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Identity and Adherence in a Diabetes Patient: Transformations in Psychotherapy

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## **Identity and Adherence in a Diabetes Patient: Transformation in Psychotherapy**

### **Abstract**

The authors present a case study of a 26-year-old woman who developed diabetes in early adolescence and who attended seven CAT sessions. They used phenomenology to analyze therapy transcripts, case notes, and a reflexive journal and extract the major themes. The client's identity had been overshadowed by the development of a "diabetic identity" that the client rejected. Poor adherence was linked to the rejection. Motivation to manage her diabetes changed during the CAT sessions once her identity was confirmed as being separate from her diabetes. The client was then able to integrate diabetes into her life. Psychological and psychosocial factors are linked in complex ways, both in the personal development of adolescents with diabetes and their transition to adulthood. Understanding the impact of diabetes on identity can enhance the effectiveness of therapeutic interventions with nonadhering clients.

Keywords: Please provide. DIABETES, PSYCHOTHERAPY, IDENTITY, TYPE 1, QUALITATIVE METHODS, PHENOMENOLOGY,

### **Introduction**

Physiological complications of diabetes are a leading cause of death, yet the prevailing phenomenon in this disease is poor adherence to the treatment regimen (Strauss, 1996). The psychological explanations for poor treatment adherence have been almost exclusively based on comparison of group research designs using psychometric methods. However, research to date has not adequately explained the reasons for poor adherence to treatment.

Case studies can be a valuable source of empirical data: “Instead of growing impatient with the single case and hastening on to generalization, why should we not grow impatient with our generalizations and hasten to the internal pattern?” (Allport, 1962, p.407). What is proposed here is a particular form of case study, a descriptive and exploratory case study (Yin, 2003). These types of case studies can be used to make inferences based on the validity of the analysis rather than the representativeness of events (Mitchell, 2000, p.8).

The single-case method employed in the present study was characterized by a high level of detail embedded in the narrative of psychotherapy regarding the client’s poor adherence. Viable rival explanatory theories can be identified and rejected in a case study, but first, the qualitative data needs to “reveal” its themes.

### **@H1 = Literature Review**

The onset of type 1 diabetes is usually early in life. Management requires continuous and careful monitoring of blood glucose levels, frequent injections of insulin each day, and significant lifestyle medications. Such regimens are important for metabolic control.

Recent research in child and adolescent metabolic control has concentrated on family factors. Although there is a mass of correlation literature showing that a percentage of variation in blood glucose control can be explained by various factors, such as parental involvement in the supervision of insulin administration, these studies are not helpful in identifying the factors that explain most of the variance in an individual case. For instance,

broad trends have emerged, such as high levels of family conflict being negatively correlated with poor adherence and poor metabolic control in children or adolescents with type 1 diabetes (Coleman & Hendry, 1980; Lawler, Volk, Viviani, & Mengel, 1990; Miller-Johnson et al., 1994). Similarly, Wysocki (1993) found that better communication skills and conflict resolution skills were associated with better metabolic control. However, these studies do not shed light on the nature of the conflict between child or adolescent and his or her family.

Grey, Cameron, and Thurber (1991), in a study of coping and adaptation, found that preadolescents with diabetes generally employed positive coping strategies and tended to accept the guidance of authoritative figures, such as parents and medical personnel. However, the metabolic control worsened with the onset of adolescence, and adaptation problems became evident. Kolker (1980) maintained that there is a tendency in adolescents with diabetes toward anger and denial. Although the anger and denial might manifest itself on an unconscious level, it is thought to be a reaction against the restrictions that differentiate adolescents with diabetes from their peers. Kolker suggested that emotional difficulties regarding illness might be acted out through diabetes mismanagement that hinders adherence to treatment.

Fosbury (1996) pointed out that adolescents might also use diabetes as a vehicle to rebel against people such as parents and doctors perceived to be controlling and interfering. Therefore, as notions of identity are carried forward into adulthood, unresolved conflicts impede the process of developing identities separate from chronic illness, thus affecting

healthy developmental pathways. It remains unknown whether patients with diabetes experience rebellion and conflict as reported by these early studies and whether these experiences do affect their developmental pathways.

The concept of identity is best explained from the social interactionist perspective developed by Mead (1974). According to Mead, the self-concept is made up of a sense of a personal identity that is both developed and maintained through various identities derived from social interaction. Indeed, the findings of a study by Adams, Pill, and Jones (1997) with 30 adult asthma sufferers suggested that identity issues might be a major contributing factor to the variations in self-care behavior. The authors found that there was an obvious difference in their sample between people who accepted asthma as a part of their identity and those who could not. The former group viewed their illness as being an integral part of themselves that they considered to be manageable and did not interfere with their concept of themselves or their social identities. The latter group rejected their illness in both a personal and social sense and would ignore or only partially adhere to treatment.

Kelleher's (1988) results from a study of 30 adults with diabetes were consistent with those of Adams et al (1997). A common feature of the two studies was the difference in self-regulation between people who either integrated or did not integrate their illness into their personal and social identities. Clearly, the way in which the individuals in Kelleher's and Adam's studies experienced illness had implications for the way in which they managed their daily treatment regimen. People who experienced difficulties in accepting and managing their illness had poorer health outcomes. However, Sandelowski (1991)

maintained that people tell stories and construct their realities in a way that is meaningful to them; thus, their present thoughts and beliefs are always subject to change as a result of new experiences.

Charmaz (1983) used qualitative methods to interview 57 chronically ill adults over the age of 20 years to explore the problems that chronically ill adults encounter. She maintained that there seemed to be a “fundamental form of suffering,” which she termed “the loss of self” (p.168). Essentially, adults’ perceptions of their illness or the increasing severity of their condition caused them to become disengaged from the social networks in which their sense of self was situated. The accumulated loss of social identities, which had previously sustained their self-image, resulted in a “diminished self-concept” (p.168). The concerns shared by these people were the importance of emotional support from significant others and the explicit desire not to be identified by their illness.

These early studies are examples of qualitative methodologies that are essentially cross-sectional in design. Qualitative methods have only recently been applied to longitudinal and sequential analysis of multiple interviews (or therapy sessions) with a single interviewee (or client), as was the case in this study. The client was referred to a CAT psychotherapist for poor adherence to her diabetes regimen, and all previous medical interventions were unsuccessful. The transcripts of the psychotherapy sessions, case notes, and a reflexive journal constituted the data. The research questions were What were the possible reasons for poor adherence to treatment in this case? and What were salient transformation processes over the course of this person’s psychotherapy? Thus, the aim of the study was to

extract major themes emerging during the course of CAT therapy with an adult with type 1 diabetes and to relate these to poor adherence.

### **@H1 = Method**

#### **@H2 = Participants**

##### @H3 = The Client (June, pseudonym)

June was a 26-year-old woman with type 1 diabetes who was initially diagnosed with early-onset type 1 diabetes at the age of 10. Her condition had deteriorated because of poor adherence to diabetes treatment over a number of years, and at the time of entering therapy, she was receiving laser treatment for retinopathy. June lived by herself in rented housing accommodation and sustained herself on a government allowance for people with disability or illness.

##### @H3 = Psychotherapist

The psychotherapist was employed full-time in a diabetes care center in a major public hospital in central London. The model of therapy used was cognitive analytic therapy (CAT). CAT is a short-term therapy developed by Ryle (1991) from a theoretically integrative blend of both cognitive and developmental psychology.

#### **@H2 = Data Collection and Management**

##### @H3 = Therapy Sessions

The standard number of CAT consultations is 16 sessions. However, in June's case, the therapy consisted of 9 consultations, because the therapist was going on extended leave. The consultations took place over a period of 2 months. With the exceptions of sessions 1 and 4, the CAT sessions were audiotaped. Session 1 was not taped because a recorder was

not available, and session 4 was not taped because of a recorder breakdown. Tapes were transcribed verbatim and were subsequently checked by the researcher to correct any mistakes or omissions in transcription. June gave informed consent to the therapy sessions being audiotaped and for confidentiality and anonymity in the reporting of results.

@H4 = Therapist case notes. The case notes consist of an assessment session that described June's medical and personal background and the therapist's between-session summation of the salient points June expressed in each of the 9 therapy sessions.

@H4 = Reflexive journal. The journal was an account of (the first author's) thoughts and ideas about the data throughout the course of the research.

@H4 = Matrix. A matrix was created from the case notes and transcripts from which to view the changes that were occurring in June's description of her interpersonal relationships and perceptions of her self between sessions (Lincoln & Guba, 1985). The material included information about June's relationships with her mother, father, sister, family, friends, therapist (author/researcher), and medical personnel. The matrix was ordered in a sequential fashion from session 2 through to session 9.

@H4 = Trustworthiness. Lincoln and Guba's (1985) method of triangulation was used to establish credibility and enhance the methodological rigor in this study. The transcripts, reflexive journal, and therapist's case notes were used as different sources from which to increase the trustworthiness of the interpretations. The matter of dependability and confirmability was addressed by the independent review of the data and matrix by the second and third authors, who were clinical psychologists, one familiar with diabetes, psychotherapy and CAT, in particular, and the other with the method of analysis.

**@H2 = Analysis of Data**



The analysis was guided by Giorgi's (1989) phenomenological method. The steps included a thorough reading and subsequent rereadings of the transcriptions, creating units of meaning by intuitively making sense of the data, transforming those meaning units by extracting the underlying psychological content, and, finally, synthesizing the transformed units to reveal the structure contained within the phenomenon. This data analysis process meets van Manen's (1990) notion of the researcher being immersed in the data, and Lincoln and Guba's (1985) concept of inductive analysis, which they defined as "a process aimed at uncovering embedded information" (p.203). In our study, conversation units about June's perceptions of herself in relation to others were included in the analysis.

The method incorporated the tracking of the chronological sequence of events, including psychotherapeutic processes, implementation, and subsequent diabetes control. Finally, emerging themes were identified, and the units of meaning were ordered into a sequential structure according to those themes, which were further analyzed in terms of change over the course of the therapy. It was often necessary to return to preceding stages in a circular emergent fashion to review different aspects of the emerging themes, to make decisions about the inclusion or exclusion of data, or to reexamine the context of units of meaning.

The following example illustrates the transcription strategies employed. For example, the first utterance from session 2 is recorded as 2-1, and subsequent utterances as 2-2, 2-3, 2-4, and so on, until the end of the dialogue in that session. "T" stands for therapist, and "J," for the client, June. Words enclosed in brackets [ . ] are the researcher's words, which we used

to clarify segments of narrative for the reader. The recorded utterances are used to illustrate the main themes emerging in the therapy.

T: 2-89: Do you know what I mean?

J: 2-90: Yes I... most of the time [relating to therapy] and it doesn't matter.

### **@H1 = Findings**

The analysis revealed two identifiable themes. The first theme addressed dimensions of rejection of an illness-precipitated identity, and the second theme was concerned with mapping the salient changes in identity over the course of the therapy sessions that led to the integration of diabetes as a part of the client's self.

#### @H2 = Rejection of a diabetic identity

June reported being "spoiled" by her father because of her diabetes during the period from her diagnosis at age 10 until she was approximately 15 years of age. After age 15, June perceived that she gained attention from her parents only because of her diabetes. The communication was "all about my diabetes...they don't care about me."

J: 3-74: I suppose for fifteen years all I've been listening to is, you should be doing this, you should be doing that. It's doctors, nurses, parents or whatever. There's always someone telling you, should you be eating that? And you just think, go away .

J: 5-26: I just told him [father] to get off my back.

J: 5-28: Well yi, yi know it's always have you eaten enough? Should you have something to eat? You're not eating enough these days... and I just, just, just leave it alone, that's how it feels at home.

Responses revealed that June rejected the attention that was focused on the physical management of her diabetes. June seemed to perceive the constant attention to her diabetes management to be both an intrusion by others and a rejection of her self: “I don’t matter ninety per cent of the time.”

J: 2-146: I get so annoyed at them [parents] when they ... they know it upsets me when they keep going on at me.... It’s like they think they’re doing it for my benefit, but they think they can cross any lines then.

J: 5-95: An I wanta come. I want to get these things sorted. This whole thing, it's just a diabetes thing. When I go see [the consultant], what’s he going to tell me? Yi know it's like, oh, oh we'll do this we'll do that, and it's all diabetes the whole thing. They don't give a sod about me you know. I'm just a... it's not me as a person. I'm just a number on that diabetic bar you know. I really want to feel like some sort of person. Don't just want to be a number.

J: 5-152: I don't feel no one.

Embedded in these segments was the expressed wish for her “self” to be recognized and valued, not just her diabetes.

June did not want to accept the social identity of “diabetic,” because to do so would mean that her other self potential would be threatened. Therefore, her behavior tended toward denial or distancing. June showed signs of distancing herself by withdrawing from conversation and employing her strategy of “bottling things up” (T: 3-89).

J: 2-6: [June’s response to her father] [We just sat in dead silence [in the car] all the way home...

J: 2-24: I get annoyed, but don't say anything about it.

J: 6-82: [Regarding her sister] ...if there is a conversation...she'll knock me back...and I think, why do I bother?...I just think it's not worth the fight...

J: 7-14: [Regarding friends]...normally I'm not in the conversation a lot.

As June reacted by being negative and distancing from others, she was also being negative and distancing herself from her diabetes, evident in her poor management. There were two sides to the negativity and distancing. For example, June reported, "I feel like a child in front of my parents" (J: 3-89), yet her social life was predominantly centered on her family. June described a strong desire to "feel more like part of the family." On the other hand, she recognized that her relationships with family members were conflicted and that periods of separation from her family were beneficial to her.

J: 7-116: At the moment I'm feeling quite strong 'cause I'm not involved with family.

J: 8-83: See, I hope this isn't the case. But I've not been at Mum and Dad's. I've had no contact with Vicky [sister]. Since I've had no contact, ...that's four weeks, I don't know ... anyway ... that is when these sessions have had that effect.

June's developmental issues became evident. She had not engaged in any other activities beyond involvement with her family and seeing her two friends on an intermittent basis. Although June had not worked in paid employment for 5 years, she had been reluctantly involved in child minding for her sister. At 26, June realized that her sister and friends

“have other lives,” which made her feel “lonely” and “jealous.” Furthermore, June referred to herself as an “outcast” because of diabetes (J: 6-74).

### H2 = Summary of Theme 1

Kelleher’s (1988) findings indicated that people who accepted and managed their diabetes had many relationships that they could draw on to maintain a positive sense of identity. Kelleher maintained that social identity affects personal identity and is created through involvement in various activities, such as work, sport, or other interests. Social representations of illness are developed via these personal networks and can impinge on personal beliefs about one’s illness (e.g., Joffe & Bettega, 2003). For June, the ambivalence of being “diabetic” was evident around negative illness-related attention in contrast to being valued as a person with a well-formed social identity. June found it difficult to care for an aspect of self she had rejected, that is, her diabetes. The integration of perceptions of herself as a person with a chronic illness with herself as a person needed to be reconciled.

### @H2 = Integration of the diabetic identity

The therapeutic challenge was to identify June’s customary defense mechanisms that also appear in June’s therapy, identify the underlying affects and in this way facilitate integration. For instance,

J: 2-14. I can’t remember what we covered ... . I just come out with all this stuff when I’m in these sessions sort of thing, and then it goes.

June’s defense of “blinking out” her feelings was prevalent: “Too many emotions ...that’s what I blank out, these feelings” (J: 3-62).

The excerpts from the therapist's case notes (session 4) indicated that June had concerned herself with what "they" (family and medical fraternity) were doing to her and did not consider her role and responsibility. "They blank me out...Dad doesn't say how are you feeling but you haven't eaten...They don't care about my feelings, only my bleeding eyes."

June's use of the word "they" was challenged by the therapist:

T: 5-102: You know exactly what to do. You know exactly what not to do. You know exactly how to look after yourself. You choose not to. You blank it out, and everyone else is so concerned about you.

J: 5-103: Hmm.

The therapist's use of the word "you" and key phrases such as "blank out" emphasized that June had a part in her interpersonal drama with her family and management of her chronic illness. The therapist's use of key words or phrases that the client uses can evoke clearly defined emotional states that combine emotional impact with easily accessible meaning to the client. The therapist in this study introduced a phrase June used at the beginning of therapy, which could be considered a potentially "highly charged" emotional phrase:

T: 2-90: You said, "I felt I don't matter ninety per cent of the time." I mean if you feel like that, how can you possibly really look after yourself.

The therapist continued to use the phrases "I don't matter" and "blinking out" throughout the course of the therapy to emphasize the many ways in which June treated herself as if she did not matter.

A key event took place for June between sessions 5 and 6. June had a major altercation with her sister. Previously, June said that she felt "used" (J: 2-28) by her sister, in that she felt

obliged to look after her sister's two small children because she was unemployed. She stated, "I haven't got the guts to turn around and say no" (J: 2-30). However, during the argument, she refused to care for the children. In other words, June changed from being passive to being assertive. The therapist reinforced June's actions by changing the phrase from the negative stance of "I don't matter" to a positive one:

T: 6-32: You challenged her on that, and saying like, I do matter. Actually it does matter. This matters and I matter.

The argument was a key event, because June did something quite new. She expressed the feelings that belonged to the "bottled up" self. The result was that she felt, "relieved...like a weight gone when I said that" (J: 6-104). Another change was evident subsequent to the argument, in that June was able to bring diabetes into the conversation with her mother. This happened during a conversation with her mother that June perceived to be a two-way conversation that did not include diabetes. It was also the same session that June, for the first time, mentioned her diabetes to the therapist: "You brought up your diabetes today which is the first time you've done that ever" (T: 7-33).

The following week June communicated with her father in a way that she had not done before by expressing herself openly:

J: 8-4: And I was as honest as I could be, ...how I felt about Vicky [sister]...he was very understanding really. I was surprised.

J: 8-8: I was very open...

J: 8-18: He was really open. And about other things, the diabetes, I even brought that up for a change. ... It was just so different from anything we've ...

I've spoken to him before, but I suppose this time I felt like I'd actually got through to him.

J: 8-12: Although for all I know he probably would have responded like that time and time again, if I'd given him the chance.

In previous sessions, June complained that her father talked to her only about diabetes issues. Her previous response was to distance herself: "Why should I bother"? However, when she was assertive and expressed her feelings directly, she seemed to experience a favorable response, thus validating the notion that she might be, at least in part, responsible for her illness-related conflicts.

Indeed, the following statement signified a major cognitive transition in the meaning that June had placed on her diabetic identity.

J: 8-16: I hadn't sort of realized. There have been times when I've thought you just take, it's been all them, not me, sort of thing. Now I accept that it isn't that, it is me, as well.

The socially constructed diabetic identity changed through cognitive recognition and positive action, which was the therapeutic interruption of negative procedures or patterns and subsequent open communication with her family. Furthermore, her perception of the medical fraternity changed from "a battle with me and the medical profession" (A: 9-47) to

J: 9-136: To be fair I don't think I have given him [consultant] that much of a chance. The thing is I have had three very good consultants.



The negativity to others was also in evident in her attitudes towards medical staff. However, as she changed, her attitude toward medical staff also changed. For the first time, June felt that she wanted to control her diabetes:

J: 8-20: I am starting to feel like I am part of the human race...

J: 8-22: I'm frightened of going back there...I'm not going back there.

J: 8-32: I'm actually thinking positively. Not just thinking, oh well, I should be doing this for the diabetes.

J: 8-75: I now feel that I want to get it in control, which I've not felt before.

T: 9-282: So, you treat yourself as if you matter, and you do.

J: 9-283: I've certainly come around to that way of thinking.

### @H2 = Summary

The key events in June life and therapy appeared to be the focus being her diabetes and not her. She resented and rejected the attention to her diabetes and wished for her "self" to be recognized and valued, not just her diabetes. This circumscribed self commenced in adolescence effected her personal and social development, especially her adult sense of autonomy and independence from family. It was difficult for her to care for an aspect of herself she had rejected. Over the sessions, June's beliefs that others blank her out and only see her diabetes is confronted, as she, too, manifests blanking out herself, including her diabetes. In effect, she treated herself as if she did not matter, something that she had perceived only others doing to her. Subsequently, June separated herself from family, and in the ensuing weeks, apparently new communication was formed with her parents and medical personal. It seemed that June shifted the meaning that she had constructed around

having a diabetic identity to allow her self to be more prominent: She now felt that she could be assertive and take responsibility for her social relationships. This feeling flowed on to taking responsibility to adhering to her recommended diabetes management plan.

### **@H1 = Discussion and Conclusion**

The aim of this study was to use a phenomenological method to understand the meaning/experience of having diabetes by exploring the emerging themes in CAT sessions with a young woman with type 1 diabetes who did not adhere to diabetes treatment. The findings show that the experience underlying her poor adherence revolved around her rejection of a diabetic identity. Adherence to diabetes was “engulfed” by her identity as a diabetic, in a way described by Copeland (2004) in her study of people with hepatitis C. Transformation of that central identity of diabetic occurred when June felt valued by significant others (including the therapist), as a person apart from her diabetes.

In this study, June’s new assertiveness and subsequent positive response from her parents, supports Wysocki’s (1993) hypothesis that better conflict and communication skills favorably affect diabetes management, and thus metabolic control. This was evident in June’s changes in metabolic control, which were monitored. At referral, she was described as having with poor control, recurrent diabetic ketoacidosis, microvascular complications, and severe retinopathy. Her glycated hemoglobin (HbA1c) was 12.2%. Although she was due to have 16 sessions of CAT, she, in fact, had 9, because the therapist was going on maternity leave. Her HbA1c at the end of 9 sessions was 10.1%. The remaining sessions

were completed on the therapist's return 6 months later. Three months after the last session, June's HbA1c was 8.2%. Readings below 10% are considered good.

Identity formation is a complex and constantly evolving process, and individuals are constantly discovering who they are in relation to others. In our study, June's, "I," in "I don't matter," can be likened to the personal "I" in Mead's (1974) conception of the self. According to Mead, the inner dialogue between the personal I and social I is the process whereby self-image is produced and sustained. However, it has been shown that people with chronic illness reject being identified by their illness (Adams et al., 1997; Charmaz, 1983; Kelleher, 1998). This rejection could be interpreted as the personal I perceiving the chronic illness identity as unacceptable, therefore rejecting it as part of the self. It could be inferred that subsequently, these people do not take care of their "rejected identity," evident in their poor adherence to treatment.

Furthermore, a "diminished self" is postulated to be the result of the loss of alternative social identities due to either, the pervasive nature of the illness or any number of psychosocial reasons (Charmaz, 1983, p.168). When the diminished self occurred, illness became the pervading feature of those peoples' lives and thus their main identity. According to Charmaz, if a person becomes preoccupied with his or her illness, there is the tendency to become overly sensitive to others' actions and statements, which are often interpreted in negative ways, making it difficult for the individual to reestablish other identities (Charmaz, 1983). Others' actions and statements might, in fact, be unwanted and

put the individual under pressure, so much so that the social environment comes to act like “diabetes police” and the individual to feel blame and guilt.

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 (e.g., Blumberg, Lewis, & Susman, 1984; Garrod, Smulyan, Powers, & Kilkenny, 1992). Yet, curiously, psychological research regarding diabetes from the perspective of identity is scant. Instead, health sector efforts are characteristically directed to diabetes education about diet and exercise. This type of education in the case of “June” served only to emphasize her diabetic identity and reduce her adherence.

The concept of the diminished self and the negative effects of unwanted support were derived from studies of adults who have established identities. For example, the DAWN study was based on interviews of 5,000 people with diabetes and 3,000 health care professionals in 13 countries (Snoek, 2002). The concepts of identity and diminished self might need to be viewed in reverse when considering adolescents who might have had difficulties with the developmental and identity formation processes because of illness-related issues, as was the contention in the present study. The self might be diminished, in that the individual had not established other social identities separate from his or her illness.

In our study, a central factor affecting resolution of family conflict and the inability to communicate effectively appeared to be an identity founded in diabetes. New experiences, according to Sandelowski (1991), constantly change the “self-story” (p.163), which is

critical for shaping the status of various identities. June's personal account emerged in therapy and was a story presented at a given moment. Her story at the beginning of therapy of "I don't matter," was subjected to reformulation throughout the course of treatment and was revised to "I do matter" by the termination of treatment. Subsequently, June found that she was motivated to manage her diabetes treatment regimen and sustained this motivation. The way in which this change in identity occurred in psychotherapy and in relationship with the therapist is beyond the scope of this article. However, that the identity change is significant for self-care confirms previous research (Kearney & Sullivan, 2003).

The intricate associations are well served by the case study method, such as adopted in this study. Case studies have their own method and rationale, which are rapidly acquiring better recognition as a scientific tool. Case studies are often confused with qualitative research or with quasi-experimental designs (Yin, 2003), but as is shown in this article, case studies can be combined with them. It is the method of choice when the phenomenon under study is not readily distinguishable from its context. Case study methodology can track changes (if any) over sequential psychotherapy sessions and test rival theories for those changes. The validity or trustworthiness of the interpretation of findings can be assessed by triangulation of data from different sources.

#### **@H1 = Limitations of the study**

The limitations of this case study approach are related to the difficulty of generalizing the findings. However, the study does demonstrate that psychotherapy has the capacity to change identity and thereby influence adherence. This finding does support the

efforts of those who assist people with poor diabetes control: The study did find that psychological treatments can be effective. The mechanisms for the effect were not explored in this paper, but are likely to be related to the relationship between the person and the therapist.

Further research exploring an age-stage specific issues might help refine the possible reasons for poor adherence to diabetes management across age and gender. For example, as shown in previous qualitative research with adolescents, male adolescence typically respond to the requirements for diabetes management and the struggle over “defining images of self and over one’s life” (Charmaz, 1991; Drew. 2003).

On a broader level, there is a social responsibility for diabetes educators, researchers, and clinicians to be informed about the nature of poor adherence to diabetes from multiple research methodologies, interdisciplinary sources, and the experience of people who live with diabetes. The implications of this study for clinicians, researchers, and academics alike are that identity should not be ignored when investigating the management of chronic illness.

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