Marital Interactions in the Process of Dietary Change for Type 2 Diabetes

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ABSTRACT

Objective: To explore how couples adjust to dietary management of type 2 diabetes.

Design: Couples were interviewed, first together and then separately, during the first year after diagnosis and 1 year later.

Setting: Qualitative interviews conducted in hospital classrooms using a semistructured interview guide.

Participants: Couples (N = 20) with a recently diagnosed spouse who met the study criteria were purposefully selected from volunteers solicited from hospital-based diabetes classes.

Phenomenon of Interest: Processes used by the couple to address the prescribed diet.

Analysis: Thematic analysis of interview transcripts using grounded theory to identify patterns of adaptation processes used over time.

Results: Three couple categories emerged (cohesive, enmeshed, and disengaged), representing adaptation to the diabetic diet. Initially, 5 couples were cohesive (teamwork approach), 7 were enmeshed (nondiabetic spouse responsible for the diet; spouse was dependent), and 8 were disengaged (spouses functionally separate; spouse was solely responsible for the diet management). A year later, the majority of couples were disengaged (n = 14), 1 couple remained cohesive, and 4 couples remained enmeshed. Themes of flexibility, roles, rules, and communication varied across categories.

Conclusions and Implications: Understanding categories of marital adjustment to the diabetic diet may improve nutrition-based diabetes interventions. Further study is needed to verify these findings in larger and more diverse populations.

KEY WORDS: diabetes, qualitative interviews, couple interactions, family systems theory

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INTRODUCTION

The prevalence of type 2 diabetes is approaching epidemic proportions in the United States.[1] Adherence to recommended diets, the cornerstone of diabetes treatment,[2,3] has been identified as a major obstacle in diabetes management.[4,5]

When obstacles to dietary adherence are elicited, family reactions (often termed family support) emerge as major influences.[6,7] Dietary treatment of type 2 diabetes disrupts family routines, especially mealtime routines, which are fairly resistant to change.[8] Some studies indicate that family support is associated with better adherence to diabetic regimens and glycemic control[9-12] and is the strongest, most consistent predictor of adherence.[13,14]

Spousal interactions (ie, spousal support), a subset of family support, have a particularly strong impact on adjustment to the diet because spouses are often intricately involved in many of the tasks required for diet management.[15,16] Spousal support has a major impact on food selection and meal planning.[16] Further, significant others' perceptions of the importance of following the regimen are a stronger predictor of the patients' behavioral intention than are the patient's own beliefs.[17]

However, no one definition of spousal support exists,[18] especially one that includes negative spousal interactions. Although patient-perceived supportive behaviors from spouses have been described, little is known of the marital interactions around adjustment to diet management. Theories offer a framework for organizing and assessing what we observe about behaviors.[19] Family systems theory helps explain why family members behave as they do toward one another[20] and is a logical choice to guide an investigation of interaction around diabetes diet management. The family

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(or marital dyad) is not a group of individuals but a dynamic system in which each individual's behavior affects everybody else. Additionally, family systems theory includes dimensions of cohesion (degree of emotional closeness), flexibility, and communication, all major coping strategies for stressors such as illness.[21]

Although few studies have used family-based theory to study adults with type 2 diabetes, a number have used family theory to examine family functioning and glycemic control of type 1 diabetes in children and adolescents. Both cross-sectional and longitudinal studies indicate that good family functioning is associated with better adolescent glycemic control.[11,22-26]

We chose family systems theory to guide our inquiry to shift our attention from the individual patient to the dynamic marital subsystem (the couple) in which diet management occurs. Our subjects were couples in which one spouse had been recently diagnosed with type 2 diabetes. We used qualitative methods to satisfy our research objectives: (1) to provide a rich description of the processes (mechanisms used to regulate member relationships such as role enactment and rules[27]) associated with dietary change over time for diabetes at the couple level and (2) to group couples, if possible, according to observed marital adaptation patterns around the diabetic diet.

METHODS

Study Design

We used a longitudinal design of 2 sequential interviews, 1 year apart, with 20 couples. The initial interview occurred within 1 year after diagnosis. The second interview occurred a minimum of 1 year following the first. The purpose of the initial interview was to outline the framework of adjustment, whereas that of the second interview was (1) to build a richer description of the themes centered on the couples' adaptation to the diabetic diet and (2) to examine reported changes that occurred in the couples' behavior over time to yield process-oriented themes.

Participant Recruitment

Volunteers were recruited through multiple visits to 4 outpatient hospital diabetes education programs meeting the standards of the Pennsylvania Department of Health Diabetes Control Program and serving predominantly Caucasians of European descent in central Pennsylvania. Three hospitals were the major diabetes care centers for 2 counties with metropolitan areas and the fourth served 1 rural county. All 3 counties were contiguous. We explained the study, distributed informational flyers, and circulated a sign-up sheet at the beginning of class. All volunteers were contacted by telephone to provide more study information and to determine eligibility. Participation criteria were that (1) diabetes was diagnosed within 1 year of recruitment; (2) the person with diabetes was 45 years or older, based on increased prevalence above this age[28]; (3) the couple was married or cohabiting; (4) both partners agreed to be interviewed; and (5) at least the patient had completed the outpatient sessions on dietary management. It took 10 months to recruit 20 couples from 24 meetings (on average, 14 participants were present) using purposeful sampling to secure equal numbers of men and women with diabetes and a mix reporting success or difficulty with the diet. Many attending classes did not meet eligibility criteria (ie, they were single, divorced, widowed, or more than 1 year past diagnosis). The cooperating diabetes educators estimated that half of the class participants were married and only 40% of those were newly diagnosed. Of those estimated as eligible (N = 67), 60% (n = 40) met our criteria. Half of these met purposeful criteria for the study. The Office for Research Protections at The Pennsylvania State University and the participating hospitals' research review committees approved all procedures.

Interview Protocol

Interviews were conducted in participating hospital meeting rooms, except one done in the couple's home at their request. The couple interview protocol, including tape recording, was explained by telephone, and the subsequent interview was scheduled at a time convenient for the participants. At the initial interview, all participants signed an informed consent form granting permission to tape record the conversation and then completed a demographic questionnaire that recorded age, height, weight, educational level, income range, and ethnicity. One interviewer, trained during a pilot study, conducted all of the interviews using a semi-structured interview guide. First, the interview with both spouses took place, typically lasting an hour. Questions to the couple included open-ended queries about meals before the diabetes diagnosis (eg, How did the cooking work before the diagnosis?) and after the diagnosis (eg, How do meals work now? Describe a typical day.). Blood glucose monitoring was not directly assessed. Separate interviews with each spouse followed and lasted about 30 minutes, with the order determined by a coin toss. Questions to the spouses focused on behaviors that contributed in some way to diet management. For example, those spouses with diabetes were asked, "What kinds of things does your spouse do or say that help you follow your meal plan?" Likewise, spouses without diabetes were asked, "What kinds of things do you do or say to help your spouse follow his/her meal plan?" At the conclusion of the 3 interviews, the couple received a cash gift. The interviewer requested and received permission to contact all of the couples 1 year later regarding the second interviews.

The second interview guide included both general and specific follow-up of initial findings. The couples were contacted again by telephone, about 1 month prior to the anticipated date of the second interview. All but one couple (n = 19) agreed to participate. Reasons for nonparticipation were not disclosed. The initial interviews were conducted