

ORIGINAL ARTICLE

Prevalence of Depression, Anxiety, OCD, and Social Isolation Among Married Men with Type II DiabetesAHMED BILAL¹, IRAM FATIMA²^{1,2}Department of Applied Psychology, University of the Punjab, Lahore.
Correspondence to: Ahmed Bilal**ABSTRACT****Objective:** This paper is a report of a study conducted to examine the prevalence of common mental disorders among a sample of married men with type II diabetes.**Background.** Low educated, financially constrained men are disproportionately affected by diabetes and are more likely to suffer decreased quality of life, marital and sexual satisfaction and to have co-morbidities. They are also likely to suffer more from common mental disorders due to various facets of their ailments.**Method.** A cross-sectional survey study with 210 married men with type II diabetes were recruited from General Hospital, Lahore between from July 2021 to August 2022.**Results:** Men between the ages of 26-39 report disproportionately more depression and mental health issues as compared to older demographics with diabetes. Lack of education and high HbA1c have increased prevalence.**Conclusion:** There is a need to explore mental health issues of men more and physicians should look into the reasons for high HbA1c and prepare diabetes learning material.**Keywords:** Depression, Anxiety, OCD, Type II Diabetes.**INTRODUCTION**

Diabetes is a life-long ailment with no proven cure to date. The only way to cope with diabetes is to manage it. It is the fourth leading cause of death in the world¹. As the world already is reeling from the after effects of Covid-19 pandemic, the untold devastation caused by diabetes will only serve to cripple the already stressed global health burden. The human cost of lost labor hours and money spent on medical supplied for diabetes management and its complications run into billions of dollars. As per American Diabetes Association (ADA) diabetes costs world economy around \$327 billion in 2017². More than 400 million individuals are living with different types of diabetes across the globe³. WHO predicts that this number may very well double by the year 2030. Developing countries are at a series risk of uncontrolled diabetes outbreak. Pakistan is among the rising countries with ever expanding diabetes patient population. As of 2021, there are 33 million people living with diabetes in Pakistan. Pakistan has the highest diabetes prevalence in the world. It is estimated that by the year 2030, a 71% increase in diabetes⁴. Pakistan is already financial stressed and the focus on medical health in general and diabetes care in particular receive little attention and financial support. A sedentary lifestyle, changes in dietary pattern, over eating, bad genes and environmental factors are major causes of diabetes pandemic⁵. Men are more than twice likely to develop diabetes and to receive poor medical care than women. Therefore, there are also more likely to suffer more from diabetes and its complications thereby severely reducing their quality of life in general and sexual quality of life in particular. A large number of men either do not seek required medical care or seek it late or indulge in self-formulated self-care of diabetes⁶. There lacks male-centric diabetes knowledge for men which is crucial in maintaining desired plasma sugar levels. It is assumed by physicians that if individuals will fare better in diabetes if they are simply given adequate information.

SAMPLE AND METHOD

This descriptive cross-sectional study was conducted in Lahore. Sample of 210 married men with at least one child who had diabetes for at least 2 years were recruited for this study. Data was collected via survey method from outpatient endocrinology department, General Hospital Lahore. After giving the brief introduction of study purpose to the patients, written consent form was get signed by all the participating patients. Demographic information was collected through self-constructed questions. Frequency and percentage was calculated using SPSS version 25.

RESULTS

Among 210 married men with type II diabetes the prevalence of depression, anxiety, OCD and social isolation was 68 (32.4%), 31 (14.8%), 77 (36.7%) and 28 (13.3%) respectively. The mean age of participants was 38.9 years whereas the mean age when they were diagnosed with type II diabetes was 31.3 years. Whereas higher level of OCD and depression was found this indicates that men due to type II diabetes suffer from OCD and depression.

Table 1: Prevalence of Depression, Anxiety, OCD and Social Isolation among Married Men with type II Diabetes

Characteristics	Frequency (n) Percentage (%)
Depression	
Yes	68 (32.4%)
No	142 (67.6)
Anxiety	
Yes	31 (14.8%)
No	179 (85.2)
OCD	
Yes	77 (36.7%)
No	133 (63.3%)
Social Isolation	
Yes	28 (13.3%)
No	182 (86.7%)

Table 2: Socio-Demographic Characteristics (N=210)

Characteristics	Frequency (n) Percentage (%)
Age Groups in Years	
24-35	72 (34.3%)
36-45	88 (41.9%)
46-55	50 (23.8%)
Mean(SD) 38.9 (8.2); min. age: 24 years; Max. age: 55	
Age Group in years (when diagnosed with type II diabetes)	
16-25	44 (21.0%)
26-39	132(62.9%)
40-50	34 (16.2%)
Mean(SD) 31.3 (6.9); min. age: 16 years; Max. age: 50	
Employment	
Employed	126 (60%)
Unemployed	84 (40%)
Education Level	
Illiterate	90 (42.9%)
Primary up to class 5	56 (26.7%)
6-10	25 (11.9%)
Intermediate	19 (9.0%)
Bachelors and Above	20 (9.5%)

The minimum actual age range of participants was 24 and maximum was 55, whereas minimum age of participants when they were diagnosed with type II diabetes was 16 and maximum was 50. More than half of participants were employed however education level of more than half of participants were illiterate.

Table 3: Socio-demographic characteristics Prevalence of Depression and Anxiety among Married Men with type II Diabetes (N=210)

Characteristics	Depress	Not depress	Anxiety	No Anxiety
Age Group in years (after diagnosed with type II diabetes)				
16-25	16	28	6	38
26-39	40	92	18	114
40-55	12	22	7	27
Hba1c Levels				
Healthy (<6)	11	27	6	32
Unhealthy (>6)	57	115	25	147

Table 4: Socio-demographic characteristics Prevalence of OCD and Social Isolation among Married Men with type II Diabetes (N=210)

Characteristics	OCD	No OCD	Social Isolation	No Social Isolation
Age Group in years (after diagnosed with type II diabetes)				
16-25	19	25	2	42
26-39	43	89	22	110
40-50	15	19	4	30
Hba1c Levels				
Healthy (<6)	14	24	6	32
Unhealthy (>6)	63	109	22	150

The age of participant's after they were diagnosed with type II diabetes was further dived into 3 categories to investigate the prevalence. The results indicated that higher level of depression, anxiety, OCD and social isolation was found in second age group (26-39). Whereas OCD and depression level was higher among second age group (26-39) as compare to anxiety and social isolation. The participant's with higher HbA1c score suffered more from OCD and depression at higher level as compare to anxiety and social isolation.

DISCUSSION

Lack of education is a major hindrance in the way of improved diabetic management⁷. Our results found that around 70% of the population was educated below high school level. Less education is likely to decrease diabetes knowledge and impede dietary and lifestyle changes required for optimal diabetic control. Results indicated that men with diabetes scored more on depression. An alarming 33% of men reported being depressed. This underscores the mental toll on men with diabetes and the need for mental health facilities for such men. Depression is linked with a decrease in medication adherence⁸, quality of life⁹. Depression is also linked with increase sexual dysfunction with men. As the sample of this study were men who were not only financially challenged, but also were less formally educated, the chances of such men to pursue mental health services is rather bleak, especially for a poor country such as Pakistan. Obsessive compulsive Disorder (OCD) symptoms were reported relatively less than either depression or anxiety, but were still more than 14% which is an unpleasant statistic. Increase in OCD symptoms is also related to a decreased quality of life¹⁰. Results indicated as compared to new diabetics

and older diabetes, the intermediate ranged diabetics i.e. aged 26-39 reported twice as much prevalence of depression. A reason could be that it is this age bracket coincides with a difficult stage of life where expected a man is already under much duress but is less equipped emotionally. The added burden of diabetes may add to existing hassles of life. Similarly, these individuals also reported a stark difference in their social isolation as compared to either young or older men with diabetes. Alarming, 172 men were found with elevated sugars. Increased HbA1c scores are indicative of poor glycemic control. Poor adherence to medication, unhealthy dietary habits contribute to an increase in HbA1c leading to decreased quality of life¹¹.

CONCLUSION

Lack of education, increased depression and high glycemic score hamper diabetes management. Our results necessitate the focus on diabetic health of men. Common mental disorders are on the rise among men who are considered in their prime i.e. between the ages of 26-39. These individuals are at an increased risk of premature diabetes related mortality and reduced quality of life. Measures should be taken by academic and physicians alike to cater to the increasing number of diabetes prevalence in men and to take remedial measures.

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