

## Women's Developmental Experiences of Living with Type 1 Diabetes

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**Abstract:** We used a developmental framework to structure and analyze 24 women's personal accounts of the impact of type 1 diabetes on their lives. The developmental framework draws on RIEGEL's (1979) dialectical model of how disruption leads to developmental change as the person works to regain a lost equilibrium. Our questions focused on participants' qualitative accounts of specific areas of impact, their responses to that impact, and their interpretations of the developmental outcomes of their experiences. Most women saw their diabetes as intrusive and disruptive, bringing a sense of the diabetes' pervasiveness and their sense of loss. They reported either adaptive or perseverating responses to the disruption, and either change or stability in their lives. Our questions invited personalized accounts. The women's accounts revealed this struggle for equilibrium in a variety of ways. We present their qualitative accounts and our developmental framework as a way of understanding the impact of chronic illness in life experiences.

**Key words:** *adult development, chronic illness, disruption, qualitative analysis, equilibrium*

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### 1. Introduction

How do people view the impact of chronic illness on their everyday lives and their life priorities? Do people have a sense of how their illness affects their lives, and do they see their illness contributing in any way to their development as adults? The aim of this study was to analyze women's accounts of the impact of type 1 diabetes on their adult experience. As well as changing their physical health, chronic illness often adversely affects people's psychological well-being

and quality of life (BALEY 1996; TALBOT & NOUWEN, 2000). Yet it may not always be a destructive force. There is some evidence that chronic illness may stimulate as well as impede personal development (McMILLEN & FISHER, 1998). ABRAIDO-LANZA, GUIER and COLON (1998), for example, found that women suffering from chronic arthritis reported thriving psychologically, with positive increases in their attitudes and empathy, and with greater appreciation of life and their own competence. Some people also made positive references to life changes following the diagnosis of cancer, interpreting their illness as a catalyst for positive feelings, and for reappraisals of lifestyle and priorities (TAYLOR & ARMOR, 1996). There is little research, however, that gives people opportunity to reflect upon how their chronic illness is perceived as part of their developmental experience of adult life. [1]

No ongoing illness or disease is experienced in isolation from other parts of a person's life. The history and impact of the illness form only one part of the total system that is the person developing in a developing environment (MAGNUSSON, 2000). How the person interprets muscular dystrophy, asthma or diabetes is closely tied to what s/he is trying to achieve in life, and to how the medical condition impinges on such life plans and arrangements. For example, some children who take up serious swimming because of their asthma, then have to work out how to effectively juggle training and treatment regimens. The outcome of their efforts can bring positive developmental advances, as the person gains new insights and strengths in the process (RIEGEL, 1979). [2]

As SEIFFGE-KRENKE (2001) demonstrated from her longitudinal study of adolescents with diabetes, taking a developmental approach allows researchers and diabetes sufferers themselves to locate the management of their disease within a larger framework of normal life priorities. Her young participants, for example, were divided over whether they gave most of their attention to managing their diabetes to the neglect of the kinds of activities typical of teenagers, or whether they neglected their diabetes in the service of accomplishing the things that were normative for their age and their peers. In either case, the balance of life is disrupted, and for a person with diabetes there can be serious later complications. SEIFFGE-KRENKE's study is important for showing how reframing an illness experience in terms of personal development and life-tasks gives researchers and their respondents a clear focus on the points where the illness disrupts everyday experiences for an individual, and also where an individual makes gains in personal achievements. [3]

The mixed responses that chronic illness can provoke in an individual clearly have a place in the personal perspectives that are a crucial part of an ongoing illness, and also clearly have potential for becoming a source of information for the continuing provision of health care. Yet, there is little information about people's perceptions and conscious behaviors as they try to juggle the debilitating symptoms and demanding regimens of diabetes along with everyday tasks. What is needed is a way of understanding people's responses to their chronic illness within the context of their priorities and concerns for their whole lives. [4]

As health-related symptoms and regimens vie for attention, some accommodations are likely to be adaptive and growth producing, just as other accommodations are likely to be maladaptive and lead to loss. Social activities, for example, may be sacrificed so severely in the cause of personal safety, that a person's social life is diminished. Yet a disability may be turned into a strength, as in the case of para-olympic athletes. The experience of life-long development, in fact, has been characterized as a series of gains and losses (e.g., BALTES & BALTES, 1990; LERNER, FREUND, De STEFANIS, & HABERMAS, 2001) and as ongoing engagements between constraining personal and social forces that bring the person to adaptive or maladaptive patterns of behavior (VALSINER & LAWRENCE, 1997). Consequently, it becomes important to understand how people deal with illness in the struggle to retain some stability in their changing worlds—how they cope with losses, and how they assess and pursue personal success in the process of responding realistically to changing circumstances. [5]

Recognizing the gain/loss dimensions of both life-long development and experiences of chronic illness, we turned to RIEGEL's (1979) dialectical model of development to devise a set of

concepts that would allow us to structure and analyze people's perceptions of their own experiences of life with diabetes. RIEGEL's foundational work in the area of adult development was suitable, because it characterizes the processes by which development occurs in the adult years in terms of efforts made to attain an equilibrium within changing and challenging circumstances. Development is complex, and progression can be achieved at one or more levels in unfolding sequences of experience over time. These different levels of people's existence interact with each other to demand the person's activity to resolve disruption, especially when the levels are out of synchrony. The levels themselves were suitable for our focus, because they specify the different sources of disruption in personalized experience—the biological (e.g., health), the psychological (e.g., cognition and affect), cultural-sociological (e.g., community, ethnicity) and external physical (e.g., prevailing natural conditions or disasters). Challenges to personal ways of living arise when two or more of these levels of existence come into conflict or are out of synchrony. A pertinent example is when the biological forces related to ill health are out of kilter with cultural demands, such as workloads or social commitments, or even with a person's psychological needs, such as to raise a family or develop self-confidence. The impact of the disruptive force destabilizes the whole developmental system that is a particular human person (MAGNUSSON, 2000). Yet, in the person's efforts to re-establish equilibrium, RIEGEL argues, s/he is likely to take a developmental shift forward into new developmental experiences. [6]

This model of adaptation to conflicting levels of experience gave us a framework for asking people about the impact of their diabetes, within a normal course of development that may or may not be disrupted by the chronic illness, and then for asking them how they responded to the experience, and what they saw as the outcomes of the experience for them. This meant that we would need to organize our questions around a set of realistic developmental tasks and give research participants opportunity to talk about their diabetes as part of their ongoing life experiences, rather than as an abstract thing removed from ordinary life. To achieve that aim we adopted two conventions. For this initial study, we restricted the sample of participants to adult women, and we anchored their comments to a set of normative developmental tasks of adult women's lives. [7]

While the dimensions of development through adulthood may be similar for men and women, they often occur in different sequences and proportions (LEVINSON & LEVINSON, 1996). Some developmental tasks exhibit large gender-related differences, for example, in young women's greater concerns with family, even if they are also focused on their careers (KITRELL, 1998). There is considerable evidence that men and women respond to chronic illness differently (DELAMATER, JACOBSON, ANDERSON, et al., 2001; GORDON, FELDMAN & CROSE, 1998; RUBIN & PEYROT, 1998) and also face different developmental challenges at different times (ARYEE & LUK, 1996; LEVINSON & LEVINSON, 1996). Consequently, we restricted our initial sample to women in their twenties or older. [8]

The dynamics of the individual's experience of developmental challenges invite the use of qualitative methods, because those methods are capable of revealing the depths of personal meaning people attach to their experiences (KENYON & RANDALL, 1997; LEVINSON & LEVINSON, 1996). We wanted to analyze women's accounts in ways that combined our framing of the experience of chronic illness as a disruption in developmental processes, with the meanings that they gave to their own observations of what that disruption was like. [9]

## **2. Method**

### **2.1 Participants and procedures**

*Participants* were 24 women of varied ages and varied experience of type1 diabetes (i.e., early onset insulin dependent). They had a mean age of 37.25 years (*Range* = 23 to 55 years), and a mean of 24 years of diagnosed diabetes (*Range* = 1.5 to 50 years). To preserve both the anonymity and integrity of participants' individualized comments, we identify participants in the text by number in the order they were interviewed (e.g. P7). [10]

All participants were volunteers, recruited from a hospital clinic or two institutions serving people with diabetes via workshops or staff contacts, all in Melbourne, Australia. Personnel at different institutions initially introduced the study to women, handing out letters saying that we wished to ask women about their experience of diabetes. A researcher explained further details of the interviews on the telephone when we arranged interview appointments. The interviews were conducted either at the university or the participant's home or work by two experienced psychology graduates trained in the background theory and interview procedures. Interviews were audiotaped (with participant permission) for transcription, and took approximately an hour. All interviews were conducted by one of two trained interviewers. [11]

## **2.2 Approach to qualitative analysis of experiences of diabetes**

### *2.2.1 Structuring the interviews*

The interviews were structured by a series of questions that set the impact of diabetes in a developmental framework. An initial question asked each participant for her perceptions about the general impact of diabetes: "How much would you say diabetes affects your life generally? How would you put it in your own words?" Next, questions about specific impacts were anchored in a checklist identifying 34 areas of personal, interpersonal and work life where women are faced with activities, competencies to accomplish, and challenges (e.g., planning a family, being a parent, running a household, dating and going out, dealing with career changes, planning retirement, aging, nurturing others). The specific areas reflected developmental tasks shown to be significant in women's lives (LEVINSON & LEVINSON, 1996; SUGARMAN, 2000). Each participant was asked to indicate how much having diabetes impacted on all 34 aspects of her life, using a 5-point scale ranging from 0 "none at all" to 4 "a very great deal" (these quantitative ratings were not analyzed for this study). The interviewer asked the participant to select the area in which she experienced her diabetes and its complications most strongly: "In which one of these individual aspects (things in your life) is the impact greatest?" She then asked for a specific example, or recurring instances, of that impact. She gave the participant scope to explain the nature and extent of the impact: "How did your diabetes affect your ...?" Next, she asked for the participant's personalized response: "What did you do about this situation? ... For example, did you try to change things in any way? Did you walk away from the situation or generally try to avoid it? Did you do something else?" In focusing on possible outcomes of the experience, the interviewer then asked: "Would you say that you have changed or not changed as a result of this experience or set of experiences? How do you feel about it now?" [12]

This technique permitted the participant to anchor and focus her comments on specific or recurring incidents. It also permitted us to focus the interviews on areas that have been shown to be developmentally pertinent for women (LEVINSON & LEVINSON, 1996), without restricting the range of possible experiences for participants. More importantly, it means that the data were structured around the concepts of potentially disequilibrating experiences and their outcomes that are consistent with RIEGEL's (1979) developmental model. The analyses, then, reflect the kind of package that genuinely integrates the coding system with the theory so that underlying assumptions are open to critical scrutiny (LAWRENCE, 1988). [13]

### *2.2.2 Coding and analysis*

One coder (the first author who did not interview the participants) identified global themes in all responses to each of the four questions. She developed the set of coding classifications with examples, shown in the Appendix. Then she trained a second coder who independently coded all the interviews. They met to compare their coding of all 24 transcripts and to resolve any disagreements. Once the overall classifications of participants' responses were given non-overlapping global codings, the first coder listed the different instances of a particular classification (e.g., whether adaptive responses were in the psychological and social areas of a participant's life). These instantiations formed the illustrative examples analyzed in the results. The qualitative analyses thus included identifying the different themes across all participants' responses, showing

how they were used in different instances by individual participants, and the presentation and an exegesis of an illustrative example. This exegesis is presented in a scheme developed by LAWRENCE, BENEDIKT and VALSINER (1992). A quote is divided into meaningful units in their naturally occurring sequences, the units are numbered and these numbers are linked to analyses in the text. [14]

The general impact of diabetes was coded globally either in terms of its pervasiveness, its pervasiveness accompanied by a sense of loss, or as a minimal impact (either little or none). The two coders agreed on their independent codings for 23 of the 24 participants (96%), with the single disagreement resolved by discussion. For the impact of diabetes on specific areas of life, the coders agreed perfectly in classifying participants' comments as: loss, threat, both loss and threat, or as a benign effect. For each participant's description of her own response to the specific impact, the coders agreed perfectly in classifying each response as either adaptive or perseverating. For the outcomes of the impact experience, the coders agreed in coding 23 of the 24 comments as involving growth or stability. The single disagreement was resolved by discussion. [15]

### 3. Results

We present the results in four sections, as the general and specific impact of diabetes, participants' responses to that impact, and their perceptions of their developmental outcomes of the experience. [16]

#### 3.1 The general impact of diabetes

##### 3.1.1 Pervasiveness

Eleven women described the general impact of diabetes on their lives as pervasive and unrelenting. They saw diabetes as invasive in more than one area, for example, as dominating their thoughts and restricting their physical and social activities. Instances of this pervasiveness involved influences on how diabetes affected participation in activities, for example, sport (P1), travel (P14), or dining socially (P3). Mental intrusions, mentioned 13 times, covered a continual awareness of the diabetic condition (P8) and anxiety over integrating it into daily living (P5). Two compared their diabetes unfavorably with cancer, because, for example, "[t]here's no end to it. If you've got cancer you live or you die. But diabetes just never goes away" (P14). The illustrative example from P13 describes the intrusion of her diabetes into her life as both pervasive (1) and interminable (2):

- (1) There's no part of any day that I can forget that I have diabetes. I have to be aware of it every part of every day.
- (2) I have to consciously think of what I'm eating, what my blood sugar might be, how much energy I've used ...
- (3) I couldn't just have an argument and run out of the house. I'd have to run out of the house with my insulin and some spare glucose.
- (4) So it affects every facet of my life. You can't forget its there. [17]

In this comment, P13 demonstrates how she finds the constant presence of her diabetes overwhelming. Her diabetes interferes with basic daily activities (2), restricts freedom of movement (3) and is unforgettable (4). The repetition of imperatives such as "have to" (1, 2, 3) and "can't" (4) conveys the strength of experience of diabetes as deterministic and uncompromising. [18]

##### 3.1.2 Pervasiveness and loss

Another six women also talked about the pervasiveness of their diabetes, but explicitly added comments about the sense of loss this relentless intrusion brought with it. The reports of emotional loss from four women also mentioned the flow-on effects of their loss. Feelings of anxiety, vulnerability (P16), and restricted activities (P12) were accompanied and extended by losing a sense of well-being. Two women mentioned the loss of confidence that emanated from physical

loss (e.g. when blood sugar is too low; P14), and inability to keep up physically with peers (P1). Three women said it meant losing the ability to participate in common rituals (e.g. sharing a birthday cake; P16), and that this exclusion made them feel different from other people. The illustrative example from P3 tells how the pervasiveness of her diabetes involves making special arrangements for social activities that, in the process, point to her loss of spontaneity and freedom.

- (1) Everything has to be timed. Time for insulin, time after that for food, time after that for this ...
- (2) I can't go like a normal person to the pub and say, "Hey lets go and get drunk," or I can't just go to a friend's house and say, "Hey I don't feel like going home I think I'll stay here the night."
- (3) If I leave home I have to take a whole medical box with me ... and I can't go somewhere where there's not a phone in case I need it
- (4) ... because if I go on a (bushwalking) track and I need something fast it's not there. So yeah, it has its limitations. [19]

P3 describes her diabetes as restricting her choices (1) and dominating her activities (2). She feels her diabetes excludes her from "normal" social interactions (3). The primacy of diabetes in her life has left her with a heightened sense of physical vulnerability that further interferes with her (recreational) activities (4). Again, the use of negatives (e.g., "I can't," "I don't") conveys her perception of her diabetes as undermining her sense of autonomy. [20]

Another of these women (P7) described the severity of her loss of sight. This major complication had general spill over "into the things I do" (1). The pervasiveness affected her confidence about "doing a lot of things," because living alone, she feels particularly vulnerable to the effects of hypoglycemia and thus restricted—uncomfortable about what she can do (2).

- (1) [T]he complications I've now got as a result of the diabetes do affect the things I do—a lot.
- (2) I have a lot of trouble with hypos as well, which because I live on my own makes you a bit ... not comfortable doing a lot of things, in case ... [21]

### 3.1.3 Minimal effect

While seven women reported experiencing minimal ("little" or "no") diabetes-related general impact on their lives, it was possible to detect some ambivalence in their expressions of this minimal impact. For example, although P24 said having diabetes was "like having red hair when you want blonde," she went on to say: "If someone said there was a cure tomorrow, I couldn't be happier." The illustrative example from P2 reports little impact on her life (1), but then describes a childhood incident where diabetes demanded adjustments in behavior (2) and marked her out as different from her peers (3).

- (1) My parents always made sure that my diabetes didn't affect anything that I did.
- (2) I mean sometimes it would. For example, when I was in grade prep I had to go and see a pantomime and we weren't allowed to eat anything and it was the time when I had to have my morning tea and I was only five ...
- (3) So Mum gave me some dried apricots in the pocket of my school uniform and said when Snow White eats her apple you eat your dried apricots. So you know, it was things like that, as a child you have to eat when you have to eat. [22]

## 3.2 Areas of the impact of diabetes

### 3.2.1 Identifying specific areas of impact

The women's indications of the specific areas of life where they experienced the most disruptive impact of diabetes came from their responses to the checklist of developmental tasks. [23]

*In their personal lives*, most women indicated that diabetes had an impact on their: personal goals for the future (n = 13), beliefs and attitudes to life (n = 14), physical functioning (n = 15),

sense of control over their lives (n = 15), aging (n = 18), and fears about the future (n = 18). *In their interpersonal relationships*, most indicated an impact on planning a family (n = 18) and being a parent (n = 15). *In the area of work*, most women reported diabetes had an impact on career goals (n = 14). [24]

When asked to identify from all these possible areas the one aspect of their lives most affected by their diabetes, eight women selected "planning a family," and five "a sense of control over my life"—representing 54% of the sample. The rest made selections that were categorized as either "future oriented" (e.g., "fears about the future," "career goals"; n = 6) or "personal functioning" (e.g., "closeness in relationships," "physical functioning"; n = 5). [25]

### 3.2.2 Forms of specific impacts

Eight women described the specific impact of their diabetes again in terms of loss—mentioning three forms of loss or follow-on disadvantage in areas of opportunity, control, or relationships. Another seven women described a sense of threat or impending harm, focusing on fear, or a sense of worse to come, especially in physical degeneration or child bearing. Another seven expressed combinations of loss and threat. [26]

#### 3.2.2.1 Loss

Loss of opportunity was reported by eight women who described how they had forfeited both personal and social opportunities due to their diabetes. Work opportunities were lost through physical incapacitation (e.g., onset of diabetic complications forcing early retirement; P20), or through difficulty in coordinating health and professional needs (e.g., jobs requiring intense physical activity or shift work; P21). Recreational and social disadvantages included missing spontaneity when traveling (P1) or giving up plans for a family due to poor health (P10). The illustrative example from P7 describes how diabetes-related retinopathy made driving impossible, reducing her opportunities with both practical and emotional consequences.

- (1) It sounds really dumb but the worst thing is that I can't drive.
- (2) Its just the loss of independence I find most frustrating.
- (3) I can't socialize as much as I used to. I can't go to pubs that are dark. I can't go to places I haven't been before, can't go out by myself at night. They're the worst things.
- (4) I loved driving and I loved just going out. [27]

For P7, the loss of physical independence (1) has created considerable distress (2). Impairment of her mobility has undermined her self-confidence, seen in her stream of "cant's" (3) and made many of the activities she used to enjoy impossible (4). Thus, she describes the impact of her diabetes in terms of social deprivation and loss. [28]

*Loss of control* was reported by another eight women who commonly referred to how poor management of their diabetes had caused deteriorating health that impaired their functioning (e.g. through eating disorders; P4). Several expressed resentment at the unpredictable nature of their condition and how it robbed them of control over their bodies (e.g., in the compulsory medicalization of diabetic pregnancy; P8). The illustrative example from P16 tells how her diabetes robbed her of control both physically and emotionally.

- (1) You don't have any control ... you do but you don't kind of thing ... and that's the whole thing with diabetes ... even when you do the right thing, eat well exercise that sort of thing, you'll still have a period where your sugars are out of control and you feel like crap so your body kind of betrays you ...
- (2) For example for the past week I've felt really crap, my body's felt really tired and achy, my sugars have been all over the place and I've been eating exactly the same thing, getting all the same exercise and it just ... and that's just kind of bad luck really, it's the nature of the disease. So that's pretty awful. There's no reward for having done the right thing.

- (3) That of course then has a pretty big emotional impact because ... you start to lose confidence in yourself. You start to question what you can and can't do and where you're at.
- (4) It's bizarre how a physical ailment like that or physical manifestation can kind of rock your emotional stability. [29]

Here P16 describes how her diabetes is undermining her sense of physical and emotional integrity (1). Her terminology vividly reveals her feelings as "like crap" (2) and "betrayed" (1). Her efforts to take control of her health have only reinforced her loss of a sense of control over her own activities and confidence (3), leaving her frustrated (2) and doubting her own competence (4). [30]

*Relational loss* involving impaired social interactions for five women is illustrated by the example from P16 who specifies how the physical manifestations of diabetes impair social interactions.

- (1) Another practical example is having a hypo. I've been in business lunches when I've had a hypo. If you're surrounded by people that you work with and that you've built up relationships with based on professional structures, and next thing you're blubbering over the table crying and unable to ... in different people it will manifest differently and unfortunately I tend to get very upset and emotional and shaky and anxious.
- (2) And my job as production manager is to coordinate and be in charge and so losing control publicly like that undermines my professional persona.
- (3) It invades ... it seems to give entrée to people to ask personal stuff. If someone finds out you're a diabetic ... you have to give a twenty minute potted history.
- (4) All those kinds of things eat away. Most people like to be in control of how they present to people or what their public and even their personal face is, and these things kind of erode and eat into that in different ways. [31]

Using the example of hypoglycemia (low blood sugar), P16 describes how she becomes vulnerable in interactions, "blubbering" and "crying" (1) in incidents that undermine her sense of professional competence (2) and make her "public property" (3). She strongly points to losing credibility and her right to privacy when her condition becomes apparent in social situations (4). [32]

### 3.2.2.2 Threat

Threat of physical degeneration appeared in discussions of their aging or future health by seven women. They felt their diabetes threatened them with physical incapacitation (P2), and they expressed concern about their ability to cope with disability (P22). The illustrative example of P14's experience of diabetic complications leaves her with a sense of great personal and social vulnerability and anxiety about an early death (5).

- (1) I suppose because I've had retinopathy there's always the fear that it will come back again and how would I cope being blind. And because I live by myself you know that that would cause major changes in your lifestyle ... you'd have to be dependent on people and I'm used to being more independent.
- (2) My grandmother who was diabetic ended up with a leg amputated due to diabetic complications so there's always the reality fear there as well ...
- (3) [Y]ou get to a stage too where you go, "Well who would care if I'm on my own ... like who'd be there to look after me?"
- (4) So there's that fear of, "Can I manage, can I cope, have I got enough money?"
- (5) I expect my life-span will be lessened due to diabetes ... might be true might be not true, but yeah its one of my fears ... [33]

Her complications have robbed P14 of social and financial security (1). She is afraid impending blindness will leave her not only physically incapacitated (2) but also isolated and without help (3) or resources (4). In (4), there is an urgency in her queries. Moreover, she is anxious about her own ability to deal with her physical degeneration and fears of early death (5). [34]

Threat in planning a family was particularly frightening for six women who were worried about whether they could comply with or achieve the necessary diabetic control during pregnancy

(P5), and whether failure to achieve such control would harm the fetus (P15). P3 also expressed concern about passing on her diabetes to children or harming them in utero. Rigid medicalization of pregnancy contributed to these anxieties and engendered feelings of guilt and failure (P8). In fact, the general lack of information about diabetic pregnancy meant that horror stories generated in the public domain filled that void and exacerbated P8's sense of impending harm. The illustrative example from P5 expresses this concern in relation to planning a family.

- (1) Well I am trying to plan a family but I know that everything has to be on track and that I need to have very good control and there can't be any hiccups. Because I don't want to end up with a child with a disability.
- (2) And I work with people with a disability and I know what happens to them and I know how scary it is, and it is really scary. So it's very scary ...
- (3) [A]nd well I haven't been a parent before and you wouldn't know what to really expect anyway. Everything else that comes with it and how I'm going to control myself, protect myself from that.
- (4) [A]nd look I wouldn't like my own child to have diabetes if it could be helped.
- (5) But I'm probably more scared of getting them disabled. You always want to do the best for your child.
- (6) [A]nd I'm just a bit confused about how I'm going to be able to control my diabetes.
- (7) [A]nd others blame me as well ... and you often hear the bad stories everyone is really good at that—"Oh no you can't this and that," and that's really negative.
- (8) It's really hard because you might be a little bit high but surely they'll still come proper babies? [35]

P5 is fearful of the risks associated with diabetic pregnancy. She feels her diabetes threatens the infant with either disease or disability (1). Her repetition of the word "scary" (2, 5) and her plaintive, questioning conclusion (8) convey how deeply she fears the effects of diabetes on pregnancy (1, 4, 5). Her fears are also undermining her self-confidence and burdening her with an exaggerated sense of personal responsibility (6), leaving her open to the blame of others (7). [36]

### 3.2.2.3 Loss and threat

For the comments about loss accompanied by threat, the illustrative example comes from P1 who describes how she had become preoccupied with the risks associated with her diabetes and how this interfered with her travel ambitions.

- (1) Probably it's made me more careful of going ahead and deciding to do things with my life ... and again my big personal ambition was ah going overseas and working in a community, and yes traveling but I want to have a career happening there as well ... and I can't just get up and go which so many people are able to do ... and I'd really like to be able to do that I'd really have to plan it ahead.
- (2) And perhaps that makes me more cautious than I'd otherwise like to be. And I find that irritating. Having to be cautious.
- (3) I'd probably say that's the main thing really and thinking, "What if this happens? What if that happens? What if I get some complication, What if, what if?"
- (4) And in so many ways in my life generally I think too much and analyze and that can stop you doing something, because you just analyze your way out of doing it and that is one of them.
- (5) I just have to try to push myself to say "yes yes yes, you can do it" but it doesn't work that way. [37]

The unpredictability of P1's diabetes in the context of travel represents a threatening unknown (1) that she knows she has allowed interfere with her ambitions (4, 5). Diabetes has undermined her confidence and left her preoccupied with potential risks, as shown in her stream of "What if's" (3). She resents the cautiousness her diabetes has imposed on her life (4) but is so cowed by a sense of impending harm that she feels unable to resist the losses her fears have incurred (5). [38]

### 3.2.2.4 Benign

In contrast to most of the women, two (P12, P19) specifically mentioned how diabetes had a benign or even favorable effect on their lives, especially in the area of personal relationships. They said their diabetes had improved the quality of their interpersonal relationships by providing a catalyst for reassessment of interpersonal needs (P19), or by facilitating insight and empathy with others (P12). In the illustrative example, P12 refers to what she saw as the impact of her illness when asked about the way it had impacted most strongly on her.

- (1) A great deal more caring for others.
- (2) And I see that in a positive way ...
- (3) Because having had a lifetime with a disease, I have a very good understanding ... [39]

Here, P12 makes a specific connection between her own new "caring" (1) and "understanding" (3) of other people and what has happened to her through her long-term illness (3). Further, she makes a global judgment that the whole is "positive" (2). [40]

## **3.3 Responses to the impact of diabetes**

### *3.3.1 Adaptive responses*

Two-thirds (n = 16) of the women described adaptive responses to the impact of diabetes, involving departures from previous patterns of behavior. They mentioned specific instances that demonstrated either practical or subjective novelty. Practically, they mentioned being prepared to make changes in their activities and agendas, such as learning public transport routes when vision impairment made driving impossible (P7), or adopting different diabetes management strategies, such as using the Glycaemic Index (a ranking of carbohydrates in relation to high and low sugar content) (P2). Subjectively, they spoke of using new cognitive and emotional processes to either motivate themselves (e.g., telling oneself that good health practices now will increase the likelihood of successful pregnancy later; P23), or to integrate these changes into their lives (e.g., positively weighting the importance of having a family over the enjoyment of a liberal lifestyle; P5). [41]

#### 3.3.1.1 Health-related adaptations

Instances of changing health behaviors (6) ranged from trying new medications (P22) and adhering to a dietary regimen, (P14); to changing doctors (P5). These changes were seen as having flow-on effects in other areas of the women's lives. For instance, the illustrative example from P2 describes how altering her health behaviors reduced her fears about the degenerative nature of her condition.

- (1) I wouldn't say it was fear necessarily, it's just a concern. If anything it probably makes me realize that the things I do now may impact in the future as far as aging goes. And I know that if I make the right choices now, further down the track I will be fine. by ensuring that my control is very good ...
- (2) ... I mean regular visits whether it be diabetes doctors or the diabetic renal people ...
- (3) ... I mean I don't take my health for granted anymore. I guess I check my blood sugar levels a lot more frequently than I did previously ...
- (4) ... I guess that's a bit of a change. doing the things I should be doing more frequently. [42]

P2 responds to her fears about aging optimistically and decisively (1). She is changing her behavior, with regular visits to doctors (2) more consistent blood sugar monitoring (3) and greater attention to her health generally (4). Her change in life-style is giving her a greater sense of control over her life (1). [43]

### 3.3.1.2 Psychological adaptations

Instances of psychological adaptations (16) covered searching for meaning in the particular situation (e.g., "it was a catalyst for positive change"; P12), and attitudinal change through information seeking (P5). The illustrative example from P16 specifies how she feels the medicalization of her health disrupted her enjoyment of pregnancy, and how she has to adjust to that situation.

- (1) I get upset. I get angry. I get depressed. I get all those sorts of things about it.
- (2) I hope that ultimately it will make me determined to deal with it and I have started to try and do that. but I haven't quite 100% turned the corner. I'm still in a bitter phase.
- (3) Emotionally I have to come to terms with it. That's the big thing, the challenge I suppose. That I have to accept that this is my lot and dwell on the positives and exciting things about having a child rather than the things that piss me off about the process of getting there ...
- (4) [B]ecause of all those kinds of emotional pressures I don't want to be a person who's always upset and unhappy and tense ... so I have to try new ways of actually dealing with it. I'm much more proactive about my mental state than I used to be I think. Like if I'm feeling depressed rather than letting it go I'll range to do something or try to get myself out of it because I'm aware that it's happening more often. I'm working on it. [44]

P16 acknowledges that the impact has been perpetuated through her inability to accept the limitations on her pregnancy (1). She is also aware of the emotional and attitudinal shifts she has to make before she can fully accept the situation (2). By cognitively reframing the impact as a "challenge" (3) and engaging in positive "proactive" mental health behaviors (4), she is in a better position to reclaim the aspects of pregnancy she feels her diabetes has been denying her. Thus her ability to modify her feelings and attitudes about the situation has moved her towards resolution. [45]

### 3.3.1.3 Social adaptations

Nine references to adaptations referred to social situations. They ranged from modifying work environments by cutting back on workload (P22), changing jobs (P5), to becoming involved with diabetes support groups (P14). One woman told of her personal journey from covering-up her diabetes, to being willing to join a diabetes self-help group, and eventually to be willing to attend seminars openly (P9). The illustrative example from P21 describes how her attitudes about disability had interfered with her acceptance of her blindness and how she had come to change those attitudes.

- (1) Since going to the Royal Victorian Institute for the Blind and seeing what they do about the blind people there and reskilling them—I saw a woman there who was completely blind and she was working as a receptionist, sort of gave me a bit more of a positive outlook on the functional aspect of being blinded and working. That made me feel a bit better because I saw all sorts of people doing those sorts of things, furniture making and sheet metal work and stuff like that and they're completely blind.
- (2) [S]o it made me feel a bit better. There are choices and there are quite a few choices.
- (3) Taking the steps to do that kind of thing and know what's out there and what help and support is out there has been really helpful.
- (4) Because before that I just couldn't imagine myself blind and doing anything. At all. And I got my piano and I started playing piano, and just focused on the things that I could do and focused on me as not being my eyes. Or my diabetes. That I'm still a functional person and I can do things. [46]

Disability has undermined P21's sense of self. However, she is engaging in information seeking and self-examination behaviors that challenge her negative attitudes (1), and encourage her to identify alternatives (2) and then move towards them (3). Her new perspectives that came from social experience have allowed her to adjust her self-concept to incorporate her blindness, thereby generating renewed optimism and movement towards a radically different sense of personal and social integrity (4). [47]

### 3.3.2 *Perseverating responses*

Eight women said they responded to the impact by avoiding novelty and maintained continuity of their previous behaviors and attitudes. Commonly, these women reported having made some attempt to modify their practices, but then abandoning the attempts in favor of personal and social stability. Some women talked about an inability to maintain "good intentions," for example, making an effort to record blood sugar levels but then misrepresenting them to doctors (P8), or withdrawing from situations that challenged the status quo, (e.g., avoiding planning a family due to fear of complications; P3). [48]

Effectively, these women disengaged from the situation, often using cognitive mechanisms like rationalization to reduce feelings of guilt or loss, such as (e.g. "diabetes has exacerbated my eating disorder and prevents me taking control of it"; P4) or shifting responsibility to others (e.g., "my diabetes management is poor because I have no time to exercise with three kids and a husband"; P5). The illustrative example from P1 describes how she aborted a working holiday in Japan when it compromised her diabetes management.

- (1) I just couldn't go there and do my job and have my meals all over the place like everybody else did ... I couldn't just go to bars and join my fellow teachers afterwards and drink and drink and drink. And eat and eat until the wee hours of the morning. They'd have no problem with that but I had to consider well I'm doing this to my body and I can't ... I suppose ultimately as far as my health was concerned not such a bad thing because I came home at least with my health intact.
- (2) I dealt with it for a while ... I tried to deal with it. I let my colleagues and supervisors know that I had diabetes and I tried to maintain my life hours as normally as possible. So I'd get up at 8 in the morning I'd have breakfast, do a bit of exercise if I could, try to have lunch at the right time, try to have dinner at the right time even if it meant snatching it ten minutes between lessons ... and again just maintain the right patterns on my days off. Not always perfectly of course. I tried maintain it in the right way.
- (3) And eventually I guess I walked away from it. At least I walked away from the situation that made it difficult.
- (4) And I just reverted back to normal hours and eating patterns that were easier to maintain because my hours became more regular.
- (5) So I changed the situation. [49]

P1 reports having made some attempt on a practical level to adjust to the demands of the situation (2). However strong attitudes about diabetes management and adherence to routine (1, 3, 4) have undermined her adaptation attempts. Indeed, her reluctance to modify her diabetes behaviors meant that all attempts to adjust her behavior only increased her sense of crisis (3). Her decision to withdraw from the situation has created a sense of failure which she has attempted to resolve by reframing it as beneficial: "at least with my health intact" (1) and under her control (5). However this rationalization of her withdrawal from the situation has provided only superficial relief, and much of the rest of the interview focused on her feelings of regret. [50]

## 3.4 **Developmental outcomes from the impact experience**

### 3.4.1 *Growth*

Most (20) women said they had changed as the outcome of the impact experience, referring to some form of growth or gain. In describing their experience of change, they made specific references to growing personally (20), and also socially (11), and said they felt positively about the experience now. Nevertheless, their accounts of productive change were not all unequivocal. There were 13 references, for instance, to ambivalent outcomes, where gains and losses vied with each other. [51]

### 3.4.1.1 Personal growth

Personal growth involved practical and subjective changes, such as shifts towards greater acceptance of their condition (e.g., by improving self-care behaviors through blood glucose monitoring or controlling weight; P24), and a willingness to incorporate their condition into their lives (e.g., through rigorous physical preparation for pregnancy; P15). The women also reported shifts in perspective (e.g., acknowledgement of their mortality; P9), greater self-awareness (e.g., having found a "truer" self; P16), or a greater sense of control over their lives (e.g., reducing fears around physical degeneration by taking care of health; P22). The illustrative example from P13 describes a lifetime trying to "make the diabetes disappear" through self-destructive health behaviors that resulted in diabetic coma. Her struggle to exert control over her life is a personally painful movement from rebellion to acceptance.

- (1) It helped me ... to look for ways that I can achieve a sense of control in my life.
- (2) I can acknowledge that I can't control the fact that I have diabetes. but I can control the way that I deal with my diabetes and the way that I think about dealing with diabetes.
- (3) So rather than looking at it as an enemy that controls my life I can take steps to make sure that I'm calling the shots as much as possible. [52]

P13's developmental journey happens at several levels of conscious cognitive change. She moves from treating diabetes as an "enemy" (3) that she is unable to control (2) to looking forward to having more control (1). This achievable control ("I can control ...") occurs in her cognitive and behavioral responses (2) and empowerment (3). [53]

### 3.4.1.2 Social growth

Descriptions of socially-oriented growth in the social domain (8 instances) specified shifts in intimate relationships (e.g., reducing family conflict by educating members about the difficulties of diabetes; P17), and broader social change (e.g., increased empathy; P17, assertiveness; P10). The illustrative example from P22 mentions how the physical and emotional constraints of her diabetes had exposed flaws in her relationships with others. The stress and ultimate breakdown of a marriage in which she received little emotional or practical support for her condition caused a radical reassessment of her relationships generally.

- (1) I had a lot of friends who would arrive in the morning and say 'I want this dress to wear tonight' and I would just drop everything and make the dress and they'd wear it out that night, and there was a lot of things where people just assumed I would do things.
- (2) I guess I've learned what was a reasonable ask and what wasn't a reasonable ask and then to deal with that ...
- (3) ... [T]he diabetes was an event that sort of made me really consider those issues. Isn't it funny how ... something happens to you that makes you trigger that thing where you are most vulnerable. So its given me a chance to grow. [54]

P22 realizes that, in the past, her interactions with others were based on meeting their needs and neglecting her own (1). She was easy to exploit. Pushed by her experience of diabetes, however, she has adjusted her expectations of relationships and now values reciprocity (2). She describes this process as having been an opportunity for growth (3). [55]

### 3.4.1.3 Ambivalent growth

Conflicting descriptions of growth combined both gain and loss (13 instances). The women identified areas of considerable growth, that nevertheless also involved other areas that remained unresolved (e.g., fears around physical degeneration had improved empathy with others but still caused anxiety; P14), or that engaging proactively with diabetic pregnancy had involved sacrificing a desired lifestyle (P5). The illustrative example from P9 tells how she has spent a life-time resisting her diabetes through competing strategies of denial and hyper-vigilance that

left her ill and demoralized. Changing her health behaviors improved some aspects of her life but left others unresolved.

- (1) I feel a combination of being more frightened about what can happen in terms of complications or even in terms of losing control or whatever ... I feel more frightened of it ...
- (2) But I also feel ... I feel pleased that I've taken some steps, and that makes me feel better about the whole thing, even though I don't feel quite right with the world yet ...
- (3) But I feel definitely pleased that I've met some people with diabetes because I so avoided that for years so I've allowed it to become more normalized within my life.
- (4) At the same time I feel like all this process is stirring up a muddy puddle ... you know, its all coming up to the surface and some days I don't think about it all and some days I ... know there's still lots of stuff I still have to think about and/or do something about. [56]

P9 speaks of a "combination" (1) of fear and loss of control and pleasure and satisfaction (1, 2). She is "normalizing" the presence of diabetes in her life (3) and reclaiming the sense of control she had relinquished (2). Nevertheless, confronting the history of her condition has also meant stirring up the "muddy puddles" (4) of her fears and the uncertainty of her condition continues to trouble her (4). As she moves towards resolution, her awareness of both her gains and her losses is acute, and is reflected in her expression. For example, she makes a comment, and then equivocates with, "but" (1,2) and "at the same time" (3). [57]

Two other women (P3 and P4) described their outcomes in even less positive ways, again referring to personal and social ambivalence. Referring to her eating problems and bingeing, P4 conveys a sense of negative outcomes, for example, "I think diabetes has made it worse," and led to "eating out of spite" and being "obsessive" about food. The illustrative example from P3 tells how she had been avoiding making plans to have a family. She has feelings of envy when confronted by parenthood in others (1) but her sensitivity to the risks associated with diabetic pregnancy and an overwhelming sense of responsibility (3, 4) have left her fearful (2).

- (1) I made the decision to must wait and see. Later on they may change. they may have more information, I don't know. Wait and see ... makes it difficult sometimes. especially when you see your younger sister having a baby and you're wondering why can't I?
- (2) Definitely changes you ... makes you realize that that not everything in life comes easy ... life's a lot harder ...
- (3) ... [B]ecause you can't just be selfish and ... you're not just dealing with your own life you're dealing with someone else's who is growing inside you ... you have to make a choice.
- (4) And the choice I made is I don't want to put my baby in danger ... I want like every other woman on this planet a healthy strong baby.
- (5) I have to wait and see. Wait and see and put it on hold. Like on a video tape you put it on hold until you come back to it. [58]

There is genuine ambivalence and equivocation in P3's attempts to engage proactively with the situation through information seeking. Her attempts have only reinforced her fears and rationalizations (1). She put everything "on hold" (5). There is some feeling of the possibility of positive change, as she stands in waiting for something else to happen, but she is not being proactive in seeking a resolution. Indeed, there is considerable negativity in her resignation both to the constraints of her diabetes and her continuing emotional distress (1, 2). [59]

### 3.4.2 Stability

Two women (P6, P8) reported that their illness experiences led to no significant change for them. The illustrative example specifies how a life-time struggle with her diabetes management showed no signs of abating for P8. It was during her pregnancies that she felt her inability to change her behaviors most acutely, and though her children were born healthy and have now grown up, she continues to describe feelings of guilt and regret (4).

- (1) [N]ot really changed. I'm still not great with my diet. It hasn't been enough to say well get yourself together and be good now.
- (2) [A]s I said before I just can't manage my life like that. it has to be in stages.
- (3) [B]ut something always happens and I fall in a heap and I start eating again. I suppose the fact that I had three children has made me a lot more stressed and busy ... I've got three children, my husband works very long hours, plus I've got this chronic medical condition that really needs a fair bit of work.
- (4) I'd like to spend more time looking after it ... I was going to join a gym this year but that hasn't happened ... I still think about the control issue a lot. I still think "well, why wasn't I better?" and I'll always have regrets about that. [60]

P8 has attempted to minimize her sense of failure by locating the source of her poor diabetes management externally, that is, in her family (3). But attempts at rationalization have failed and she knows it (1,2) and she owns her own responsibility (4). [61]

In summary, these women were well aware of what their chronic illness meant in their lives, and their accounts present varied pictures of its impact on everyday events. These 24 women provided vivid and rich observations of their personal experiences of living with type 1 diabetes and what it meant for them in their adult years. Our interest was not in the medical history of their disease, but in their personal perceptions of how and where their lives were affected, and how they in turn responded. [62]

#### 4. Discussion

Most of these women saw diabetes as a pervasive, intrusive force in their lives that disrupted their "big plans" for family or career, or disrupted the everyday pleasures of dining out with friends, sharing a birthday cake or bushwalking. For some women, it was the expanding tentacles of the intrusion that mattered. Others felt as keenly the losses they experienced with the intrusion. The restrictions on simple pleasures drew out of several women the "I can'ts" or "buts" of frustration. They experienced the frustration of missed opportunities for self-determination and spontaneity, and the missed expectations of better things to come. [63]

On the whole, despite the impact, however, most of the women could put their experiences into a developmental perspective that spoke of personal change. Two thirds saw the outcomes of their struggles with specific impacts as leading to adaptations and change in their lives. Their accounts of change were not simply rosy glosses on a difficult experience. Their responses, and the lasting effects were mixed. They knew that some of their reactions were ambivalent at best. A third knew they did not always handle the adverse circumstances productively, failing to manage their self-care, withdrawing from some of the pressured situations. They experienced heightened senses of crisis and fear. [64]

The personal accounts, however, were not all gloom. It will be remembered that two women interpreted the impact of their diabetes in much more positive terms. It provided them with a catalyst for viewing their lives differently, or a trigger for changing their dealings with other people. It is difficult to say whether these two women were expressing a rosy, unduly optimistic view of the impact, or whether they were running ahead of the questions in actually reporting their reactions. Certainly, others also saw the impact over time in ultimately productive terms. [65]

When we specifically asked about the outcomes of their experiences, the women told of the kinds of adaptive cognitions and behaviors that people use to make sense of their circumstances and to give their experience meaning. The majority spoke of change. These changes came from the fear or anger that belong to the very type of disequilibrating experience RIEGEL (1979) said would push people forward to new levels of development. In their frustration or anger, they adapted in how they managed their health or in their attitudes and expectations. One woman (P21) gained new insights about her own vision impairment as she refocused on herself as a person when she opened herself to new experiences, "focused on me as not being my eyes. Or my diabetes" (P21). This exemplifies the kind of holistic adjustment that the dialectical

model treats as a developmental shift forward (RIEGEL, 1979) out of conflicting forces. Along with P16's realization "I have to come to terms with it. I don't always want to be a person who's always upset and unhappy and tense," P21's adjustment to disability shows how change occurs as a turning point following psychological reinterpretation of events (RÖNKÄ, ORAVALA & PULKKINEN, 2002). [66]

The alternative routes of perseverance, avoidance and disengagement may be interpreted as developmentally unproductive, along with accounts of ambivalence in attitudes and behaviors, or a struggle to be the same—to not change. However, fighting to retain a normal sense of life and one's circumstances may be adaptive in itself. For instance, what we have suggested may be an excessively rosy response, may in fact represent enormous effort to retain personal meaning and integrity in the face of disruption. There is ego integrity in being oneself and not surrendering one's sense of self to external, or internal biological forces. Developmental processes are transactional, with the person's intentions and feelings an important part of the transaction (LERNER & SIMI, 2000; VALSINER & LAWRENCE, 1997). The developmental outcome, then, may reside in a strengthened resolve to retain personal continuity (McDONALD & CURL, 1997). Certainly, for several of these women retaining personal control was a much-desired goal. Development does not simply take one direction (BALTES & BALTES, 1990). [67]

A lifespan developmental perspective assumes that the human person is a holistic system (MAGNUSSON, 2000). That system seeks to achieve equilibrium when disruption in one aspect of life throws the system out of kilter. Striving for meaning and equilibrium has the potential for taking the whole person forward to new and sometimes novel forms of development. In the face of such a disruption as these women reported we should expect a range of responses. Human responses are marked by variability and by the possibility of different pathways of development, as individual people initiate and respond to the conditions in which they live. [68]

We invited variability and personalization. Under these circumstances it is noteworthy that the women's comments about their experiences could be classified economically, with a small number of categories that could be applied to the global data on each question by a second coder. It is possible the women's ways of thinking about their experiences were not well-enough differentiated in our coding scheme, or the codes are too simplistic, or the small sample made the classifications too easy. The careful quote by quote analysis of the illustrative examples speaks to the authenticity of our interpretations. The global themes were distinctively amplified in varied instances. In a larger follow-up study, it will be additionally useful to ask if or how global classifications and their instantiations would differ for men with diabetes, and for women and men with other chronic illnesses. [69]

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## Appendix: Categories for Global Classifications of Responses to Four Questions

Categories of responses for each question	Examples
(Question 1) General Impact of Diabetes:	
<p><i>Pervasiveness</i></p> <p>Describes the diabetes and/or its impacts as persistent, far-reaching, relentless in its effects, or as permeating the participant's consciousness or activities.</p>	<p>"I wake up with my diabetes and I go to bed with it; it's always there," "Its just there all the time. It never goes away. You can't get away from it at all," "I just keep dealing with the same situations coming up and I'm just continually trying and then you fail and then you try again and you fail."</p>
<p><i>Pervasiveness and Loss</i></p> <p>Describes the impact as pervasive, and also refers to loss. Loss describes participants' perception that something has been lost or they have been disadvantaged due to diabetes and/or its impacts. The loss may be personal or social, or both.</p>	<p>Examples of loss: "I don't feel in control anymore," "I miss my good health and the freedom it gave me," "I can't go like a normal person to the pub."</p>
<p><i>Minimal Effect</i></p> <p>Describes a participant's comment that diabetes has had little or no impact, effect on her life.</p>	<p>"No, it's not really a problem for me," "I don't think about it," "I don't notice it. I don't feel any difference," "Having my insulin is like brushing my teeth."</p>
(Question 2) Specific Area of Impact:	
<p><i>Loss</i></p> <p>(Classify as for Qn.1.) Instantiations may be loss of opportunity, control, relationships or quality of relationships.</p>	<p>"The sense of loss of control has increased over time," "I stopped counting the miscarriages after the twelfth," "I had a boyfriend and he couldn't handle that so I lost the boyfriend."</p>
<p><i>Threat</i></p> <p>Describes a participant's comment about impending harm or trouble. Participant may also express fear, anxiety about the possibility.</p>	<p>"I worry about hypos at night," "I'm scared I'll have another miscarriage," "It's made me more careful of going ahead and deciding to do things with my life."</p>
<p><i>Loss and Threat</i></p> <p>Use when there is a combined effect involving both loss and threat.</p>	<p>"You start to lose confidence in yourself ... I don't think I was a tentative person before I was diagnosed with diabetes but I'm definitely a more tentative person now."</p>
<p><i>Benign</i></p> <p>Describes a participant's comments about as benign, favorable, or positive.</p>	<p>"It's also made it easier for me to adjust to the 'diabetic way of life' ... it hasn't been a big hassle or a hurdle to get over," "It's given me a chance to grow. So in that sense I see it as positive," "I've certainly matured in my understanding and outlook."</p>

<b>(Question 3) Response to the Specific Impact:</b>	
<p><i>Adaptive Responses</i></p> <p>Describes a participant's report of responding to the impact with adaptations that are departures from previous behaviors, or that embrace novelty and change. Adaptations may be instantiated as health-related, psychological, or social, or as combinations.</p>	<p>"I couldn't drive anymore so I had to learn to depend on others," "I reevaluated where I was at and what I could expect," "I had to understand it and accept it and look at it all in different ways than I had just to keep going."</p>
<p><i>Perseverating Responses</i></p> <p>Describes a participant's report of responding to the impact by continuation of previous behaviors or attitudes, or by avoiding novelty and change.</p>	<p>"I couldn't see the point of fighting the situation. Better to walk away," "I really don't see how changing my diet will make me feel better."</p>
<b>(Question 4) Developmental Change:</b>	
<p><i>Growth</i></p> <p>Describes a participant's expression of gains, changes in behaviors and/or attitudes that are beneficial, that involve positive movement. Instantiations may refer to personal and/or social growth. Also use this code for comments that included both gain and loss (where growth is seen as ambivalent).</p>	<p>"I think I've grown with it ... Growth in my interactions and my ability to care," "if that hadn't happened I wouldn't have run into .. (partner) and wouldn't have had the growth and I , I don't know what my relationship with my kids would have been," "Taking care of my health means I worry less about it," "I hated giving up work and I still miss it. But I guess it's enabled me to get a handle on my health."</p>
<p><i>Stability, No Change</i></p> <p>Describes a participant's report of having experienced no change, but a continuation of experience without lasting effect from the impact.</p>	<p>"Nothing much has changed. I still take care of my health OK," "They wanted me to go back to school ... and being stupid ... I really regret now that I didn't continue ... its too hard to go back now ..."</p>