

Transformational Experience of a Student Nurse with Diabetes: A Case Study

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Purpose. The current study was aimed to investigate the transformational experience of a female student nurse living with type 1 diabetes.

Methods. A case study of a 24-year-old diabetes patient was conducted, with interviews concerning the evolving process she had lived through during the period from her later high school years to her graduation from nursing college.

Results. Followings were identified as 5-transformation process: With her diabetes-related limitation, the participant experienced 'conflict involving choosing a college and major'. The participant tried to be in charge of managing her diabetes and stepped forward to 'adaptation to college life as a new environment', and she learned more about the process of 'evolving awareness of caring' and developed herself further through the process of 'integration of the nurse identity into self-identity', and finally through the process of 'progression and preparation for getting a job' she achieved her goals, being positive about the future.

Conclusions. The results of the study can provide individuals with diabetes a way of self-management and help the patients and their families in diabetes education. Further research will be needed to refine the results of this study and to learn more about the experiences of patients with type I diabetes in college years.

Key Words : Diabetes type I, Case study, Transformation, Nursing student

The control and management of diabetes and other chronic diseases are high-priority public health issues in the 21st century. According to the Korea Health Insurance Review Agency, by the end of 2003 more than 4,010,000 people have needed health treatment because of diabetes. The number of patients with diabetes will increase by more than 7,220,000, and will reach the ratio of 1 to 7 out of the entire population by 2030 in Korea (The Seoul Newspaper, March 14, 2005).

In addition, we should consider the complications of diabetes, which result in loss of physical capacity and a decrease in the quality of life for the diabetes patients and their families, and consequently represent a major socioeconomic burden on the health care system (Hernandez, Antone, & Cornelius, 1999; Narayan,

Benjamin, Greg, Norris, & Engelgau, 2004).

Recently, researchers have emphasized lived experience to denote the aspects of an illness that result in transformation, courage and spirituality (Paterson, Thorne, Crawford, & Tarko, 1999), whereas in earlier years, such experiences might have been thought of as characterized by loss, burden and sorrow (Thorne & Paterson, 1998; Thorne et al., 2002).

Earlier models of diabetes care focused on adherence to medical recommendations (Hernandez et al., 1999), but we need to understand life with diabetes beyond adherence. We must study how this disease evolves over time and investigate circumstances in the life trajectory (Thorne, Patterson, & Russell, 2003).

As Tilden, Charman, Sharples and Fosbury (2005)

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mentioned, although enough health sector effort has been expended on education concerning diet and exercise, not enough research has been done on the way diabetes affects a patient's sense of identity. Paterson et al. (1999) have indicated that more research is necessary to determine the correlations between transformation and the effectiveness of certain self-management practices (Paterson & Thorne, 2000).

Earlier studies mentioned that relationships between the patients and educators should be based on deeper understanding of the patients' experience living with diabetes, and when the providers do not understand patients' conceptions of diabetes their communication would be impaired (Hernandez et al., 1999).

Therefore, health care providers should pay attention to patients' life situations to provide supports that increase their compliance. Individual patients are different in their responses to living with diabetes, but little is known about the experience of diabetes from the perspectives of those who are living with it.

What motivates a female student nurse with diabetes to learn about the disease and to take care of herself would be important in order to decrease complications of the disease and to promote compliance including her disease control.

Research Purpose

This study was conducted to understand what it means for a female nursing student to live with type 1 diabetes. More specifically, it was focused on the experience of diabetes on a daily basis through a case study. The results of the study could provide the insight needed to prevent diabetes complications and to improve self-management of diabetes.

Procedure

To acquire information concerning living with diabetes, this study relied on unstructured interview method because of its focus on understanding the disease experience from the perspective of an individual patient. It was felt that a case study of this type should concern itself with a female nursing student's firsthand experience with type 1 diabetes rather than with the way researchers or others conceptualized the experience. Based on the review of the literature on the research method (Anderson, Funnell, & Hernandez, 2005; Han, Park, & Cho, 2000; Kim & Shin, 1996; Kvale, 1996; Strauss & Corbin, 1998), the use of this approach

was appropriate because of the need for an interpretation, not just a description, of the evolving experience of a female nursing student with type 1 diabetes during the period spanning the latter portion of her senior high school years to around the point of graduation from college. By listening to and reflecting on the patient's descriptions, the researchers were able to gain an understanding of what it means to live with type 1 diabetes.

Participant

The participant was a 24-year-old woman with type 1 diabetes who was working as a full-time registered nurse in a university hospital in Seoul, Korea after she graduated from the university. She was initially diagnosed with diabetes at the age of 14 (8th grade middle school).

The researcher met the participant for the first time when she was a high school student in the 11th grade in 1999. At that time the researcher was teaching a community health nursing course and went to its clinical site, a girls' high school. The school nurse introduced the subject to the researcher. The participant was one of the subjects in the researcher's doctoral dissertation study "Adolescents' Experience with Diabetes Mellitus" (Choi, 2000).

The participant took part in the study voluntarily. The procedure was explained to the participant, who agreed to permit interviews. The participant was told that there would be no discomfort or risks involved in responding to the interviews. It was also explained that all the interviews would be anonymous and would be used only for the study. The participant received no direct benefit from participation in the project. The participant's home was in the researcher's neighborhood, and the researcher was able to access the participant and her parents without any difficulties and to communicate with them frequently.

Data collection

The interviews for this study took place from July 1, 2000 to July 30, 2005. They were face-to-face and unstructured interviews, once or twice a month and they were conducted in a private room and began with a broad question, "What is it like for you to live with diabetes?" The researcher asked the participant such as all aspects of her life, including school, home, sports, social life, work, and other activities. Additional open-ended questions were used, as needed, to clarify responses given by the participant. Each interview was approximately

1 hour in length, and all interviews were recorded on audiotape. The interviews were continued until the data reached to the saturated point.

The researcher has been meeting the participant for around 6 years.

During this time, the interviews were conducted as needed and the interviewer and the participant have both been connected and have become close confidantes for each other. The participant received this study's interviewer and established a close relationship with her from the beginning and talked to her in an openhearted way, telling stories about her daily life with diabetes.

Data analysis

After the unstructured, face-to-face interviews were conducted, the participant's accounts were transcribed verbatim by the researcher, read and reread several times in their entirety to obtain an overall sense of the data and to analyze for themes. Statements and phrases that stood out as meaningful were highlighted, and thematic phrases were extracted from the highlighted segments. Careful reflection on the constant comparative procedure of the data was used to guide the project inquiry.

BACKGROUND TO THE RESEARCH STRATEGY

Case study

According to Tilden et al. (2005), the case study is useful for complicated associations. Case study is the method of choice when the phenomenon under study is not really distinguishable from its context.

We learn from the narrative as we reflect on the content and make sense of it, if it is based on what we know and believe. Cases are stories that help us learn about life experience. Case studies can be a valuable source of empirical data (Cortazzi, 1993).

Instead of impatiently trying to make generalizations from a single case, we should be impatient with the generalizations that we make and try to find an internal pattern (Tilden et al., 2005).

The single-case method was used in the present study to elicit a high level of detail embedded in the narrative regarding the participant.

Transformation

While researchers in the past decades regarded living

with a chronic illness as a burden, recently, however,

“several authors have suggested that having a chronic illness can actually be a gift, something that enhances the quality and meaning of life” (Paterson et al., 1999, p.786). This leads to the conscious decision to engage in controlling the course of life with a chronic disease to the extent possible.

Thorne et al. (2003), mentioned, “although self-care decision-making in chronic illness is such that it is difficult to describe, predict, or understand” (p. 1349) there might be a few truly universal or generalized features within it. Despite the individual variations that are apparent, it seems feasible and reasonable to begin to articulate common themes and patterns (Thorne et al., 2003).

However, some researchers have commented on the time and energy demands required by the transformative process (Coward, 1990; Paterson et al., 1999). Paterson et al., (1999) say that the process consists of restructuring the illness experience and restructuring the self. Paterson, et al., (1999) assert that their transformation model is composed of (a) the experience of transformation, (b) challenges leading to transformation, and (c) differentiation of self and body. They further assert that the three themes characteristic of the differentiated self are (a) people with diabetes know their body responses best, (b) each person has unique responses that cannot be predicted by textbook cases and universal norms and (c) people with diabetes have a practical knowledge that is largely inaccessible to those without diabetes. By virtue of the differentiated self, the participant learns to relate to the body in a way that enables him or her to learn new ways of being and doing while living with diabetes--in other words, to be transformed (Paterson et al., 1999).

Similar to Paterson et al. (1999), Dickinson & O'Reilly (2004), identify 5 themes: (a) blending in with the adolescent culture (b) standing out and being watched (c) weighing the options and making choices (d) being tethered to the system and to diabetes, and (e) struggling with conflicts.

Thorne et al. (2002) found that the chronic illness experience involved (a) learning: the decision to assume control, (b) fine-tuning: (i) the disease-specific context of self-care, (ii) experiencing the effects of the disease, (iii) managing the social context (iv) managing lifestyle, (v) managing treatment, (vi) managing health care, (vii) envisioning futures and (c) evaluating quality measures for

self-care decision making: (i) using experts and biomarkers (ii) creating individualized standards, (iii) theorizing complexity.

Tilden et al. (2005) seem to see the transformation process as first, a rejection of the diabetic identity, and second, the integration of the diabetic identity.

Zoffmann and Kirkevold (2005), studying the conflicting perspectives of diabetes patients and professionals in problem solving, identify 3 approaches to the situation: (a) a compliance approach that keeps the pattern unchanged, (b) a failure-anticipating approach and (c) a mutual acceptance approach that neutralizes the conflict.

“Transformative processes have not been described beyond vague generalities, and what has been articulated is not particularly revealing” (Paterson et al., 1999, p. 786).

Although the definition of transformation have remained muddled by variations and mastery problems (Paterson et al., 1999), in the present study ‘transformative process’ was needed to provide individuals with diabetes sufficient opportunities to speak about challenges they have encountered, to listen to their accounts and to identify the most effective ways to understand the experience of the transformative process.

RESULTS

Analysis of the participant’s accounts revealed the following 5-transformation process that captured the nature of this experience.

The participant had experienced hospitalization for the first time and learned about the disease and its treatment since her initial diagnosis at age 14. She had used insulin injection and taken oral hypoglycemic pills three times a day with checking her blood glucose level once or twice a day. After junior college year, she had taken oral hypoglycemic medicine without insulin injection and she visited her doctor once a month. The participant made concurrent efforts to healthy living practices in general, such as diet, exercise, stress management, and rest, including complementary therapies. The participant and her parents responded to her disease interventions and situations sensitively. In order to control her diabetes, they had tried to monitor her more vigilantly for untoward signs including hypoglycemia.

The participant had taken charge of her own life with the disease and learning how best to accomplish her diabetes management.

Conflict concerning the choice of a college and major

It was not easy for the participant with a chronic illness to choose nursing for her major at a university. The nursing college she wanted to apply to was competitive in the community, and the participant had heard that the college would be difficult for her. Clinical practice would be especially hard because she would have to deal with emotional stress as well as a strenuous physical workload. She was also worried because she would need to leave home for her clinical practice for more than one month. Here is an English translation of what she said concerning this aspect of the problem:

My parents would not agree to my attending nursing college, due to my diabetes. They seemed to be concerned about how I could deal with course work, and furthermore, how I could work as a registered nurse with diabetes.

However, I thought that I could do more for my patients, especially if they had diabetes, because I had it, too. I would have much more experience and I would have greater understanding, than other nurses.

While emphasizing this point to my parents and also explaining to them that I would be able to get a job readily after completing the course work, I tried to persuade them to allow me to enter a nursing college. After I repeatedly emphasized my desire to be a nurse, finally they allowed me to enter a nursing college.

In addition to helping patients and their families, I thought I could learn more about diabetes as well as control this disease in my own case.

The participant stated that if she could be admitted to nursing college, while feeling more confident about dealing with the next crisis that she might encounter, she could be more optimistic about her future and about living the way she wanted to live.

Adaptation to college life as a new environment

After being admitted to nursing college, the participant made efforts to adapt to her new environment with its new friends and teachers, in a school and locale that were both unfamiliar. She thought she could adjust successfully, and she felt that she could handle her diabetes better. The participant stated that she did not necessarily follow a strict diet, but she was careful about what she ate. She did not adhere to a regular exercise program, but she did exercise a little overall. She stated that she felt she took fairly good care of herself.

Because her diabetes was under control with exercise and diet, she did not think that she needed to tell her friends or other people about her disease.

During my high school years, I used to study in one classroom all day, but in college I needed to move from one classroom to another for my courses. Therefore, I had to walk farther than before. On top of that, the nursing department building was located at the far end of the school, so this required me to walk even more than I might otherwise have had to at the school. This was ultimately helpful to me because of the extra exercise. In addition, besides walking from my dormitory to the hospital, I needed to walk back and forth many times in my ward, during my clinical practice.

Regarding diet, I had bread and milk for breakfast, a little of the usual Korean food for lunch and the normal amount of Korean food for dinner. I always considered choice and amount for my diet. I tried not to eat things that were harmful for diabetes, such as food that was fried or that contained sugar or fat. When asked why I did not eat certain things with friends, sometimes I just gave them a casual, noncommittal answer. For example, when I had pizza and soda with them, I took a smaller slice or left a little explaining that pizza and soda were not my favorite foods.

So, I tried to diet in a natural way, choosing appropriate foods in small amounts. This has become a part of my life style now. I might mention that during my clinical practice I thought that, although I took a little bit more rice than usual, it was rather helpful for my clinical work.

The participant stated that she discussed aspects of her diabetes with her parents and, with their help, made decisions related to diabetes care. She felt that she received important support from her parents, including reminders to take good care of herself, eat the right foods in the right amounts, exercise and take prescribed medications.

Evolving awareness of caring

Although she still experienced stress in her clinical work, she felt that she was better adapted to hospital duties now than she was in the beginning. This was true despite the emotional stress she felt due to leaving home and staying away from her family.

Although she was still a nursing student completing her clinical practice, she felt the concept of caring was becoming an important part of her internal makeup. She talked about being able to communicate with patients, family members of patients and other health team members and relate to them more smoothly than before.

I felt awkward and unfamiliar with my clinical environment at first, but now, I have begun to speak first to other people.

Throughout my clinical work, I have never felt anxiety over my diabetes or physical difficulties.

If I met a diabetes patient, I could take care of him or her by relying on my experience with diabetes. I gained the confidence to help patients well through my clinical work, and I think that I will be more helpful to patients than I had thought at first. It was a good choice to enter nursing college.

She stated that her clinical practice revolutionized her and enabled her to improve her prospects for becoming a nurse. With hard work in clinical practice, she came to adapt to her new environment and achieve a more empathetic nature than ever before. She stated that her clinical practice gave her an opportunity to reflect on what life is like for the patient with or without diabetes, and what the concept of caring is. She stated that she would be confident of helping patients and their family members comprehensively.

Integration of the nurse identity into self-identity

The participant is a role model showing how diabetes can be integrated into a person's life. The participant believed that advice and education from another person with diabetes would be more acceptable than that given by a nondiabetic educator. Comments such as those listed below demonstrate the strength of this belief.

The participant stated that she could make a commitment to supporting and teaching diabetes patients and their families. From her diabetes arose a new sense of meaning.

Whenever I see the family members of patients, I feel sympathetic toward them. From what I have experienced, I think nobody can really understand what diabetics endure unless they go through it themselves. I would like to help my patients with comprehensive care.

I think a person does not really know anything--really understand it--unless it has happened to him. So I think, when seeing diabetes patients, I can share what I have learned and experienced, and still more, I can do my best to take care of them and help them get really well.

The participant stated that through her course work and clinical practice during her four-year college life, she had a positive outcome, and she felt her diabetes was her strength rather than her limitation. She said that she felt a sense of sublimation from her diabetes, and finally, she experienced growth of her depth of thought while living with her condition.

Progression and preparation for getting a job

The participant wanted to get a job in a major hospital in Seoul, Korea, leaving her home and parents. However, emphasizing her diabetes, her parents recommended that she not move to Seoul and asked her to stay and work in their hometown instead. After sufficient persuading she accepted the situation and decided to work in her hometown hospital, which is what her parents wanted, mostly because of her diabetes.

I wanted to go to Seoul and get a job there, but my parents would not agree to this. My mother was concerned about my living alone in Seoul, particularly about my eating, and recommended that I work in my hometown hospital instead.

My mother told me that I was managing my diabetes well, but if I went to Seoul, my diabetes could get worse. Although I could have stayed in the home of my mother's sister in Seoul if I got a job there, my parents wanted me to remain at home and work where they could help me immediately if necessary.

I am worried about getting a letter of recommendation from my college advisor. I need it in order to get a job. But I might have a difficult time due to my diabetes, even though it is under control and my blood sugar level is maintained within the normal range. When visiting my diabetic clinic, I discussed my condition with my doctor, with particular emphasis on whether I could handle my diabetes when I got a job as a nurse in a hospital.

I have not used an insulin injection since I was a junior in college. Instead, I have taken oral hypoglycemic pills two times a day, and this not a problem

for me at all.

The participant's parents were always supportive, and they wanted to offer additional assistance when their daughter suffered complications from diabetes or needed to be hospitalized. She had known that she should be careful of her diet since the time of the diabetes diagnosis, and she was grateful that her parents were willing to join her in following diabetes regimens. She subsequently became convinced that she would be able to handle her diabetes with her parents' support, and she could advance further.

DISCUSSION

The study showed the participant's evolving experience with her diabetes and the way she intensively tried to manage her problem in order to live with it in the short term, while at the same time continuously making efforts at long-term control.

Conflict involving choosing a college and major

In this study, the participant regarded her conflict in a positive light. This finding is the same as that of Paterson et al. (1999), since the participant made a conscious effort to see illness-related problems as challenges, not as problems or threats. Challenges presented more opportunities for growth.

Previous studies found that the conflicts of a patient with diabetes involved difficulties such as ambivalence toward self-management, parental involvement, confiding in friends, adjusting to living with diabetes and uncertainty about the future (Choi, 2001; Dickinson & O'Reilly, 2004; Park, 2001). The findings of Dickinson & O'Reilly (2004) concerning conflicts were confirmed as the participant struggled with several conflicts and choices she had to make on a daily basis. Although she felt a diabetes-related limitation that would never go away, she adopted methods of handling her disease so that it was manageable within the context of her life.

This stage might be similar to the stage in the findings of Thorne et al. (2003) involving the restructuring of the illness experience, in which the participant could integrate the limitations imposed by her disease into her life. This step is deemed necessary in order to accept and come to terms with experiences associated with the illness (Thorne et al., 2003).

Kyngas and Barlow (1995) found that adolescents re-

sponded negatively to living with type 1 diabetes, but the majority of the participants in their study discussed ways in which diabetes could be viewed positively. In the present study the participant exhibited a positive attitude.

Adaptation to college life as a new environment

This study demonstrated the same result as that of Thorne et al. (2003), that is, that assuming control represents a distinct philosophical shift in patients' relationship to their disease and its management.

As Thorne et al. (2003) mentioned, being in control meant being able to lessen the effects of a disease so that the patient could live as normally as possible. The present study involved a redefinition of the meaning of the illness, relationships with others, and relationships with the self that inhabited the diseased body.

Johnson and Morse (1990) view the transformative process that occurs when learning to live with an illness as an aspect of regaining control. Regaining control, according to these researchers, is integral to adaptation in illness.

Concerning the implementation of control, ideas are diverse and often perplexing. In the study conducted by Paterson et al., people who saw themselves as in control of and separate from their illness could more easily rise above their physical limitations and concentrate on their life objectives. (Paterson et al., 1999)

In the present study, regarding the control of the participant's diabetes and her adaptation to a new environment, because regulation of diet was seen as an important element in the treatment of the disease, the participant generally took what she learned in diabetes education classes and incorporated it into her own perception of a healthy diet. Regarding exercise, this was similar to the observations of Jezewski and Poss (2002), where the participant stated that she got the appropriate amount of exercise from daily walking or clinical work rather than from doing regular exercise. Jezewski and Poss (2002), mention that in spite of the importance of regular exercise in the management of diabetes, there was some variation in the way patients interpreted the need for exercise: Several women felt they were getting enough by doing their housework, and a few men exhibited some variation in the way they interpreted the need for exercise.

This study also showed the importance of certain aspects of the social significance of diabetes. In the study

by Jezewski and Poss (2002), the majority of the patients were willing to discuss the fact that they had diabetes with friends and acquaintances, and most expressed the opinion that there was an advantage to doing so. Several participants, however, knew individuals who had diabetes who were ashamed or embarrassed to discuss their illness with anyone. The current study revealed that the participant discussed her diabetes with her family, but she did not talk about it with others, including friends or even teachers. This finding indicates that diabetes care and education need to be tailored to a particular age and gender group in order to provide a cultural component approach (Choi, 2000; Jezewski & Poss, 2002).

One of the most important findings of the study was that the participant regarded living with diabetes as a part of her life. She found ways to handle her diabetes so that she could describe it as being no big deal (Dickinson & O'Reilly, 2004). She felt that diabetes was her own thing and she wanted to be in charge of managing it.

Evolving awareness of caring

The findings of this study illustrate the result of Jezewski and Poss (2002) that individuals' explanations of illness are a compilation of their own cultural beliefs and the lessons learned from living through the experiences of their illnesses (Jezewski & Poss 2002).

Through the process of evolving awareness of caring, the participant in the present study became able to transcend the body, thus opening the way to the restructuring of the self (Paterson et al., 1999).

This study showed, through processes of trial and error, monitoring and evaluation, that the participant felt she had evolved to become rapid and automatic in the context of the everyday and familiar, but reverting to a much more thoughtful and deliberative pattern in unfamiliar contexts, new manifestations, or changes in the course of her disease (Thorne et al., 2003).

The participant believed that health providers were generally not well informed about the reality of living with diabetes and tended to give impractical, textbook derived advice. Where a diabetes nurse educator, who is sympathetic to real life problems, is working, patients are more likely to accept advice (Park, 2001; Park & Song, 2001; Thorne et al., 2003).

Thus, the participant in this study achieved transformative progress that required, as Thorne et al. pointed

out, "balancing the demands of many masters in such a manner that it was difficult to explain with any precision" what type of expertise might really be required in a given situation (Thorne et al., 2003, p. 1349).

Integration of the nurse identity into self-identity

This study revealed "the dynamic process of interaction between the individual and the social context of illness, with the internal perceptions this brings, is fundamental to the nature of identity formation" (Tilden et al., 2005, p. 322).

The participant stated that through her four-year college life, she achieved positive results, rather than negative ones. She felt a sense of personal growth in being a nurse. She stated that the most important benefit she got from her life in the nursing college was the transformation of her self-identity into being a nurse, despite her diabetes.

The identity change of the participant is significant because her transformative progress confirms previous research (Tilden et al., 2005), and this study also showed that an individual could shift from being "a victim of circumstances to a creator of circumstances" (Barroso, 1995 p. 44; Paterson et al., 1999, p 788).

The progress of the participant in the present study parallels the research findings of Tilden et al. (2005). Self-integrity developed as frequent challenges arose that required the participant to face critical situations. Such situations necessitated that she achieve a balance between the self as a person who accepted having diabetes and the self that wished to lead a normal life (Tilden et al., 2005).

This research also agrees with Paterson, et al. (1999) whose study showed that individuals attempted to create an illness experience that was independent of the self while at the same time relating to it.

Progression and preparation for getting a job

In the present study, once the participant felt her progression was sufficient, she believed she would be able to give priority to rigid adherence to a self-imposed healthy living regimen with satisfaction and comfort (Thorne et al., 2003).

The participant in the present study envisioned her future as a nurse working at a major hospital in Seoul, Korea, thus leaving her home as well as her parents. However, emphasizing her diabetes, her parents asked her not to leave for Seoul but to stay and work in their

hometown instead. After their persuading she acquiesced to their wishes because she would still be able to work in a major hospital located in her community.

Earlier research indicated that adolescents benefited from parental involvement in diabetes management (Kim, 1997; Frey, Ellis, Narr-King, & Greger, 2004). On the other hand, other studies showed that parental involvement was a source of conflict for young women (Dickison & O'reilly, 2004; Kim, 1997), although these women admitted knowing that their parents were motivated by concern and care. In the present study the participant said that her parents' involvement provided a positive motivation. Her transformation, as Paterson et al. state, was an evolutionary activity that entailed responding to illness-related challenges. By responding in this way, the participant can develop her transformation progression (Paterson et al., 1999).

This study showed that the participant achieved her goals through her preparation for getting a job, being positive about the future and accepting herself as an individual with a chronic illness. These are the foci of restructuring the illness experience (Johnson & Morse, 1990).

The participant demonstrated an acceptance of the inevitability of the changes involved in living with diabetes and a commitment to live as well as possible within the constraints of the disease. She is living the way she would like and says she feels healthy because of it. For her, health means self-enhancement, transcendence of body, a sense of meaning, mastery and balance, as Paterson et al. (1999) mentioned. The research findings can be interpreted in relation to the constructive developmental perspective (Paterson et al., 1999).

CONCLUSION

This study demonstrated an understanding of what it is like for a female nursing student to live with type 1 diabetes. The study is an example of a part of a participant's approach to diabetes management for this age of female patients.

The significance of this study was to examine the meaning of the transformation process, which is the result of a deliberate decision to construe a challenge and, in so doing, to invent a new relationship with diabetes. Although there might be individuals who have not experienced transformation and are not successful in their adaptation to living with a disease, in this study the par-

ticipant felt that her life with diabetes was successful, which means that over time she succeeded in developing a way to live with her diabetes.

The important component of this study is that lessons from lived experience with diabetes can contribute to psychological research regarding diabetes from the patient's perspective.

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