Coping Profiles Associated with Barriers to Self-Management in Adolescent Diabetes

Alison Hartog ~ Shelagh Mulvaney, PhD ~ Ken Wallston, PhD

Introduction
Pediatric Type 1 diabetes affects one in every 400-500 children making it one of the most widespread childhood chronic illnesses (NIDDK, 2003). Individuals with type 1 diabetes need to plan for and complete many daily tasks including taking insulin up to five times a day and determining the appropriate dose of that insulin in relation to diet and exercise. Previous research has shown that adolescents have a difficult time coping with the physical, emotional, and social demands of self-management of type 1 diabetes, and that more than half do not adequately complete self-management tasks teenager (Kynngas, et al. 2000). Problem solving and coping skills training have been shown to enhance adolescent self-efficacy and competence, improve completion of self-management tasks, and improve diabetes outcomes (Graue, et al. 2004). The purpose of this study was to see if unique coping profiles emerged for the type of barrier identified by the adolescent and if these coping profiles differed from the general coping profile of the entire sample.

Methods
Sample – Type 1 adolescent diabetic patients were recruited from the Eskind Diabetes Clinics. The eligibility criteria restricted the sample to adolescents between 13 and 17 who had been diagnosed with Type 1 Diabetes for more than 6 months. Participants were either approached in clinic and recruited or filled out an interest card in the waiting area of the clinic and were contacted to set up a recruitment appointment at their home.

Design – The data presented here are part of a larger survey used within a randomized trial of a diabetes self-management intervention. At the time of recruitment, adolescents completed a survey on the Internet that assesses diabetes self-management practices, barrier identification, problem solving skills, and coping strategies.

Measures – Self-management barriers were elicited by asking about the last time the participant remembered not taking care of diabetes when they should have, and the main thing that caused them not to take care of diabetes. Participants could choose one of 5 barrier types: People, Situation, Feeling, Thought, or Diabetes literacy/knowledge. Coping with the barrier was then measured using 13 subcategories of the Brief COPE inventory scale developed by Carver (Carver, 1997).

Analyses
Data from surveys was analyzed using SPSS (v16). Descriptive statistics and graphical analyses were used to examine the overall reported coping style effectiveness the coping profiles by type of self-management barrier.

Results
At the time of analyses, 25 adolescents had been recruited and filled out an assessment survey. Table 1 shows descriptive statistics for the sample and the reported self-management barriers.

Discussion
The study is limited by a small sample and limited characterization of the actual barrier encountered. The results indicate that adolescents believe a number of different strategies are helpful in coping with barriers to diabetes self-management. Overall, humor, denial, behavioral disengagement, and self-blame were considered the least effective strategies. Adolescents tended to use more adaptive coping strategies such as positive reframing, acceptance, and emotional support.