

Letters and Comments

Emotional Side Effects of Diabetes Educational Program

Rubin et al. (1) evaluated an intensive program of diabetes education designed to improve self-care practice, emotional well-being, and metabolic control by examining changes after the program in self-care practices, emotional factors, and glycemic control. They found that the emotional status of program participants was better at the end of the program than it was before, and this improvement markedly contributed to the general amelioration of diabetic metabolic control. Similar results were observed in another study (2). We agree with Rubin et al.'s conclusions, but on the other hand, in exceptional cases, we believe that an intensive diabetes education program can produce severe adverse emotional effects in predisposed patients. We describe an illustrative case.

A 19-yr-old diabetic patient was admitted in our unit to ameliorate his diabetic control. He was diagnosed with insulin-dependent diabetes mellitus when he was 12 yr old because of a ketoacidotic episode. He received conventional insulin therapy with two doses (before breakfast and before supper) of NPH insulin and an isocaloric diet at the time of admission. His metabolic control was deficient, with an HbA_{1c} level of 11.8% (normal values 5.5–7.6%). Evaluation of chronic complications revealed only abnormal microalbuminuric levels. He was included in our usual diabetes education program, consisting of didactic instruction, skill exercises, and behavior modification techniques. He was discharged from our unit with regular preprandial insulin doses and NPH before supper. In a few weeks, amelioration of metabolic control was achieved. During the weeks that followed the diabetes education program, the patient gradually developed disturbances in his

normal psychological behavior. The patient's diabetic self-care control acquired obsessive-compulsive characteristics: repeated weighing of food (up to 8–10 times) before each meal, checking capillary blood glucose 12–18 times/day (worrying about whether it was "done right" and repeating it until it was "right"), and high levels of anxiety related to diabetic complications and their prevention. He was unable to lead his usual social and family life, including having to drop out of college. At this time, a psychiatric evaluation was performed. The psychological examination found retrospectively an obsessive behavior during childhood in our patient that had not been previously noticed by his parents. The psychiatric diagnosis was an obsessive-compulsive disorder according to the Diagnostic and Statistical Manual of Mental Disorders criteria (3,4), and treatment with clomipramine was initiated. It was thus recommended to stop self-monitoring of blood glucose (SMBG). After SMBG stopped, a progressive resolution of behavior disturbances was observed.

In patients with chronic diseases and premorbid personalities, psychological disorders have been described after their inclusion in a health education program (5,6). It is easy to understand how a diabetes education program precipitated an obsessive-compulsive disorder in our patient. Therefore, we believe that a psychological assessment must be performed before a diabetes education process is begun to rule out patients at high risk for developing emotional disturbances. Select patients with emotional disorders would be provided with special educational techniques.

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Reply

We appreciate the support Conget et al. (this issue, p. 901) offer for our finding that intensive diabetes education generally improves emotional well-being (1), and we agree that, in exceptional cases, intensive intervention might produce adverse emotional effects in individuals with preexisting psychological problems. However, we question whether the case Conget et al. describe is an illustration of such effects. In addition, we differ with Conget et al. concerning the implications of these exceptional cases for diabetes education and treatment.

If we assume that diabetes education produced the psychological problems of the patient Conget et al. describe, we risk confusing symptomatology with causation. The young man's obsessive-compulsive disorder expressed itself in part as disturbances in the realm of his diabetes self-care, but this does not establish the fact that his disorder was caused by interventions in this realm. We note that obsessive-compulsive disorders most commonly emerge during late adolescence (2), the young man's disorder expressed itself in several realms, and several factors might have contributed to the exacerbation of this man's underlying problems. Although the young man's symptoms were relieved after treatment with clomipramine and termination of diabetic self-control, it should not be assumed that changes in regimen caused changes in the patient's psychological state. Clomipramine is widely used in Europe for the treatment of obsessive-compulsive disorders, and this medication might have been the essential factor in improving the patient's emotional status.

Conget et al. assume that it is possible to predict who will experience severe adverse emotional effects from diabetes education. Based on this assumption, they recommend eliminating those at high risk before the educational process is begun. Unfortunately, even if it were possible to accurately identify such people, this action would withhold a potentially beneficial educational program from some patients. For example, Conget et al. report improved metabolic control for the patient they describe.

We prefer another approach—close monitoring of participants during and after the educational intervention. If an underlying psychological disorder is revealed, the patient can be referred for assessment, counseling, or pharmacological treatment. If the patient is disturbed by something he/she hears during the educational program (e.g., the possibility of complications), his/her fears can be addressed. If there are questions about the appropriate level of regimen intensity for an individual patient, changes in regimen can be titrated, the patient's response can be monitored, and adjustments can be made accordingly.

Conget et al. remind us that diabetes education does not produce universally beneficial results and that some patients require special attention. We agree. Furthermore, we believe that research should be directed toward estimating the number of patients who may be at risk and improving our ability to identify and protect these patients.

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Pediatric Primary Care for Children With IDDM

Henry (1) recently reported the results of a self-report survey of practicing pediatricians in Michigan regarding their routine ambulatory care of children with insulin-dependent diabetes mellitus (IDDM). We published similar data gathered from pediatricians practicing in Virginia (2) and present a comparison of the findings from these two studies. Survey response rates were similar in both studies (66% [1] vs. 77% [2]). Use of human in-