

SEXUAL DYSFUNCTION IN HISPANIC AND AFRICAN AMERICAN WOMEN WITH TYPE 2 DIABETES

Low-income, underprivileged minority populations have higher rates of depression and minimized control of their diabetes. Type 2 diabetes is a major health problem with an incidence of 500,000 Americans each year and a leading cause of male erectile dysfunction. Although research on sexual dysfunction in men is extensive, research on women with diabetes and sexual dysfunction is not. Studies also show that patients with diabetes have lower libido and decreases in genital sensation and lubrication, all leading to a sexual dysfunction that detrimentally affects a person's quality of life. Not only does diabetes affect sexual function, but depression also affects a person's sexual function. The unbalanced chemical functioning of a person with depression may cause a low or non-existent sexual desire.

This study has been extracted from a randomized placebo controlled trial treating and following subjects for 6 months using selective serotonin reuptake inhibitors (SSRI) to treat depression in subjects with diabetes. For this portion of the study the aim was to determine the prevalence of sexual dysfunction in a low-income minority population with type 2 diabetes and to determine if treating depression would improve sexual dysfunction and quality of life in African American and Latino women. Three questions from the Diabetes-39 Quality of Life Questionnaire were used in this study. The three questions were: 1) Does type 2 diabetes interfere with your sex life?; 2) Are there problems with your sex life; and 3) Is there a decreased interest in sex?

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INTRODUCTION

Type 2 diabetes is the most common form of diabetes, in which the body does not produce enough insulin or the cells ignore the insulin. When insulin is not present it cannot take the sugar from the blood therefore the glucose builds up in the blood and the cells may be starved for energy. Type 2 diabetes is more commonly found in African Americans and Hispanics than in Whites.

About 2.5 million or 9.5 percent of Hispanics in the US have been diagnosed with diabetes resulting in it being the sixth leading cause of death among Hispanics. Approximately 1.5 million African Americans have been diagnosed with diabetes and another 730,000 have the illness but are not aware they have it. Studies have shown that diabetes is 33% more common among African Americans than non-Hispanic Whites.

Feelings of depression are caused by a chemical change that affects how the brain functions. A normally functioning brain is a giant messaging system that controls everything from the heartbeat, to walking, to emotions. The brain is made up of billions of nerve cells called neurons. These neurons send and receive messages from the rest of the body, using brain chemicals called neurotransmitters. These varied amounts of brain chemicals are responsible for our emotional states. Depression occurs when these chemical messages aren't delivered correctly between brain cells thus disrupting proper communication within the brain.

Sexual dysfunction is difficulty during any stage of the sexual act (including desire, arousal, orgasm, and resolution) that prevents the individual from enjoy-

ing sexual activity. Diabetes affects arousal, decreases genital sensation and lubrication and is a leading cause of male erectile dysfunction. Type 2 diabetes has more negative side effects regarding sexual desire, orgasmic capacity, lubrication, sexual satisfaction, and sexual activity. Psychosocial factors affecting sexual function include: intrapersonal conflicts, historical factors, and life stressors

HYPOTHESIS

Treating women with diabetes and depression will improve sexual function along with quality of life.

METHODS

Recruitment took place at the King/Drew Medical Center. Whooley's 2 question screening was used first and participants who answered no to both questions were excluded from the study. Participants who answered yes to at least one question were brought in to the office and given an informed consent form.

To diagnose depression, a diagnostic interview schedule was given to participants; those that answered yes on suicidal questions were excluded. A Hamilton Depression Scale was used to assess the severity of depression; participants who suffered from severe depression were excluded. From the remaining participants, who had a mild to moderate case of depression, we acquired baseline data. We also asked the three questions from the Diabetes-39 questionnaire (D-39). Additionally, lab tests, a physical exam, and EKG, were conducted for each

participant. We recorded and input the results into an Excel document and data were coded and evaluated through SAS (P value of $<.05$ was significant)

RESULTS

A majority of our patients had uncontrolled HbA1c. Although no associations were found through data analysis, the questions from the D-39

demonstrated that women do feel their sex life is affected by their diabetes.

CONCLUSION

The best way to avoid diabetes-related sexual dysfunction is to manage the disease by following physicians' orders and having adequate self-health management. Maintaining blood glucose to recommended levels will lessen the likelihood of sexual dysfunction.

IMPLICATIONS

When the study ends, it will be apparent if the tested drug Sertraline is an adequate treatment for depression in Hispanic and African American patients with diabetes. In order to better understand sexual dysfunction as it relates to diabetes, we would need to increase our sample size and continue this preliminary research with the D-39 questions.