associations among teen-parent relationships, metabolic control, and adjustment to diabetes in adolescents. *J Pediatr Psychol* 18:441–452, 1993
- ²³Anderson BJ, Coyne JC: "Miscarried helping" in the families of children and adolescents with chronic diseases. In *Advances in Child Health Psychology*, Johnson JH, Johnson SB, Eds. Gainesville, Fla., University of Florida Press, 1991, p. 167–177
- ²⁴Wysocki T, Meinhold PA, Abrams K, Barnard MU, Clarke WL, Bellando BJ, Bourgeois MJ: Parental and professional estimates of self-care independence of children and adolescents with IDDM. *Diabetes Care* 15:43–52, 1992
- ²⁵Wysocki T, Taylor A, Hough BS, Linscheid TR, Yeates KO, Naglieri JA: Deviations from developmentally appropriate self-care autonomy. *Diabetes Care* 19:119–125, 1996

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