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Prevalence of Anxiety in an Outpatient Clinic Sample of People with Type 2 Diabetes in Trinidad.

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ABSTRACT

The study examined the prevalence of anxiety in an outpatient clinic sample of people with type 2 diabetes in Trinidad.

Survey methodology was employed, and 128 respondents were randomly sampled. Demographics, levels of anxiety, blood glucose levels and coexisting medical complications were measured.

Pearson's correlation revealed that 19.5% of the sample had moderate levels of anxiety; coexisting medical conditions and women were indicators of anxiety.

These findings highlight that psychological symptoms are associated with type 2 diabetes and there is a need for the implementation of screening for anxiety at health clinics in an effort to effectively treat type 2 diabetes in Trinidad.

OBJECTIVES

The objective of the study was to examine the prevalence of anxiety in an outpatient clinic sample of people with type 2 diabetes in Trinidad.

Additionally, this study aims to examine gender differences in anxiety, whether anxiety levels differed among age groups and whether anxiety is related to hyperglycaemia and having a coexisting medical complication such as hypertension and heart disease.

METHODS

This study was a non-experimental research design with a sample of 128 persons with type 2 diabetes attending outpatient clinic on designated clinic days for their routine appointment. One hospital was selected from each Regional Health Authority in Trinidad. Participants of this research were all registered at the diabetic clinics where they have been clinically diagnosed by a medical consultant with diabetes mellitus.

Anxiety was determined using the Zung Anxiety Scale (Zung, 1971). A score ranging from 20 to 44 is considered in the normality range, scores of 45 to 59 indicates minimal to moderate anxiety, scores of 60 to 74 suggests severe anxiety and 75 or higher indicates extreme anxiety.

Participants provided verbal consent to participate in the research by agreeing to complete a questionnaire, which consisted of demographic information, duration of diagnosis, coexisting medical complications and their present blood glucose level and The Zung Anxiety Scale.

Data analysis was done using the Statistical Package for Social Science (SPSS, version 13). Descriptive and frequency statistics were conducted to calculate the prevalence of anxiety. The Pearson product-moment correlation coefficient was used to measure the correlation between the variables. The independent-sample t-test was used to compare the means on anxiety scale scores for the categorical independent variables of gender, age, glucose levels and coexisting medical complications

RESULTS

With an 85% response rate, the participant sample was predominantly female (60%), Indo-Trinidadian (49%), over the age of 50 years (79.7%), classified as unskilled or social class 5 (43%) and diagnosed between 1 to 10 years (82%).

Statistical analysis indicated the 19.5% of this sample population had mild to moderate levels of anxiety. A Person's r correlation analysis indicated a moderate positive correlation between gender and anxiety $r(126) = .27$, $p = .002$. An independent t-test analysis indicated a significant difference in anxiety between males and female, $t(126) = -.343$, $p = .001$. Female type 2 diabetics were more likely to have higher levels of anxiety ($M = 39.30$, $SD = 10.95$) than males ($M = 33.69$, $SD = 7.54$).

A Person's r correlation analysis indicated a weak negative correlation between coexisting medical complications and anxiety $r(126) = -.183$, $p = .038$. In this sample, hypertension (12.2%) and Heart disease (10%) are the two most common diabetes coexisting medical complications among the type 2 diabetics with anxiety.

There was a non-significant correlation between age and anxiety $r(126) = .27$, $p = .002$). An independent t-test analysis indicated a non-significant difference in anxiety between the ages 31-49 and the age group 50 years and older, $t(33) = 1.33$, $p = .192$.

Similarly, there was a non-significant correlation between anxiety and glucose control ($r = .083$, $p = .352$). An independent t-test analysis showed no different in anxiety scores between type 2 diabetics with normal glucose levels and low glucose levels, $t(44) = .411$, $p = .496$.

DISCUSSION

Anxiety may perpetuate a constant cycle of health care use by diabetics primarily because anxiety increases the risk of developing other medical complications. This further heightens anxiety levels affecting the patient's quality of life and psychological wellbeing.

Women view type 2 diabetes as affecting their lives negatively and therefore worry about the complications of the disease. Men on the other hand were more likely to be concerned about the limitations that diabetes will impose on their lives but would generally view diabetes as a controllable disease.

The onset of diabetes at any age is an unsettling event that increases uncertainty about the future.

CONCLUSION

The prevalence rate of anxiety in this sample of persons with type 2 diabetes is comparable to international studies. Therefore, the high prevalence of anxiety among persons with type 2 diabetes in Trinidad increases the concern for effective treatment of psychological and behavioural disorders among these individuals. Treatment is essential since anxiety may potentially exacerbate the complications associated with type 2 diabetes.

REFERENCES

Fisher, L., Skaff, M.M., Mullan, J.T., Arean, P., Glasgow, R., Masharan, U (2008) A longitudinal study of affective and anxiety disorders, depressive affect and diabetes distress in adults with type 2 diabetes. Diabetes Care, 25(9):1096-1101

Fitzgerald JT, Anderson RM, Davis WK. Gender differences in diabetes attitudes and adherence. Diabetes Educ. 1995;21(6):523–9. [PubMed]

Mitsonis, C., Dimpopoulos, N., & Psarra, V (2009) Clinical implications of anxiety in diabetes: A critical review of the evidence base. European Psychiatry, 22(supplement 1)