

Title of Intervention: A behavioral intervention for adolescents with insulin-dependent diabetes mellitus

Intervention Strategies: Group Education, Supportive Relationships

Purpose of the Intervention: To increase treatment adherence and improve stress management in adolescents with insulin dependent diabetes mellitus (IDDM)

Population: Adolescents with IDDM between the ages of 11-18 and their parents

Setting: Health center in Murcia, Spain; health care facility-based

Partners: None mentioned

Intervention Description:

- Group Education: Twelve weekly sessions were held at a health center. Researchers and two psychologists (one who was a diabetic and one who had worked as a nurse with diabetic children) facilitated the sessions. Lessons, demonstrations and homework were given. Information focused on self-care skills, how to take proper measurements, the impact of stress on glycemic control and advice on how to handle social situations related to having diabetes.
- Supportive Relationships: Parents attended sessions that provided information about diabetes and treatment. Emphasis was placed on reinforcing their child's adherence behavior.

Theory: Not mentioned

Resources Required:

- Staff/Volunteers: Two psychologists
- Training: Not mentioned
- Technology: Not mentioned
- Space: Meeting space
- Budget: Not mentioned
- Intervention: Educational materials, materials to practice self-care skills
- Evaluation: Questionnaires, tests

Evaluation:

- Design: Quasi-experimental
- Methods and Measures:
 - Several self-report questionnaires and tests were used to assess the knowledge of the subjects on different aspects of diabetes; the types and severity of different events that interfere in behavior; family behaviors supportive of diabetes; degree of uneasiness and likelihood of response in social interactions relating to diabetes; blood glucose testing skills; and blood glucose discrimination assessment and training.

Outcomes:

- Short Term Impact: Adolescents and parents displayed significant increases in knowledge. There were significant decreases in non-supportive parental behavior, the severity of daily hassles and uneasiness in social skills. There was no change in positive supportive behavior of parents or adolescents' perceived amount of social support from the family.
- Long Term Impact: Adolescents who participated in the intervention displayed significant improvement in glucose analysis behaviors, testing skills and self-reported frequency and had a significant decrease in error when estimating glucose levels, which helped to reduce complications. However, there was no effect on dietary and exercise adherence.

Maintenance: Not mentioned

Lessons Learned: Not mentioned

Citation(s):

Mendez FJ, Belendez M. Effects of a behavioral intervention on treatment adherence and stress management in adolescents with IDDM. *Diabetes Care*. Sep 1997;20(9):1370-1375.