The disproportionate prevalence of Type II diabetes mellitus among the poor suggests that, in addition to lifestyle factors, social suffering may be embodied in diabetes. In this article, we examine the role of social distress in narratives collected from 26 Mexican Americans seeking diabetes care at a public hospital in Chicago. By linking social suffering with diabetes causality, we argue that our participants use diabetes much like an “idiom of distress,” leveraging somatic symptoms to disclose psychological distress. We argue that diabetes figures both as an expression and a product of social suffering in these narratives. We propose that increasingly prevalent chronic diseases, like diabetes, which are closely associated with social disparities in health, may function as idioms for psychological and social suffering. Such findings inform the anthropological literature and emerging clinical and scientific discourse about the roles of stress and psychological distress in diabetes experiences among underserved groups.

Keywords: [diabetes mellitus, idioms of distress, depression, explanatory models, Mexican Americans]
and mortality worldwide. On a global scale, diabetes incidence has risen exponentially since the mid-eighties. In 1985, diabetes prevalence was around 30 million adults, increasing to approximately 151 million adults (4.6 percent of the 20–79 age group) in 2000. Estimates for 2025 are even higher, as 300 million adults are projected to be living with diabetes by that time (International Diabetes Federation 2001). Within the United States, diabetes incidence increased by 30 percent between 1990 and 1998 alone (Centers for Disease Control and Prevention 2002), and wide variations in prevalence persists among ethnic groups and between women and men. For example, lifetime risk for diabetes among Hispanic women is estimated to be as high as 52.5 percent compared to 31.2 percent lifetime risk among Euro-American women. Hispanic men’s lifetime risk for diabetes, however, is lower than women at 45.6 percent but similarly disparate, as Euro-American men’s risk is 26.7 percent (Narayan et al. 2003).

As Melanie Rock argues, “it is worthwhile to consider how epidemics achieve social significance, both through their material presence and through the symbolic representation of their causes and effects” (2003:155). There is evidence that genetics plays a role in the pathogenesis of diabetes (Patti et al. 2003; Zeggini and McCarthy 2007). However, an emerging body of research from anthropology and epidemiology has demonstrated that the prevalence and distribution of diabetes closely correlates with economic development within and between countries and that diabetes is a “disease of modernization” (Lieberman 2003; McGarvey et al. 1989; Stunkard and Sorenson 1993; Zimmet et al. 2001). Although wealthy regions of the world, such as North America, have much higher rates of diabetes (7.8 percent) when compared to the most economically depressed regions, such as sub-Saharan Africa (1.2 percent; see International Diabetes Federation 2001), it is the poor within the wealthy regions who are disproportionately affected (Mokdad et al. 2001). Much of this discrepancy results from greater risk factors for the onset of diabetes among the poor in these regions, such as the consumption of high-fat diets, reduction in physical activity, obesity, stress, and psychological distress, which, in turn, seem to result from increasingly urban lifestyles and structural inequalities (Lieberman 2003; Rock 2003). As such, Rock (2003) critiques diabetes research that solely considers population-level factors, such as genetic variation or the distribution of glucose levels within and between populations, and argues that more attention is needed to the ways in which political–economic, social, and cultural forces mediate glucose levels through individual experiences, behaviors, and beliefs.

In this article, we use individual-level analysis of illness narratives to consider how diabetes achieves social significance among 26 Mexican American patients at a safety-net hospital in Chicago. Congruent with a small body of scholarship from medical anthropology and public health on lay discourses, we found that individuals often report stress and emotional distress as causes of diabetes (Cohen et al. 1994; Garro 1996; Hunt et al. 1998; Zezewski and Poss 2002; Loewe and Freeman 2000; Mercado-Martinez and Ramos-Herrera 2002; Schoenberg et al. 2005; Weller et al. 1999). Such findings are particularly interesting in light of the fact that diabetics are up to two times more likely to develop depression than nondiabetics and that depression among diabetics most strongly correlates with low socioeconomic status and female gender (Anderson et al. 2001; de Groot et al. 2001; de Groot et al.
We argue that, in the lay discourses we have analyzed, diabetes figures both as a product of social suffering and an expression of such suffering, and we suggest that such findings may shed light on questions surrounding the comorbidity of diabetes and depression.

We argue that an “idioms of distress” framework can be used to interpret our sample of narratives about diabetes causation, as our study respondents often use talk about diabetes to convey disorder from their social worlds. Traditionally, bodily idioms of distress have been interpreted as a somatic language for expressing distressing experiences in a culturally meaningful way, or as evidence of psychosocial stress that has been transduced into physical symptoms (Kirmayer 1992a; Kirmayer and Young 1998; Kleinman and Kleinman 1985; Nichter 1981; Scheper-Hughes and Lock 1987). In either case, somatic symptoms are typically viewed as a direct manifestation of psychosocial distress, and these symptoms are therefore considered to be either psychosomatic or metaphorical in nature. In neither case are these idioms associated with organic pathology. We use data from our study of diabetes explanatory models among Mexican Americans to argue for the idea that increasingly prevalent chronic diseases, especially those, like diabetes, that are closely associated with social disparities in health, may function as idioms for psychological and social suffering. Narratives from our study indicate that patients may use diabetes to communicate stress and emotional distress in their social worlds. At the same time, viewed in light of recent data about the bidirectional links between diabetes and depression (Golden et al. 2008), these narratives provide provocative material for thinking about current epidemiological trends involving disproportionately high rates of diabetes among underserved groups.

Expressions of Social Suffering through Illness Narratives

For the past 30 years, exploration of the borderland of culture, psychology, biology, and environment through narrative has become central to medical anthropology (Becker 1997; DelVecchio Good et al. 1992; Farmer 1994; Good 1977, 1994; Kirmayer 1992b; Kleinman 1980, 1988; Mattingly 1998; Mattingly and Garro 2000). Through close examination of illness narratives, researchers have found a unique opportunity for understanding how patients conceptualize causes of and experiences with disease. They have found that patients not only tell their illness narratives to explain their suffering to others but also use narrative to make sense of illness experience for themselves. In many cases, individuals struggle to bridge their past, present, future, and even imagined lives to formulate coherent identities through illness narration (Bruner 1986; Capps and Ochs 1995; Garro and Mattingly 2000; Mattingly 1998). These identities become central to understandings of how patients conceptualize their illness experience and how past life events may figure into their current condition and self-understanding.

As patients of chronic illness, everyday lived experiences of diabetics are disrupted and transformed by their disease. As such, tales about living with chronic illness and making sense of its causes are central to diabetes narratives. These narratives may function as tools with which patients actively refigure a “self” that has been severely undermined by illness experiences (Becker 1997; Hunt 1998, 2000; Mattingly 1998; Ochs and Capps 1996). In this sense, narratives have a therapeutic dimension when
patients use them to reconcile expectation with experience (Kleinman 1980, 1988; Labov 1972; Mattingly 1998; Pennebaker 1997; Seligman 2005).

In addition, some scholars have argued that patients use narrative strategically to influence their social situations (Hunt 1998, 2000; Mattingly 1998). Linda M. Hunt (1998, 2000) found that Mexican cancer patients build causal stories about their illnesses based on local moral constructs framed within distinct cultural and social perspectives. These cancer patients strove to make their illnesses meaningful in terms of everyday life and strategically reconfigured their identities through illness narratives in ways that were socially empowering. For example, a wife who dealt with 30 years of domestic abuse cited her husband’s abuse as the cause of her brain cancer, publicly challenging her husband and for the first time being recognized as his victim. Literature on domestic violence finds that victims of physical and sexual abuse hesitate to tell their stories, and when they do, their stories often have a fragmented character (Herman 1992; Polletta 2007). However, Hunt demonstrates that finding a way to talk about abuse can function as a source of empowerment (Hunt 1998, 2000). This example illustrates the very personal nature of illness narratives and how patients can use them to restructure their social roles in strategically advantageous ways. The patients in Hunt’s study effected change at the microsocial level without challenging or overtly protesting larger political–economic forces. At the same time, their narratives articulate their relationship to these larger forces by illustrating how such forces affect their lived experience.

We suggest that individuals also may use illness narratives to identify distressing experiences from their pasts that continue to affect their everyday lives and consequently may interact with management and treatment of the chronic illness itself. Because the lives of people with chronic illnesses have already been disrupted and transformed by their ongoing treatment and management of the disease, they may strategically use their affliction to make sense of, and reorder, elements of their biographies that continue to live on through powerful memories. As such, the revision of the self-narrative becomes part of the chronic illness. Therefore, “strategic suffering” is both a social tool for reconfiguring identity and a tool for making sense of ongoing stress and psychological distress.

**Stress and Distress as Causes of Diabetes**

Thirty years ago, Arthur Kleinman (1980) introduced the notion of explanatory models, or ideas and beliefs about an illness that help patients make sense of the illness in a particular context. Over the years, a number of medical anthropologists have adopted Kleinman’s method for measuring both patient and providers’ explanatory models in the clinical setting. Much of this research has demonstrated the importance that patients give to stress and emotional distress as causes for chronic illness (Garro 2000; Hunt et al. 1998; Jezewski and Poss 2002; Kleinman 1980; Mattingly 1998; Mattingly and Garro 2000; Schoenberg et al. 2005). Studies comparing patients’ and practitioners’ diabetes explanatory models have shown that patients often elaborate causes stemming from their social worlds and narrate distressing tales about how their illness has affected their lives, while providers largely focus on the pathophysiology of illness (Cohen et al. 1994; Loewe and Freeman 2000; Loewe et al. 1998). Moreover, a recent study examining a multiethnic sample
of patient explanatory models for diabetes attributes variation in such models to socioeconomic status and contends that patients who are less familiar with the biomedical belief systems of the health care providers are most likely to report stress or emotional distress as causes of diabetes (Schoenberg et al. 2005).

Because most of the research about patient explanatory models for diabetes addresses beliefs among Latin American populations (Coronado et al. 2004; Hunt et al. 1998; Jezewski and Poss 2002; Mercado-Martinez and Ramos-Herrera 2002; Weller et al. 1999), there is a presumption that ethnicity may be the key variable contributing to the construction of such models, as opposed to other social, cultural, behavioral, psychological, and physiological factors. However, Schoenberg and colleagues (2005) demonstrate that low socioeconomic status patients of American Indian, African American, and Euro-American descent were as likely to construct explanatory models that identify social distress as a cause of diabetes as those of Mexican American descent. Hence, Schoenberg and colleagues’ work suggests that structural violence may be as closely linked to such causal models as ethnomedical understandings. What seems to be most unique about Mexican and Mexican American explanatory models for diabetes is the powerful culturally elaborated idioms through which emotional experiences are frequently expressed. The most common idioms reported in these models include susto, an emotion roughly translated as fright and linked with acutely stressful experiences such as a car accident or being held at gunpoint, and coraje, an emotion roughly translated as rage or anger associated with prolonged forms of distress such as child abuse, domestic violence, and betrayal (Mercado-Martinez and Ramos-Herrera 2002).

Although cultural consensus analysis indicates that Mexican and Mexican American explanatory models often identify at least one form of stress or emotion as a cause of diabetes (Weller et al. 1999), the construction of these models appears to vary between men and women. For example, Mercado-Martinez and Ramos-Herrera (2002) found that although women commonly report prolonged stressors as causes of diabetes, men are more likely to report acute stressors situated within larger contexts of chronic stress. Results from the present study, discussed below, follow a similar trend. It is likely that such gender differences in diabetes narratives are related to larger trends in which Mexican or Mexican American women appear more vulnerable to sources of distress in the domestic sphere, involving family members, whereas men more often report distress originating outside the home and involving non–family members (Baker et al. 2005; Lown and Vega 2001; Mercado-Martinez and Ramos-Herrera 2002). This gender differential is consistent with patterns among other cultural groups as well, in which social and political constraints tend to make women most vulnerable to suffering associated with instability, disruption, loss of control, and betrayal in the family sphere; in such contexts, women appear most likely to employ idioms of distress (Hunt 1998; Guarnaccia 1992; Nichter 1981).

Thus, although there may be a high degree of intergroup congruence in the reporting of causes of diabetes, close intragroup analysis of the ways in which people talk about stress and situate it within local “moral worlds” (Hunt 1998) may reveal more about how individuals link social distress with somatic symptoms, thereby using diabetes as an “idiom of distress.” Moreover, these intragroup differences can tell us something about the distribution of social suffering within groups. They
illuminate who is most vulnerable, those for whom talk about diabetes causation may provide the most leverage for the expression of distress, and different patterns in the way that larger political–economic factors expose individuals to particular types of stress.

Is Diabetes an Idiom of Distress?

Idioms of distress are frequently somatic because the language of the body is often a safer or more compelling language than the social or psychological. For monistic cultures, as opposed to cultures like biomedicine that are dominated by the epistemology of mind–body dualism, the body is a natural medium through which distress may be expressed. Because the mind and body are deeply interconnected, stress and emotional distress have real effects on the body, and these effects are highlighted by idioms of distress. Thinking about diabetes as an idiom of distress introduces two new dimensions to our understanding of such idioms: first, diabetes is a biomedically acknowledged disease with clear organic causes, and yet it seems also to function as a narrative wedge for talking about emotional distress. A second and related twist is that even within the medical literature, it has been shown that stress and depression are associated with onset and negative prognosis of the disease. Hence, diabetes occupies a middle ground, as both a somatic idiom for experiences of suffering, and as an organic disease known to be affected by such suffering, although the precise nature of the physiological pathways are not entirely clear (Peyrot et al. 1999; Schoenberg et al. 2005; Surwit et al. 1992). What needs most to be unpacked is how social factors, and in particular structures of inequality, position diabetes in this middle ground.

Anthropologists and epidemiologists alike have suggested that the human body may “translate” social structures into health inequality (Bourdieu 1977; Krieger 1999; Rock 2003; Wilkinson 1996; Yen and Syme 1999). Melanie Rock (2003) argues that although much of diabetes research has focused on the “sweetness of blood” or heightened blood glucose levels, research and interventions would benefit from more explicit attention to embodied intersections among diabetes, distress, and duress at individual and population levels. However, such an investigation cannot focus solely on the vast concept of stress but, rather, must examine the ways in which certain forms of social distress become embodied. As such, narratives about illness experiences provide a unique window for interpreting how stress and psychological distress are internalized and negotiated by individuals suffering from chronic illness. Close study of these narratives can help scholars to move beyond simplistic stress-diabetes models to integrate a better understanding of the social processes and cultural mechanisms underlying the stress-diabetes interface.

Study Methods and Setting

Study Setting

Chicago is the third largest urban center in the United States with the second largest Mexican American population after Los Angeles. Latinos comprise 25 percent of Chicago’s population and, at 75 percent, Mexican Americans are the largest Latino
Table 1. Demographics of Study Population

<table>
<thead>
<tr>
<th></th>
<th>Male, n = 10 (38%)</th>
<th>Female, n = 16 (62%)</th>
<th>Total, n = 26</th>
</tr>
</thead>
<tbody>
<tr>
<td>Born in Mexico</td>
<td>7 (70%)</td>
<td>14 (88%)</td>
<td>21 (81%)</td>
</tr>
<tr>
<td>&lt; Primary Education</td>
<td>3 (30%)</td>
<td>9 (56%)</td>
<td>13 (50%)</td>
</tr>
<tr>
<td>&gt;10 years in United States</td>
<td>9 (90%)</td>
<td>13 (81%)</td>
<td>22 (85%)</td>
</tr>
<tr>
<td>Uninsured</td>
<td>6 (60%)</td>
<td>12 (75%)</td>
<td>18 (69%)</td>
</tr>
<tr>
<td>Unemployed</td>
<td>8 (80%)</td>
<td>13 (81%)</td>
<td>21 (81%)</td>
</tr>
<tr>
<td>Income ≤ $5,000/year</td>
<td>2 (20%)</td>
<td>11 (69%)</td>
<td>13 (50%)</td>
</tr>
</tbody>
</table>

subpopulation in Chicago (Guzman 2001). The composition of patients at the public hospital clinic where we recruited our population reflects this demographic; approximately 25–30 percent of the 40,000 patients seen there self-identify as Latino, 30–40 percent are diabetic, and few have steady work or jobs that provide health insurance.

Study Population

Patients were recruited from the waiting rooms of two public hospital clinics during the summer of 2007. Participants were eligible if they had a diagnosis of Type II diabetes mellitus, were older than 18 years of age, self-identified as either Mexican or Mexican American, and were able to consent in either Spanish or English. Participants were provided with a $20 incentive for their participation in the interview.

The majority of study participants were first-generation immigrants (n = 21), and the remaining five were second-generation immigrants with Mexican-origin parents (see Table 1). We refer to the study participants as Mexican Americans because, even though many were born in Mexico and self-identified as Mexican, most had lived in the United States for more than ten years. The majority of our sample was female, uninsured, and unemployed. Only half had completed more than primary school education, and half had incomes less than or equal to $5,000 per year.

Ethnographic Interviewing

Interviews were conducted in participant homes, a reserved room in the back of the public clinic, in a local YMCA, or in the cafeteria of the public hospital. Questions in the semistructured interview guide were developed based on the literature and our interest in diabetes explanatory models (Hunt et al. 1998; Kleinman 1988; Loewe and Freeman 2000; Weller et al. 1999). They included: “How did you come to have your illness?” and “Are there things that had an influence over your health?” If susto was not discussed spontaneously, we asked about susto directly. Specific questions pertaining to emotional health included: “Have you ever felt depressed or hopeless in the last month? Or in the past several months?” and “Do you talk to anyone? A doctor? A friend? A family member?” Other questions addressed more general perceptions of emotion, migration, ethnicity, and social support. Following the interview, the Beck Depression Inventory (BDI) II was administered in either
English or Spanish. The BDI-II is a 21-item self-report instrument intended to assess the existence and severity of symptoms of depression as listed in the American Psychiatric Association’s *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV, 1994) and has been validated and widely used in both English and Spanish (Beck et al. 1961; Contreras et al. 2004).

**Analytic Strategy**

After transcribing the tape-recorded interviews, two qualitative researchers developed the explanatory model framework by identifying key codes including both biomedical and nonbiomedical causes of diabetes. Each explanatory model was broken down using this framework and placed into a table with the following variables: heredity, diet, obesity, exercise, acute stressor, prolonged stressors, reported emotion (such as susto or coraje), and reported emotional experiences. Here we focus primarily on the social and emotional causes of diabetes discussed. However, it should be noted that many respondents reported concurrently both biomedically endorsed causes, such as heredity, diet, obesity, and exercise, and nonbiomedical causes of diabetes. We used the BDI-II to index depression symptomatology in terms of minimal, mild, moderate, and severe depression. To evaluate depression symptomatology, we gave each of the 21 items corresponding to a symptom of depression a score on a four-point scale (from 0 to 3). These scores were then summed to give a single score for the BDI-II; total scores of 0–13 were considered minimal range, 14–19 was considered mild, 20–28 was moderate, and 29–63 was severe.

**Results**

Although diabetes narratives collected for this study are largely congruent with those reported in other studies, we identified several important differences. Past studies largely interpret Mexican and Mexican American explanatory models in terms of cultural idioms, particularly susto and coraje (Coronado et al. 2004; Jezewski and Poss 2002; Mercado-Martinez and Ramos-Herrera 2002; Poss and Jezewski 2002; Weller et al. 1999). Although cultural idioms were reported in our sample, our analysis revealed that a greater focus on how stressors are reported in diabetes narratives (esp. in terms of acute vs. prolonged stressors) may be more important, for two main reasons. First, susto is by definition linked with acute stressors; looking only at this acute event may obfuscate the fact that such stressors are not told in isolation but are situated within larger contexts of chronic stress, such as structural violence and migration-related experiences. Second, the prevalence of prolonged forms of distress may be underestimated if they are measured solely in terms of coraje, because, by focusing on coraje, prolonged stressors associated with other emotions may be overlooked. In fact, we found that only half of the extreme and prolonged forms of distress reported, including physical, emotional, and verbal abuse, were identified as coraje by our study participants, and the other half as depression and general stress. Presentation and analysis of excerpts from several different narratives will serve to illustrate these points, and provide evidence in support of the larger argument, that narratives about diabetes function as a vehicle
for the expression of social suffering and emotional distress, and that diabetes is experienced as a product of such suffering.

“There Are a Lot of Things That Cause Diabetes…”: Narratives about Acute Stressors Situated in Contexts of Chronic Stress

Similar to the findings of other studies (Poss and Jezewksi 2002), we found that acute stressors were often linked to susto (frightful experiences) in diabetes causal explanations. For example, one respondent said, “The cause of my diabetes must be the fright . . . My house burned down and it frightened me.” And another said, “I had somewhat of a severe traumatic injury and right after that is when I guess my body turned diabetic.” In other cases, respondents situated acutely stressful experiences within a larger framework of chronic exposure to stress. This is exemplified in an excerpt from the narrative of Jorge, an elderly man who has lived in the United States more than 40 years, speaks only Spanish, and relies on social security, his pension, and his son for daily survival, as his health is poor:

Well there is fright and then there is getting startled. That also causes diabetes. . . . If you get robbed at gunpoint, you don’t know if you will be killed or not. That is frightening. All that contributes to one getting startled. If one was a criminal one would be armed and prepared in case one gets attacked. One is prepared to defend oneself. But if you are not a criminal, you are not prepared or armed. It is difficult. There are a lot of things that cause diabetes, yes. The majority of people suffer these experiences. Some experiences are worse than others but with a couple it is sufficient. If you live in a bad neighborhood you are constantly worried because you don’t know others’ intentions. When one is not a criminal, when one is an honest and hardworking person, you have to be careful of all of this.

In this excerpt, Jorge describes how chronic stress is a product of social suffering related to a deleterious living environment, in this case, a high-crime neighborhood, and increases the probability of engaging in or witnessing a stressful event—a critical point that has been overlooked in many previous studies. Later in the interview, Jorge describes how diabetes may be a direct product of social suffering:

Cause? There are many causes, many reasons. For example when one lives here illegally and one doesn’t have any documentation, immigration catches you, right and so after the first time that immigration catches you, you are traumatized. The trauma affects the diabetes a lot because you find yourself scared. One has the need to work to take care of the family, to take care of oneself because nobody will take care of you here. You have to pay rent, electricity, and water. Food. If one doesn’t have any food to eat that’s bad. You are left traumatized. That is one powerful reason that causes you to have diabetes.

These narratives suggest that the negative effects of acute stress may be potentiated by exposure to chronic social stresses resulting from structural inequalities.
Such forms of chronic stress increase the likelihood of exposure to multiple acutely stressful experiences, which may affect physical and mental health. As such, these narratives illustrate how diabetes figures as a vehicle for the expression of distress and is also experienced as a product of such stress.

“I Should Have Been Dying from Diabetes since So Much Has Happened . . .”: Narratives about Prolonged Stressors as Causes of Diabetes

Perhaps our most direct, and provocative, data linking social distress with diabetes reveal how study participants associated prolonged forms of distress with diabetes through behavioral, psychological, and physiological pathways. Many of these narratives focus on family-related stress, including family conflict, isolation from family members, and gender-based violence. Interestingly, our data also reveal that both perpetrators and victims of abuse associate such experiences with psychological distress and diabetes. The following narratives illustrate how patients use narratives to negotiate distressing experiences of their past and simultaneously to make sense of their current diabetes condition.

First, a dramatic, but not uncommon, narrative about prolonged stress demonstrates the intensity with which the experience is felt personally, socially, psychologically, and, as a result, physiologically through the idiom of and experience with diabetes. Ana is a 46-year-old divorced mother of four, who primarily speaks Spanish, has lived in the United States since she was 20 years of age, and lives on less than $5,000 per year in Chicago. She explains,

Many years ago, I should have been dying from diabetes since so much happened. But, I am strong and I felt that I was strong, that I could continue on alone. Many things happened to me, many things that my children do not know. I was violated more than ten times by my uncle, the father-in-law of my sister. He did many things that my siblings do not know and it has affected my whole life. I was younger than ten years old . . . I have been living with this rage all of my life. It is like a mark, one that always stays with you. I live on the defensive, like I want to attack, I am about to cry . . . I was always growing with no love, with resentment, all of my life. Whatever thing I faced on the floor, I kicked it; I had so much anger . . . I don’t know why, but I just had so much rage . . .

In this narrative, Ana explains how deeply she was affected by childhood abuse and domestic violence. She explains that coraje (rage) continues to affect her everyday life as she describes feeling vigilant and “on the defensive.”

Similarly, Mari is a 36-year-old mother who speaks both English and Spanish fluently, lives on $10,000–$25,000 per year, and migrated to the United States when she was 17, first to Los Angeles and then to Chicago. Mari narrates a complicated history of abuse:

I got diabetes after I came from Mexico. I met this guy in California who told me, “if you wanna come to Chicago with me, I will help you. I’ll buy you a Greyhound ticket and you can stay with my family.” But that’s not
right. He paid for my bus, but when I arrived here in Chicago and met his family, everybody called me tía. He had told his family that I was his lady. When I wanted to leave, they made me stay with him. They thought that I was his fiancé or something. Like novia—it’s not right. They made me depressed and they made me angry. It was hard because I didn’t have family here—nobody. I had to stay with him and I stayed with him for five years… He abused me sometimes. [Mari discusses sexual, physical, and emotional abuse.] He gave me food and everything, but sometimes he wouldn’t let me go out, speak with other people. He locked my door. I couldn’t talk to anyone or see anyone. He locked me in one room for five years. Sometimes we would go out with his family, but he was always there. He didn’t let me see other people or get friends—nothing like that. During that time I began eating and drinking a lot of Coca Cola. I didn’t walk. I didn’t do anything—just eat. I felt depressed because I didn’t have my parents to cry to. I didn’t have anybody to talk with about what happened to me then… I think he was scared because if I went out and made friends, I might find a new young guy and probably change my life. But I never did that. I would talk to him sometimes and say, “you know what? I don’t go and do that—I don’t want to stay with you, I told you. And I don’t go to different guys and then stay with you.” But he didn’t understand. Sometimes we fought about that… This is the real problem that gave me diabetes. It’s a lot of pop, pork, everything, no exercise, no friends, no family… and the situation depressed me.

Mari describes her vulnerability to diabetes in terms of the distressing life experiences associated with her migration: she was alone, economically dependent, and in need of social support. Although in some ways a dramatic case, Mari’s migration narrative exemplifies the kinds of severely distressing experiences to which many Mexican immigrants in the United States are exposed, and it situates her story within larger political economic processes that contributed to her social suffering. Specifically, Mari links such distress with her captivity and social isolation, experiences to which economic migration made her more vulnerable, and emphasizes the role of suffering and depression in her diabetes onset. Mari’s narrative illustrates the behavioral pathways through which her depression was made manifest in her behaviors, including eating fatty foods and staying physically inactive, which she notes increased her risk for the development of diabetes.

Finally, one male respondent, Miguel, reported coraje as a direct cause of diabetes. He was a 41-year-old male, divorced father of one, who primarily speaks Spanish, has lived in the United States since the age of 17, works in delivery, and earns $35,000–$40,000 each year. In a response to “what was the cause of your diabetes?” he replied,

I think I got too mad, I believe so. My wife had an affair and I got very mad. That was my rage. I hit her. She has a kid that isn’t mine and well that is the proof… she betrayed our marriage. I got very mad… From that point on I started to get very thirsty and I started to get dizzy. I believe it was from not eating right and working. I don’t go to the doctor often but I had an exam
and they told me I had diabetes. . . . Because of anger, that is why I got it. The pancreas is too delicate, too sentimental. It works and if you bother it, it stops working. The pancreas is one of the most delicate parts that we have in our body. The second is the heart. It is very sentimental, it is . . . very delicate. If it stops working we don’t have any insulin, we don’t produce it. It is bad.

Miguel outlines the distress behind his anger and then describes the pathophysiology (via the pancreas) behind his diabetes. Interestingly, Miguel associates coraje with gender-based violence and is both perpetrator and receiver of abuse. He is the perpetrator of physical abuse, but the receiver of emotional betrayal as a result of his wife’s infidelity. Because family and social relations are so highly prioritized culturally (Hirsch 2003), it seems that social trauma and betrayal are particularly damaging.

Can We Interpret Depression Symptomatology from Diabetes Narratives?

Close analysis of narratives about social distress provides unique potential for understanding risk for depression symptomatology. For example, Jorge’s narrative about general stressors corresponded with mild depressive symptoms according to the BDI-II. Mari’s and Miguel’s narratives about interpersonal violence were paired with symptoms corresponding with moderate depression. Finally, Ana’s narrative addressed abuse from her past that continued to affect her today, and her BDI-II symptoms corresponded with severe depression. In the sample as a whole, 20 of 26 respondents (77 percent) associated stress or emotional distress with diabetes, and 50 percent of these individuals were women who reported a form of “prolonged distress.” Of these ten women, seven identified a specific type of physical, emotional, or sexual abuse to which they were exposed during childhood or adulthood as a cause of diabetes (see Table 2). Congruent with the literature on exposure to such abuse and depressive symptoms (Shea et al. 2004), four of these seven women (57 percent) presented moderate to severe symptoms of depression at the time of the interview, and Miguel, the only male who reported emotional abuse as a cause of diabetes, displayed symptoms corresponding with symptoms of moderate depression in the BDI-II.

<table>
<thead>
<tr>
<th>Type of Stressor</th>
<th>Men 10 (38%)</th>
<th>Women 16 (62%)</th>
<th>Total (n = 26)</th>
<th>BDI-II measures of moderate to severe Depression</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute distress <em>(Examples: accident, injury, neighborhood violence)</em></td>
<td>4 (40%)</td>
<td>3 (19%)</td>
<td>7 (27%)</td>
<td>1 (14% of total)</td>
</tr>
<tr>
<td>Prolonged distress <em>(Examples: abuse, family stress, betrayal, loneliness)</em></td>
<td>3 (30%)</td>
<td>10 (63%)</td>
<td>13 (50%)</td>
<td>5 (38% of total)</td>
</tr>
<tr>
<td>Any stress</td>
<td>7 (70%)</td>
<td>13 (81%)</td>
<td>20 (77%)</td>
<td>6 (30% of total)</td>
</tr>
</tbody>
</table>
In sum, we found that prolonged stressors were (1) more commonly reported than acute stressors, (2) often reported by women, and (3) commonly reported by individuals displaying moderate to severe depressive symptoms.

Discussion

Medical anthropologists have long been interested in studying how individuals use emotional experiences to make sense of their illnesses, crafting narratives that identify distressing events of the past, and link them with distressing feelings of the present (Becker 1997; Cain 1991; Hunt 1998, 2000; Mattingly 1998; Mattingly and Garro 2000). Notably, Carole Cain (1991) has interpreted illness narratives as mechanisms of identity acquisition, as individuals use them to reorder past experiences in a way that is congruent with cultural paradigms. Gay Becker (1997) has argued that individuals use such narratives to negotiate lives disrupted by chronic illness and reestablish order and continuity in their social worlds. Linda M. Hunt (1998, 2000) has demonstrated how individuals strategically use chronic illness to confront past forms of suffering in their private and public lives. We propose that individuals also may use chronic illnesses, like diabetes, as idioms of distress, relaying psychosocial stress through somatic symptoms, and showing how social distress interacts with the chronic illness itself.

The lives of Jorge, Ana, Mari, and Miguel have been disrupted and transformed by diabetes, but their causal narratives demonstrate how diabetes is only one of many stressors in their historical biographies. Jorge describes how political–economic and social conditions are transduced into somatic symptoms through everyday violence, such as poverty, food scarcity, and street violence. Ana explains how child abuses from her youth have become embodied in a deep rage that caused her to become diabetic. Mari demonstrates how migration-related experiences fueled her depression and how depressive symptoms may have mediated behaviors that increased her risk for diabetes, including emotional eating, consumption of a fattier diet, and physical inactivity. Finally, Miguel explains how the rage from his wife’s betrayal became physically manifested in his pancreas and caused diabetes. These personal accounts show how the idiom of diabetes provides a platform on which patients can chronicle the ways in which disorder from their social worlds is mirrored by the disorder caused by living with chronic illness.

Traditionally, idioms of distress are believed to be “adaptive responses in circumstances where other modes of expression fail to communicate distress” (Nichter 1981:379). Where they are unable or unwilling to socially express deeply personal information, such as domestic abuse, individuals identify somatic symptoms that convey their suffering; often these somatic idioms are socially recognized as common ailments and therefore the reporting of these idioms, rather than psychosocial stress, does not require individuals to breach social norms (Good 1977; Guarnaccia 1992; Hunt 1998; Nichter 1981). In light of the growing prevalence of diabetes among Mexican Americans, and increasing social significance of the disease within families and communities, it is not surprising that diabetes may function as a somatic idiom through which individuals may communicate other forms of distress.

Gender differences in diabetes narratives also reveal how identities are transformed and individuals make sense of their changing social worlds through such
narrative practices. In their study on the causes of diabetes in Mexico, Mercado-Martinez and Ramos-Herrera (2002) found that illness narratives generally maintained gendered boundaries, as men more commonly identified causes of diabetes from the public sphere and women often identified causes of diabetes within the private sphere—spaces where Mexican men and women stereotypically hold the most power. Although we found similar gendered aggregations of distress reported from these distinct spheres, we believe that migration narratives, shaped by political economic processes such as labor migration, may transform these private–public sphere dichotomies, as gender norms and roles may shift once Mexican couples move to the United States (Hirsch 2003). We see this renegotiation of power in Miguel’s narrative, as he feels socially betrayed by his wife’s infidelity, an act that transcends the private–public sphere dichotomy. Such findings raise questions about the ways in which individuals facing forms of stress associated with transcultural identities, migration, acculturation, and structural violence may use new idioms of distress to convey disorder in their social worlds.

The prominence of stress and emotional distress in diabetes narratives also introduces new insights about the relationship between social distress and individual everyday experiences. For example, Jorge identified everyday violence as a cause of his diabetes, and his exposure to such chronic stress has not changed. Even at the time of the interview, Jorge and his son were in the process of being evicted from their home because they were unable to pay their monthly rent. Moreover, diabetes itself must be understood as a chronic stressor with which individuals like Jorge must constantly contend. Hence, diabetes narratives such as Jorge’s demonstrate how material deprivation may become embodied in diabetes and may continue to affect, exacerbate, and be affected by everyday diabetes experiences, such as seeking diabetes care, managing medication regimens, and attending to exercise patterns and a healthy diet.

Narratives about abuse may even more profoundly affect the everyday experiences of chronic illness because such interpersonal traumas may live on through memory. The emotional impact of such experiences is clear in Ana’s statement: “[My rage] is like a mark, one that always stays with you.” Certainly, according to the discourse on post-traumatic stress disorder, such extremely stressful experiences, or “traumas,” tend to intrude into the present-day through traumatic memories (Young 1997). Many of the individuals in our study who experienced such traumas have internalized these emotional experiences over decades without social or psychological support. Illnesses like diabetes may be especially suited as idioms for the expression of traumatic memories because chronic illness also disrupts and intrudes on everyday life. Thus, we may conceive of these parallel forms of disruption as cognitively associated with one another by virtue of their similar effects on biography and their intrusion into everyday life.

Finally, Miguel’s and Mari’s narratives introduce noteworthy lay theories about the ways in which social distress may be transduced into pathophysiology. When Miguel argues that his anger associated with his ex-wife’s betrayal caused his pancreas, the organ responsible for insulin production, to malfunction, thereby causing him diabetes, he navigates the intersection between his emotional, individual world and perceived physiological response. Similarly, Mari expresses major social and behavioral pathways through which the cause of diabetes was “pop, pork, everything,
no exercise, no friends, no family… and the situation depressed me.” Mari uses the idiom of diabetes to communicate distressing events from her migration narrative, demonstrating how such experiences caused her depression and unhealthy behaviors. Such narratives illustrate how people experience, and, in these cases, conceptualize their diabetes as a product of social suffering. Even more, the narratives we have presented suggest that we should take seriously the phenomenological links between distress and diabetes by systematically investigating them as potential causal pathways.

Conclusion: Toward an Understanding of Stress, Distress, and Diabetes

The discipline of anthropology provides opportunity to uncover the dynamic relationships among political–economic, social, cultural, psychological, and somatic factors in contributing to the diabetes epidemic. By situating dramatic plots from diabetes narratives within larger contexts of chronic stress, and considering the ways in which psychological and social suffering may interact with chronic illness, we can see how both chronic stress and specific forms of social distress may become embodied in diabetes experiences. Applying the idioms of distress framework to our understanding of chronic illness narratives advances our understanding of how increasingly prevalent chronic diseases, like diabetes, achieve social significance in the lives of those who are most affected.

Future studies that systematically investigate the interaction among the social, behavioral, psychological, and physiological pathways mediating the stress–diabetes interface will further contribute to our understanding of how lay discourses about diabetes may be used to interpret stress and psychological distress in the clinical sphere. Although underlying contributors to social distress need to be addressed, at the very least, such integrated approaches may prove to be an extremely powerful way to communicate the need for improved availability of social and mental health services for poor and underserved diabetes patients in the United States.

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