

ORIGINAL ARTICLE



## ANXIETY AND TYPE A PERSONALITY OF TYPE 2 DIABETES MELLITUS

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### ABSTRACT

The present study aims to investigate the correlation between variables of anxiety and type A personality of type 2 diabetes mellitus. Diabetes mellitus (DM) is a group of metabolic disorders caused by either total or relative lack of insulin – a hormone, manufactured by pancreas which is an endocrinal gland behind the stomach in the human body. Insulin is required to release glucose from blood to cells. Lack or deficiency of insulin thus consequently results in high blood glucose levels for prolonged period. Depending on the availability of insulin, there are two types of diabetes namely type 1 and type 2. Type 1 DM is caused by total lack of insulin and called as insulin dependent diabetes mellitus (IDDM) while insulin deficiency causes type 2 diabetes which is non insulin dependent diabetes mellitus (NIDDM). While as per International Diabetic Federation, by 2035, 592 million people or one person in ten will suffer from this disease.

**KEYWORDS:** Diabetes mellitus (DM) , non insulin dependent diabetes mellitus (NIDDM).

### INTRODUCTION

Though it is one of the most common diseases these days, millions of people are still going undiagnosed. Diabetes mellitus is a one of the most critical health states, which is usually selfmanaged by patients. Thus along with medical-physiological, social problems, there are psychological burdens well. Most of the diabetic patients face the challenges in making healthy lifestyle. It includes changing their diet, keeping regularity in medication, going for frequent checkups, exercising etc. This study emphasizes that if the variables like anxiety and personality pattern are dealt carefully; diabetic people will be able to manage the disease quite effectively and live better quality of life.

Though ample research has been carried out by many physicians, psychologists and Psychiatrist there is always a scope for further research. The present study explores correlation between anxiety, type A personality pattern, and in type 2 diabetes mellitus from Indian context and tries to give a directive to such a great number of people to live better life.

### SIGNIFICANCE

Diabetes is one of the most common chronic illnesses spreading at an alarming rate. Worldwide, the healthcare spending on diabetes has reached \$465 billion. Low income group family in India is spending approximately 25 % of their total income for a diabetic adult. Present study aims to emphasize that strong relation of psychological health with diabetes and provides a precautionary note for non diabetics.

## **METHODOLOGY**

### **Objectives**

The present study aims to investigate the correlation between variables of anxiety and type A personality of type 2 diabetes mellitus.

### **HYPOTHESIS**

1. There is a correlation between anxiety and type A personality of diabetes
2. There is correlation between Anxiety and type A personality of Non Diabetes.

### **Sample**

In the present study, the participants are selected using purposive sampling method. All participants had provided a written informed consent of their willingness to be involved. Experimental group participants (N = 40) were those who were declared diabetic over a year by the physician and control group participants were non diabetes (N=40). Care was taken during sampling that the participants were not suffering from any other major illnesses such as heart disease, kidney problems, blindness etc. Other covariates such as age, socioeconomic status and minimum education were kept constant. Both the group participants were in Rural And Urban in Solapur District.

### **Tools**

For psychological assessment following three tools were used.

#### **1. State-Trait Anxiety Inventory (Spielelberger et al 1977)**

State-Trait Anxiety Inventory (STAI) developed by Spielberger et al. (1968, 1977) is 40 items tool used to measure anxiety .It is also used to differentiate the type of anxiety. In the present study, form Y is used which has norms for adults. All items are rated on a 4-point scale. Internal consistency coefficients for the scale have ranged from .86 to .95. The test-retest reliability coefficients have ranged from .65 to .86 over interval range from one hour to 104 days (Spielberger, 1983).The present study accounts total anxiety score.

#### **2. JAS-Type A Personality Questionnaire (Jenkins et al 1974)**

Jenkins Activity Survey-JAS is a questionnaire developed by Jenkins et al (1974). It measures Type A personality behavior pattern. It has 44 items with multiple choice responses. The psychometric properties revealed by Yarnold et al (1986) estimates the internal consistency (Chronbach's alpha) of the JAS and its subscales which ranged from moderately low to moderately high. The study also has shown that the temporal stability (test-retest reliability) of the JAS total score ranges from moderately to extremely high. Also, JAS has satisfactory internal consistency and excellent test-retest reliability.

## **Data Collection and Analysis**



All the experimental group participants were given psychological tests to solve during their routine monthly check up. After explaining significance and intension behind the present study instructions were given and the psychological testing was conducted. For control group to attempt these tests two informal meetings were organized. All the participants were insured with the confidentiality of their identity as well as responses and were thanked for their cooperation.

The data was statistically analyzed using different parametric tests. Correlations between these psychological factors were analyzed using Pearson Product Moment method.

## RESULTS AND DISCUSSION

Table 1 show the coefficient of correlation of total anxiety and type A personality pattern of Diabetic and Non Diabetics. For anxiety Non Diabetics Patients mean is 68.91 and SD is 15.88. whereas Diabetes mean is 74.16 and SD 18.75. For the type A personality mean is 48.32 and SD is 7.27 where as diabetes mean is 52.41 and SD is 8.24. this indicate that there is positive correlation for diabetes in research variables where as negative correlation for non Diabetes in stated variables. Coefficient of Correlation (r) for diabetic patients is -.69 which is significant at 0.01 level, which seems to be moderately high.

**Table 1 : Coefficient of Correlation (r) for Diabetic and Non Diabetic Patients (N=40)**

Variables	Non Diabetic		Diabetic	
	Mean	SD	Mean	SD
Total Anxiety	68.91	15.88	74.16	18.75
Type A Behavior	48.32	7.27	52.41	8.24
DF	78			
Correlation (r)	-.69			
Significance level	significant at the 0.01 level			

## CONCLUSION

In the present study shows that there is negative and high correlation between anxiety and type 2 diabetes comparing with non diabetes. it implies that The occurrence of diabetes is found more in type A behavior pattern of both groups.

Thus the study presents important inputs for better understanding of the disease. It highlights that psychological health must also be given equal importance in diabetic peoples' life. The findings of this study will help Indian diabetic patients and their care takers to deal with the difficulties and day-to-day management of it and to live better life. In addition, it gives the message to non diabetics to "act today to change tomorrow".

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