

IT'S NOT A PROBLEM UNTIL IT'S A PROBLEM: HOW STUDYING SOCIAL PRACTICE CAN SHED LIGHT ON HEALTH CULTURE AND TYPE 2 DIABETES IN ISLA MUJERES

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Abstract

Diabetes is a serious public health problem in Mexico with a particular concern in Isla Mujeres. With its sparkling beaches, delicious ceviche, and dazzling sunsets, the Caribbean island of Isla Mujeres in Quintana Roo, Mexico, is paradise to all; nevertheless, an estimated 80 percent of the population has Type 2 diabetes. In a primarily *isleño* (islander) population, I conducted a mixed method ethnographic study that integrated an anthropological lens with an applied research design. The rate of Type 2 diabetes within this population highlights the need to include in-depth, qualitative exploration of local context, social environment, and *isleño* culture when considering how to create change. Clinical data, formal and informal interviews, and surveys reveal the need to improve accessible patient education programs. The focus of this ethnography study is to understand the cultural and societal domains of food as a social practice, nutrition, and education that have led to this food-related disease.

Key words: Type 2 diabetes, food and nutrition, enculturation

Introduction

This research examines the single biggest health problem we face globally: the growing epidemic of obesity and, consequently, Type 2 diabetes.

More than twice as many people around the world go to bed overweight as go to bed hungry (Hyman 2016). Western diets, such as the Standard American Diet in the United States, are to blame and is said to be “the worst diet on the planet, which we are now exporting to every country in the world” in conjunction with a lack of exercise (Hyman 2016: page 42). These diets are characterized by high intakes of animal foods—particularly processed meats, dairy products—and low intakes of fruits, vegetables, whole grains, legumes, nuts, and seeds.

Diabetes is a serious, chronic disease that occurs when the pancreas does not produce enough insulin or when the body cannot effectively use the insulin it produces. In 2012 alone, 1.5 million people died from diabetes (World Health Organization 2016). Over the past few decades, both the number of cases and the prevalence of diabetes have steadily increased. This is the case in Mexico, where it is the nation’s number one killer, resulting in about 70,000 deaths a year and more specifically on the island of Isla Mujeres (Johnson 2012).

Isla Mujeres is an island off the coast of Cancun in the Mexican state of Quintana Roo. Today, the population is *approximately* 17,000 people of mostly Maya ancestry and ethnicity. The medical director of the Public Health Clinic on the island considers the rate of Type 2 diabetes (including reported and an estimation of unreported cases) to be close to 90 percent of the island’s population, making it the number one health concern (Rosenberg 2017). In Mexico, diabetes is the first cause of adult nonobstetric hospital admissions and hospital mortality and the third cause of mortality nationwide (Jiménez-Cruz and Bacardi-Gascon 2004).

Enculturation

Enculturation is the gradual acquisition of the characteristics and norms of a culture or group by a person, another culture, etc. Through the lens of enculturation, the focus of my research is to understand and distinguish the role of traditional versus nontraditional food for *isleños* (islanders). The objective of this investigation is to employ the biocultural perspective of how culture shapes and is shaped by the body in order to understand ways in which we can lower the rates of Type 2 diabetes on Isla Mujeres. My data reveals that there is a strong need for effective programs that promote awareness and make treatment, peer support, and education for diabetes more widely available to islanders. This research was funded by the University of New Mexico’s Mellon Mays Undergraduate Fellowship and was supported in part by the Isla Mujeres Ethnographic Field School.

Methods

Research Design

This research was conducted between June and July 2017 and includes semi-formal interviews with community members, local officials, and individuals specifically impacted by diabetes. This study also involved a general survey on diabetes-related needs with community residents. I conducted semi-formal topical interviews with local chefs to understand the “traditional” *isleño* cuisine; six patients with diabetes and their family members; the director of Desarrollo Integral de Familia (DIF) Christina¹, who also has her own private practice; medical officials at the community outreach institutions of Centro

de Rehabilitación Integral Municipal (CRIM); and the Hospital Integral². I also conducted life history interviews with two diabetics, Gloria and Angela, sisters whose entire family has been negatively impacted by diabetes. I collected quantitative data from the three medical organizations that I worked with, as well as through a survey about locals' perception of diabetes on Isla Mujeres. This survey was posted on-line and distributed in a neighborhood on Isla Mujeres.

The Reality of Type 2 Diabetes in Isla Mujeres

Type 2 diabetes is non-communicable, so it is based almost entirely on lifestyle choices and is, therefore, inherently linked to culture. Type 2 diabetes on the island is a serious problem; the Centers for Disease Control and Prevention (CDC) states that an epidemic occurs when 2 percent of the population has a disease. I collected data from three separate clinics on the island. From this data, it is possible to see the reality of Type 2 diabetes within this population. With combined data from the three clinics I worked with, 65.5 percent of all patients with Type 2 diabetes are women. Furthermore, 52.4 percent of the patients are recorded to be obese, and all patients are overweight.

Thematic Domains

The idea that culture influences health has been accepted by the broader health research community, but "culture" is often superficially represented without context. People's lives exist within contexts that influence individual behavior and impact their ability to live a healthy lifestyle. The reality of how culture influences health is more complicated than placing people within the culture and, therefore, needs to include context (Page-Reeves et al. 2013). The extent to which contextual influences are structured includes the economy and natural and human built environments. Within these influences, I observed three separate prominent factors that affect people's ability to live a healthy lifestyle. These *three categories are education, nutrition, and social practice.*

Within these key domains, eight themes emerged: genetics, money, fear of medical interventions, lack of physical activity, unhealthy food choices, food as a social practice, lack of information about nutrition and diabetes, and disease acceptance. The magnitude of these data illustrates the importance of understanding the economic and cultural context in this community. Below, I will explain these themes in more detail in conjunction with ethnographic examples.

Genetics and Type 2 Diabetes

The pathological sequence for Type 2 diabetes is complex and entails different elements that result in disease, such as a genetic predisposition; medical professionals on the island identified ancestry to explain this phenomenon. Every participant interviewed has several family members that either have Type 2 diabetes or have died due to diabetic complications. To be diagnosed with Type 2 diabetes, a genetic predisposition must exist; however, chances that a diabetic phenotype will occur depend on many environmental factors that share an ability to cause Type 2 diabetes. These factors include the cost of healthy living, natural and built environments, and education about diabetes.

Money and Expense

Money is a major factor affecting nutrition and diabetes. Participants often talked about the cost of healthy food and medical treatment for diabetes. Most expressed that buying healthy food, such as their favorite fruits and vegetables, is both expensive and difficult because most produce has to be imported from other parts of Mexico. Gloria, a female participant who has had Type 2 diabetes for ten years, said, "You know, we can't live like vegetarians here because everything is brought from Cancun or Chiapas. It's too expensive." One family offered me advice on the best locations and times to buy fruits and vegetables on the island, which meant that they can only afford to buy produce on Tuesdays and Wednesdays at a specific store. Many participants stated that it is cheaper to eat out on the street than it is to eat at home. Additionally, participants

reported that they have limited access to healthy food because they cannot afford the transportation to go to the grocery stores and restaurants that have high quality, affordable food. There is, however, an overabundance of taco carts and convenience stores on street corners.

Basic health care in Mexico is free, but it is up to the patient to pay for special medical treatments and prescriptions. Therefore, most patients struggle to pay for their diabetes medication. Alexia, a female participant who has suffered from diabetes since her youth asked, "How am I supposed to eat healthy and afford my pills? I just can't."

Fear of Insulin

Participants linked the use of insulin to certain death. A few voiced the belief that insulin kills people with diabetes. One participant stated, "You will die. That's what our parents told us. I think the government wanted them to believe that because it is too expensive to pay for everyone to have it." Participants expressed fears about using insulin and expressed that insulin treatment is scary. Christina, a medical doctor I interviewed, admitted, "Many Mexicans believe that if they use insulin, they will instantly go blind. This is because they cannot associate advanced diabetes with blindness, rather they connect insulin to blindness." Alexia stated, "We believe that insulin is bad for you. You don't feel that good after using insulin, so you stop using it after the first time. We don't know that you just have to get used to it." Furthermore, Martha, another female participant, explained, "I'm afraid of insulin because you don't know what it does to your body; it can't be good." Several participants believed that using insulin injections was the worst treatment to be used for diabetes and should only be used as a last resort. Martha's aunt Juanita shared, "My mom is forced to use insulin now before every meal because now she cannot live without it like she used to."

The Island Lacks Information and Medical Professionals

One of the most common and straightforward themes to emerge from

the data for this study was that participants believe they do not have sufficient information to make informed decisions. In a survey I conducted within the community, 65 percent of locals believe that the biggest problem the island faces in terms of diabetes is the lack of information and medical professionals. They lack the information to know which foods to purchase, to know how to prepare healthy meals, (especially with respect to culturally appropriate foods), and to really understand the symptoms of diabetes and the relationship between nutrition and diabetes. A local doctor admitted to me during an interview that his patients do not come to him for their diabetes but for other chronic problems. Diabetic neuropathy alone causes several different symptoms that can be grueling without the proper treatment. However, at this particular clinic, they do not offer patient education or provide sufficient information about the role of nutrition or how diabetes operates in the body. Doctors are treating the symptoms of diabetes rather than addressing and treating the disease itself.

María

During a formal interview with Christina at her clinic, a female patient with Type 2 diabetes walked in. Her name is María, and she has had Type 2 diabetes for ten years. In April, she had an abscess removed that was a result of uncontrolled diabetes. During her recovery process, she was proud that she was able to lower her blood sugar by only eating three tortillas at breakfast and eating a healthier lunch: chicken breast and Coca-Cola. Christina, who was still in the room jokingly asked: "And which doctor told you that you could drink Coca-Cola?" María laughed and responded, "Well no one told me!" In a quick change of tone, Christina looked at her pointedly and said, "If you keep this up, you could get another abscess on your leg, and you could lose it." María clearly did not understand the connection between Coca-Cola and diabetes when her eyes bulged with fear and asked, "No, that can happen?"

Clearly, Islanders lack general information regarding nutrition and diabetes, and they lack access to accessible and

knowledgeable medical professions for daily treatment. For María, the reality of her disease became clear because of the above interchange, but others may not have this insight until it is too late.

Being Physically Active is Challenging

Participants recognized that there is a relationship between their environment, weather, and physical exercise. Isleños associate these factors with a lack of physical activity in their own lives. There are a number of exercise programs offered at various locations on the island that include Zumba or other movement practices, but most participants find it hard to attend for a variety of reasons. For example, participants discussed that the weather is the biggest component in determining their exercise habits. When asked if she exercised, Gloria laughed and said, "No! It's always too hot." Others identified that built environment factors prevent them from physical activity as well. These built environment barriers include poorly structured sidewalks that are hard to walk on because they have lamp posts in the middle of them or are cracked or chaotic roads that are filled with speeding golf carts and taxis. Despite the obvious danger, most participants prefer to walk on the road but would still rather take their moto.

Additionally, Gloria declared that the expanding tourist economy has influenced isleño physical health. She revealed that tourism has impacted her ability to freely exercise in public spaces. When she was younger, she relished in her ritual morning swim with her close friends and family before class. Now, she feels uncomfortable to be at her favorite childhood location because there are "too many tourists."

People Eat Unhealthy Food

Sugar and sweet things, in general, are the most widely recognized causes of diabetes. Participants acknowledged that the type of food they eat is unhealthy and admitted that they excessively consume Coca-Cola, fried food, and *dulces* (sweets.) However, they expressed strong opinions about the inability to stop drinking Coca-Cola: they

always go back to it. One participant even compared it to cocaine.

Participants in this project found it necessary to examine the history of diabetes on the Island and its origin in the 1970s in order to understand the role of diabetes on Isla Mujeres. One family concluded that it wasn't the Coca-Cola that started this issue but the processed meat and cheese that came to the island in the early 1970s. For hundreds of years, they used to eat fish, seafood, and sea turtles, and Type 2 diabetes did not exist before packaged Western food arrived on the island. People's diets no longer consist of beans and seafood as their parents' diets did. Participants also recognized that the island's "traditional" Mexican cuisine often contains ingredients or requires preparation techniques that do not contribute to a healthy diet. In particular, participants identified the high amount of fat in their diet and the tendency for people to eat large amounts of carbohydrates at each meal as contributing to the unhealthy quality of traditional eating habits. Gloria revealed that before she and her family were diagnosed with Type 2 diabetes, they would drink a liter of Coca-Cola a day, eat twelve to fifteen tortillas per meal, and have *dulces* like cakes and sweets nightly.

Food is a Social Practice

The emerging diabetes epidemic on Isla Mujeres plays out against a backdrop of cultural food practices. Data from this study illustrates the social dynamics at the core of food and cultural identity. As one participant explained, life on the island is characterized by sleeping late, working a little, eating with family, and most importantly "*chelas en la playa y más diversión*" (beers on the beach and more fun). The social practice of eating and drinking with friends and family perfectly captures island life. However, this has become problematic because nutrition and health are put on the backburner, as it is more important to participate in social practices.

Accepting Type 2 Diabetes

Islanders do not want to know the truth of their disease, they do not want

to admit that they have a disease, and most refuse to talk about it, especially men. The culture of machismo heavily influences the rate of Type 2 diabetes on the island. If a man has openly declared he has Type 2 diabetes, his friends and family will deem him as unmanly because he lost the ability to drink well. This kind of causation of being unmanly shames the individual for their excesses in eating and drinking, and therefore, most men do not acknowledge symptoms of diabetes. Men don't acknowledge symptoms of diabetes because machismo shapes Mexican attitude and beliefs for men, and if they lose the ability to drink due to the acknowledgement of disease, their shame will prevent them from acknowledging the disease at all.

Intervention and Prevention

Getting individuals to change their behavior is more complicated than providing more information and moving an individual along a continuum of self-efficacy toward healthier decision making. To successfully combat Type 2 diabetes on Isla Mujeres, there must be a plan of intervention and prevention. Patient education programs about health and nutrition need to become accessible to the public as well as medical professionals. There is a demand for clinics to provide more information about diabetes and nutrition.

The Case of Victoria

Gloria and Angela have a younger sister, Victoria, who does not have diabetes. She grew up in a family where everyone has diabetes and has seen firsthand the negative consequences this disease has—both her parents died from diabetes, Angela is nearly blind, and Gloria almost lost her foot in April. Despite all of this, Victoria drinks about three bottles of Coca-Cola a day and continues to eat unhealthy food. Unfortunately, diabetes is not a problem until it is too late to make any changes. Like many *isleños*, because Victoria has not yet been formally diagnosed with Type 2 diabetes, she takes no preventative action. Victoria does not take any forms

of preventive action when it comes to her health because she has not been diagnosed with diabetes.

Limitations and Suggestions

Qualitative research lends itself to the crisis of chronic disease and its management. It is necessary to understand culture and life in its whole form in order to portray the reality of the health issues as discussed in this study. Incorporating the benefits of epistemology and an applied anthropological research design offer a valuable tool for representing and understanding these dynamics by illuminating social and cultural concepts and highlighting the ways that they connect with the local context. The main limitation in this project was the short time frame. Additionally, men were unwilling to speak with me about their disease, which may have been related to the machismo culture. Nevertheless, this research contributes a multidimensional perspective on the diabetes-related health challenges faced by islanders. Meaning resides in collective representations that cannot be entirely reduced to an individual perspective. Future ethnographers who wish to study diabetes on Isla Mujeres have abounding directions in which they can go. One study I believe would be particularly interesting and informative would be to study the role of traditional healers and diabetes on the island because *isleño* culture has strong Aztec and Mayan influences. Furthermore, I believe additional research into the roles of agency versus structure among families who are particularly active, such as fishermen or whale shark guides, would be helpful to see whether diabetes is less prevalent within those families.

Notes

¹All names have been changed for the purpose of this paper.

²DIF and CRIM are social services programs that deal with family affairs and offer several rehabilitation services.

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