

Young Adults With Diabetes

Need for a new treatment paradigm

The results of the study reported by Bryden and et al. (1) in this issue of *Diabetes Care* present a sobering perspective on the challenges and lost opportunities faced during the transition of adolescents with diabetes to early adulthood. As highlighted by these findings, young adults with diabetes are a forgotten group, whose special needs seem to fall outside the primary focus of both pediatric and adult medicine (2). Many challenges are confronted at this critical transition when young adults take over the responsibility for their own self-care (3). The adult medicine culture is generally less forgiving of the behavioral and developmental struggles of the patient, and this can be unsettling to some young adults. In addition, many parents are unnerved by the, often abrupt, change in their role when their child “graduates” from the care of the more family-focused pediatric environment. The overwhelming changes in the first phase of the young-adult period (including graduating from high school, moving away from home, beginning new educational directions, and beginning to work and to be self-supporting) are often a distraction from the demands of managing diabetes. However, later, the developmental focus shifts toward making choices and plans about relationships, work directions, and lifestyle behaviors. This second phase of the young-adult period, when the life-long routines of self-care are set, can present a window of opportunity for the provider to intervene and to influence habits that will help to determine the future health of young adults with diabetes.

What are some of the key priorities in the care of young adults with diabetes? First, to develop a strong relationship that will ensure continued follow-up and that over time could be translated into influence to promote change in self-care behavior. Second, to work in a partnership with the patient to formulate realistic and attainable treatment goals that will foster a sense of success, self-efficacy, and engagement in self-care. Third, as suggested by

the findings of Bryden and et al. (1), to ensure that high-risk adolescents with psychological problems have continuity of psychological care into the young-adult period.

The successful transition of an older adolescent graduating from pediatric medicine to a new health-care provider can be challenging. Retrospective data from the Joslin Clinic population indicate that irregular clinic attendance is an important predictor for the ultimate development of diabetic nephropathy (4). Developmentally, older teenagers have a sense of “invulnerability” and tend to discount risks to their future health and the need for medical care (5). The nature of the relationship with the pediatric provider can be an important factor in this transition. If there is a strong, positive, and consistent bond with the pediatric team, it may be difficult for some older teenagers to change “loyalties.” Conversely, if there is a judgmental or fragmented experience with pediatric providers, it may be difficult for the older adolescent to initiate another “diabetes relationship.”

The traditional model of medical care, in which the physician prescribes the treatment plan, does not conform with the realities of living with a chronic illness, where the patient has responsibility of their own care on a daily basis (6). As a counterpart to the new relationship that evolves between the parent and the child during the transition from adolescence to young adulthood, this phase of development should be accompanied by a reorientation of the provider-patient relationship to a collaborative model, in which the provider serves as the patient’s guide in making informed choices about living with diabetes. The perceptions of the patient and provider of the important priorities in care will frequently differ. In contrast to the patient presenting at a time of crisis (such as diabetes diagnosis), who usually expects the physician to be directive, the asymptomatic young adult will be less receptive to this didactic approach and may not recognize the need for major

changes in their diabetes management; thus, unrealistic demands by the new physician with whom they have not yet developed a bond of confidence may be perceived as an intrusion on their sense of personal control, and this can lead to estrangement from care and follow-up.

In formulating the treatment plan and goals, the provider needs to sensitively assess the expectations and receptiveness to change of the young adult and should consider the context of life circumstances (such as the competing priorities faced by the college student, for example) and other barriers (such as the fear of hypoglycemia or concerns about weight gain, for example) that impact on self-care (7,8). The first few years after high school are often a stage when the patient is not receptive to major changes in the diabetes regimen (9). The focus of care may need to be directed at ensuring that the young adult has annual dilated eye examinations and urine microalbumin measurements and counseling concerning issues such as minimizing the risks of hypoglycemia from binge drinking, coping with the impact of diabetes and hypoglycemia on relationships, contraception, and the challenge of integrating the demands of the diabetes into a busy schedule (10). The patient who feels respected and whose fears and concerns are acknowledged is more likely to respond to the guidance of their physician (11). Changes in the diabetes program will often need to be introduced incrementally, so that they can be more readily integrated into the patient’s routine. Furthermore, the benefits of these changes will often need to be framed from the perspective of the patient. For example, the tools of physiological insulin replacement (multiple daily injections, insulin pumps, and carbohydrate counting) should be presented to the patient as a means to open up freedom in their lives rather than simply as a means to intensify glycemic control. The young adult who is athletic will relate to the importance of optimizing diabetes control around exercise, and this can be a starting

point for engaging the patient to improve his/her self-care. Goal setting has an important role in the complex process of promoting behavioral change (12). Goals that are attainable, even if they are far from ideal, will foster a sense of success that can drive greater improvements as goals are further advanced.

The young-adult period is a time of intense maturational change, when life-long routines of self-care are frequently set. This phase can be a window of opportunity for the clinician to shape the behavior that will help to determine the future health of young adults with diabetes. To be an agent of change in this process and in the implementation of intensive therapy, the clinician must actively collaborate with the patient to identify and overcome the barriers that stand in the way of improved self-care.

HOWARD A. WOLPERT, MD¹
BARBARA J. ANDERSON, PHD²

From the ¹Section of Adult Diabetes, Joslin Diabetes Center, Boston, and the ²Mental Health and Behavioral Research Unit, Joslin Diabetes Center, Boston, MA.

Address correspondence to Howard A. Wolpert, Senior Physician, Joslin Diabetes Center, One Joslin Place, Boston, MA 02215. E-mail: howard.wolpert@joslin.harvard.edu.

This editorial is dedicated to the late Beth

McVeigh (1971–2000), who courageously coped with the devastation of diabetes, always engaged with her providers in her diabetes self-management, and worked hard to fulfill her potential and the developmental milestones of the young-adult period. Beth was emotionally healthy, a brilliant student, an involved member of her family, and a true partner in her diabetes care.



References

1. Bryden KS, Peveler RC, Stein A, Neil A, Mayou RA, Unger DB: The clinical and psychological course of diabetes from adolescence to young adulthood: a longitudinal cohort study. *Diabetes Care* 24: 1536–1540, 2001
2. Sawyer SM, Blair S, Bowes G: Chronic illness in adolescents: transfer or transition to adult services? *J Paediatr Child Health* 33:88–90, 1997
3. Barbero GJ: Leaving the pediatrician for the internist. *Ann Int Med* 96:673–674, 1982
4. Krolewski AS, Warram JH, Christlieb AR, Busick EJ, Kahn CR: The changing natural history of nephropathy in type 1 diabetes. *Am J Med* 78:785–794, 1985
5. Wysocki T, Hough BS, Ward KM, Green LB: Diabetes mellitus in the transition to adulthood: adjustment, self-care, and health care status. *J Dev Behav Pediatr* 13: 194–201, 1992
6. Anderson RM: Patient empowerment and the traditional medical model. A case of

- irreconcilable differences? *Diabetes Care* 18:412–415, 1995
7. Peveler RC, Davies BA, Mayou RA, Fairburn CG, Mann JI: Self-care behavior and blood glucose control in young adults with type 1 diabetes. *Diabet Med* 10:74–80, 1993
8. Polonsky WH, Anderson BJ, Lohrer PA, Welch G, Jacobsoon AM, Aponte JE, Schwartz CE: Assessment of diabetes-related distress. *Diabetes Care* 18:754–760, 1995
9. Ramchandani N, Canteley-Kiser JM, Alter CA, Yeager SD, Tamborlane WV, Chipkin SR: Self-reported factors that affect glyce-mic control in college students with type 1 diabetes. *Diabetes Educ* 26:656–666, 2000
10. Jacobson AM, Hauser ST, Cole C, Willett JB, Wolfsdorf JI, Dvorak R, Wolpert HA, Herman L, De Groot M: Social relationships among young adults with insulin-dependent diabetes mellitus: ten-year follow-up of an onset cohort. *Diabet Med* 14:73–79, 1997
11. Kaplan SH, Greenfield S, Ware JE: Assessing the effects of physician-patient interaction on the outcomes of chronic disease. *Med Care* 27:S110–S127, 1989
12. Wolpert HA, Anderson BJ: Metabolic control matters. Why is the message lost in the translation? The need for realistic goal-setting in diabetes care (Letter). *Diabetes Care* 24:1301–1303, 2001