

Type 2 diabetes in hispanic women and the importance of treatment

[Health & Medicine](#), [Disease](#)



Introduction

Type 2 diabetes is a condition in which a person becomes insulin resistant, this means that the person is able to produce enough insulin, but their cells do not respond well to it. Type 2 diabetes is different from that of type 1 diabetes and much more common. Type 2 usually appears later in life and is more common in certain ethnic groups including African Americans and Hispanics. “ It is estimated that about 592 million cases worldwide will suffer from type 2 diabetes by the year 2035” (Esposito et al., 2015, p. 1). There are many risk factors that further the development of type 2 diabetes such as ethnic group, obesity, smoking, and stress. Treatment for type 2 diabetics can make life more manageable and help improve symptoms. By following direct precautions and treatment plans given by a physician, a person with type 2 diabetes can improve their overall quality of life along with their diabetic status.

25-year-old Briana Hernandez has just been diagnosed with type 2 diabetes. She is a Hispanic single woman who smokes a lot, she is overweight, and she lives in a rural area of Connecticut. Compared to her Caucasian counterpart, being Hispanic has made her more likely to develop the disease. Being single has also affected her chances in developing type 2 diabetes as she has had no social support. Briana is overweight, this is the number one risk factor that contributes to her disease. In Gucciard, Matthew, Demelo, and Bondy’s (2011) original investigation of people with diabetes, diabetic’s that are smokers demonstrate poorer self-care behavior than nonsmokers.

Poor self-care habits could include eating poorly and living a sedentary life. This could be another contributing factor as to why Briana developed the disease. Another high-risk factor that contributes to Briana's diabetes is her living situation. Living in rural areas can make many factors of everyday life more difficult. Access to healthy food and transportation (Jones, Crabb, Turnbull & Oxland, 2014) are much more limited to the public and can, therefore, be more difficult to access. The topics that will be further discussed include the risk factors of diabetes, what health issues diabetes can lead to, ways to help improve one's health concerning diabetes, and adherence to treatment.

The Health Issues Type 2 Diabetes Can Lead to

Although having type 2 diabetes does not seem too serious, it can lead to some very serious health issues including cancer, amputation, cardiovascular disease, or even mortality. Briana is especially at risk for cancer since she is overweight and has diabetes. Gard, Maurer, Reed, and Selagamsetty (2013) discuss diabetes as being one of the risk factors for many types of cancer. One thing that is common in developing diabetes is that someone who suffers from obesity is also more likely to develop cancer or diabetes than someone with a healthy BMI. Obesity is a risk factor for developing diabetes and cancer. Lewis, Lujan, Tonson, Wiseman, and Dicarrio (2019) discuss how people that suffer from type 2 diabetes, due to being overweight and living a sedentary life, have exercise intolerance. People with exercise intolerance have an increased chance of developing cardiovascular disease. In order to

keep Briana's health on track and reduce the risk of her condition getting any worse, her physician will need to implement a treatment plan.

The Steps of Treatment

The first step would be for Briana to meet with her physician about her condition to talk about what she can do to manage and improve her symptoms. Throughout the treatment plan, Briana should be taking her diabetes medication. The second step in this treatment plan would be to implement social support. Social support is influential to a person's health and wellbeing. It can make vast improvements for Briana's adherence to her treatment plan. Briana should try to seek support not just from her family, but from her friends and coworkers as well. Since Briana is single, she might not have a very populated social circle, so she should try to build closer relationships with her coworkers and friends.

Losing Weight

Briana's main priority would be to lose weight since obesity can lead to so many other health issues. During the meetings with her physician, Briana will get tips and advice to guide her through a Mediterranean diet. Esposito et al. (2015) did a study showing that partaking in a Mediterranean diet can help reduce the occurrence of type 2 diabetes for someone at risk and can help manage type 2 diabetes for someone that is already diagnosed. When managing type 2 diabetes, it is important to maintain their glucose level. "Lifestyle interventions, including dietary changes, have a vital role in preventing the progression of impaired fasting glucose (IFG) or impaired glucose tolerance (IGT)" (Esposito et al., 2015, p. 2). While Briana's on the

Mediterranean diet it will be constructive that she integrates in more physical activity, it could be something as little as taking a walk for 10 minutes or taking the stairs instead of the elevator.

Stopping Smoking

Briana should gradually try to quit smoking or reduce her use if possible. As previously mentioned, quitting smoking could help to improve her self-care behaviors since smokers typically demonstrate poor self-care. Gucciardi and colleagues (2011) did a cross-sectional study that examined the behaviors and disease management of smokers versus nonsmokers in patients with type 2 diabetes. They found the results by having the participants answer questionnaires on their self-management behaviors. What they found was that smokers with type 2 diabetes were less efficient at managing their diabetes. They demonstrated poor eating habits, not being cautious of their insulin levels, and neglecting to utilize the resources that were provided to them (Gucciardi et al., 2011).

Keeping a Nutrition Journal and a Physical Activity Diary

It is important for Briana to adhere to all elements of the plan because if not, Briana's health could decline and result in something much more serious. Adherence to the plan may prove difficult as all the treatment required takes place daily and is rigorous. One factor that Briana does not have control over and might make treatment adherence difficult is the fact that she lives in a rural area. Jones and colleagues (2014) talk about the issues of treatment surrounding living in a rural area. Some issues include the fact that there is less fresh food in rural areas and the cost of healthy food is greater than that

of unhealthy food. It is also hard to have access to public transportation to get where one needs to be such as a doctor appointment.

As previously mentioned, there are parts of Briana's treatment plan that need to be worked on, such as losing weight. Ways that could help Briana to lose weight would be to keep a nutrition journal and a physical activity diary. This will help Briana keep track of what she eats and help her physician see how well she is abiding by her treatment plan. Linmans, Van Rossem, Knottnerus, and Spigt (2015) did a study where they looked at lifestyle intervention of patients that have type 2 diabetes. They looked at two healthcare programs which they named Health Care Center a (HCCa) and Health Care Center b (HCCb), that implemented lifestyle interventions. HCCa focused on nutrition journals, physical activity diary, and a multidisciplinary approach. While HCCb focused solely on the multidisciplinary approach, such as referral to a dietician or advice about treatment. What Linmans and colleagues (2015) found was HCCa patients reported that having a nutrition journal and physical activity diary was helpful in their treatment process and helped the patients to feel more in control.

Wearing a pedometer to keep track of Briana's physical activity is another way to help her adhere to losing weight. Hu et al. (2015) argued that people with type 2 diabetes are more likely to partake in more physical activity if they are wearing a pedometer, opposed to just being physically active with no way of tracking. Hu et al. (2015) did a study that looked at people that shared Briana's demographic. They did interventions with Hispanic families having at least one family member diagnosed with type 2 diabetes. One

thing that they have found in this study during the intervention was that, in people with type 2 diabetes, physical activity increased when wearing a pedometer. Although this study presumably has a lot to do with the family support, it does show that wearing a pedometer can help with the adherence to losing weight. Although a pedometer may help, Lewis and colleagues (2019) found that obesity and inactivity in people with type 2 diabetes make it difficult to exercise due to exercise intolerance. They did a study with a rat model that had type 2 diabetes. They tested to see if type 2 diabetes alone would make someone exercise intolerant or if obesity and inactivity were the main contributing factors. They traced the rat's activity and found that being obese and living a sedentary life results in exercise intolerance, not just having type 2 diabetes (Lewis et al., 2019). This further justifies wearing a pedometer for adherence to give the patients motivation since it is sometimes difficult for them to exercise. However, if this plan does not work for Briana, there is a need for a backup plan to be in place since losing weight is crucial for her treatment.

Bariatric Surgery

Briana is obese and suffers from type 2 diabetes which means physical activity is going to be hard to keep up with. If wearing a pedometer and keeping a physical activity journal doesn't show any improvement in her weight loss journey, she should consider bariatric surgery. Bariatric Surgery may be better in the long run as " many individuals are able to maintain normal blood sugar levels with little or no medication following surgery and long-term mortality is decreased" (Lewis et al., 2019, p. 112). There are

multiple sources of literature that continue to support bariatric surgery for the treatment of type 2 diabetes. Buchwald et al. (2009) did a meta-analysis of English literature. The works of literature show a lot of evidence of how well bariatric surgery improves type 2 diabetes. It has had wide success in the improvement in patients as it reduces disease complication and vastly improves glycemic control (Buchwald et al., 2009).

Bariatric surgery is a difficult decision for many people to consider, but it could greatly improve their quality of life. Summers et al. (2014) looked at five general practitioners' practices to find non-morbidly obese type 2 diabetic participants in their study. They looked at their thoughts on what they think about bariatric surgery. Summers and colleagues (2014) examined their results by involving the participants in a semi-structured interview. The participants were interviewed about their type 2 diabetes and their weight management along with questions about weight loss surgery.

A lot of the participants knew what bariatric surgery was but didn't think it was for them. They thought it was for people that were bigger than them and didn't think they were to the point where they needed such drastic measures. One main finding that Summers et al. (2014) found was that there are many different attitudes on bariatric surgery. People who believe that their diabetes and weight have negatively impacted their life are more likely to be open to the idea of bariatric surgery. People that don't see their condition as affecting their life are less likely to consider the procedure. If Briana's weight loss journey through doing physical activity doesn't work out

and she feels like her weight is a hindrance in her treatment, she may be likely to consider surgery.

Social Support

Social support is a major contributor to the adherence to treatment. Without social support adherence to treatment is very low. People experiencing health issues are less likely to seek help or follow through with treatment if they have no social support. For Brianna, being single and living alone could decrease her adherence to the plan. Newton, Ventura, Mosely, Browne, and Speight (2017) discuss how social support impacts a person's treatment plan. There were many findings in this study that showed how important social support can be. One finding, made up of a larger number of participants, had more positive experiences of social control from their support system than negative. The positive experiences included encouragement and reminders to take medicine or follow through with something in their treatment plan.

Another thing Newton and colleagues (2017) found was support systems provided emotional support when needed for the patient. Emotional support could be anything from making light of the situation with jokes to relating to the patient to make the disease seem more normalized. The main goal of Brianna's treatment plan is to improve the patient's quality of life and to reduce the problems associated with diabetes. Having Briana exercise with a pedometer, or get Bariatric surgery, eat a Mediterranean diet and keep a nutrition journal of her eating habits, have continuous social support from the people around her, and gradually quit smoking are all helpful

implications in her treatment plan that will hopefully make Briana live a healthy lifestyle and increase her overall health. The journey to a healthier lifestyle in the management of type 2 diabetes is not easy, but with all the resources Briana is given, the hope is that she will be able to adjust and thrive in her treatment plan.

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