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## Depression in diabetic and non diabetic people with reference to their place of living

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### Abstract

The present study has been designed to investigate the difference of depression between diabetic and non-diabetic people of urban and rural area. The study was conducted over a sample of 160 participants both diabetic and non-diabetic people of urban as well as rural area. All the participants were administered the depression questionnaire. The obtained data were analyzed and interpreted using statistical tools such as mean, standard deviation, t-test. The results reported that significant difference exists in the level of depression of diabetic and non-diabetic male of urban area. As regarding the rural area significant difference also observed between diabetic and non-diabetic male of rural area. Overall these results indicate that people living with diabetes are more likely to suffer from depression.

**Keywords:** Diabetes, urban area, rural area, non-diabetic people, diabetic people.

### 1. Introduction

World wide diabetes affects more than 380 million people. The world health organization estimates that by 2030, that number of people living with diabetes will more than double. After the diagnosis of diabetes mellitus people must change their everyday life style and adapt to the new conditions the life. They experience may negative emotions that cause lower social adaptation and they face disability as well as depressed efficiency. Diabetes particularly its complications not only causes impairment of the physical health but at the same time promotes occurrence of psycho-emotional and social problems.

#### 1.1. What is diabetes

Diabetes is an illness that affects the way the body uses digested food or energy. Most of the food we eat is broken down into a type of sugar called glucose. Glucose is an important source of fuel for the body and the main source of fuel for the brain. The body also produces a hormone called insulin. Insulin helps cells throughout the body absorb glucose and uses it for energy. Diabetes reduces or destroys the body's ability to make or use insulin properly. Without insulin, glucose builds up in the blood, and the body's cells are starved of energy.

Many studies now confirm that, although glucose is found in the urine in the most severe cases of diabetes, it is often absent in milder forms of the disease. Obesity has long been accepted as a risk factor for diabetes.

**1.2. Depression:** - Depression is one the most common mental health disorders and is diagnosed when individuals experience a depressed mood most of the day, show a diminished interest in pleasurable activities report changes in appetite and in levels of concentration and have feelings of worthlessness or guilt - American Psychiatric Association.

#### 1.3. Signs and symptoms of depression

Felling hopeless, worthless, helpless, felling irritable/ restless, felling of tired all the time, ongoing sad, anxious, empty felling, loss interest in activities, hobbles once enjoyable, including sex, difficulty concentrating making decisions, remembering details, sleeping all the time, thought of death and suicide and suicide attempts, ongoing aches and pains, headaches, cramps or digestive problems that do not ease with treatment. Some symptoms of depression may reduce overall physical and mental health not only increasing risk of diabetes but making diabetes symptoms worse.

Diabetes and depression are two commonest public health problems affecting people all over the world. Diabetes is also responsible for about 1.256 million death occurring in low and middle income countries. Diabetes has been associated with poor quality of life in previous Indian study. Epidemiological studies have shown that the prevalence of diabetes is low in certain

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population that have retained their traditional life style and that modernization of life style and diet and migration to urban areas are also associated.

American diabetes association conference (1998) shown an association between high bloodsugars and depression it remains unclear whether high blood cause the depression or depression causes high blood sugars. Anxiety and depression were found to be 58% and 45% of the outpatients with type-2 diabetes respectively, in a recent multicenter study from Pakistan. Research using questionnaires has shown that depression in people with diabetes both type-1 and 2 diabetes may have the following effects: less likely to all their medications, less likely to function well, both physically and mentally, grater absenteeism from work- Archives of Internal Medicine 2000.

Other research has shown that people with chronic conditions, including diabetes are three times more likely to suffer depression than the general population. Depression has been found to be associated with a negative impact on diabetes. The study results of Malaysian research findings that individuals with diabetes of less than 2 year duration were 1-6 times more likely to have depressive symptoms than individuals with diabetes of longer duration. Pandit *et.al.* (2014) showed higher rate of emotional distress was found among younger adults and female with diabetes.

Nisa & shafi (2015) result showed that insulin taking type-2 diabetic adults differ significantly on emotional distress with respect to their gender and age. Female and Asian Indians were 1-4 time more likely to have depressive symptoms compared to males Kstien & Pwrs (2014). It is well recognized that people with long-term conditions such as diabetes are more likely to suffer from depression. Duration of diabetes was risk factor significantly associated with higher scores of depression, anxiety. Just living diabetes means that they are also more likely to be in depression. There are limited literate on the association between depression and diabetes. Thus, the present study aim at assessing the difference in level of depression between diabetic and non. Diabetic people with special reference to their place of living.

**1.4. Objectives**

The present study has been delimited to achieve the following objectives:

To study and compare the depression between diabetic and non- diabetic people of urban area.

To study and compare the depression between diabetic and non- diabetic people of rural area.

**1.5. Hypothesis**

The study has been designed to test the following hypothesis: No significant difference exists between diabetic and non-diabetic people of urban area in relation to their score of depression.

No significant difference exists between diabetic and non-diabetic people of rural area in relation to their score of depression.

**2. Method**

**2.1. Sample of the study**

The sample were selected through purposive sampling technique. The sample were consist of only male people, both: diabetic and non- diabetic. The diabetic people were identified as per clinical detail and diagnosis. There were 160 participants with complete data, 80 people were from urban area (40: diabetic and 40-non-diabetic) and 80 people were

from rural area (40: diabetic and 40-non-diabetic) of Rajkot district. All the participants were matched on the variables of age, marital status, gender etc. The data has been collected with the help of questionnaire.

**2.2. Research tool of the study**

Personal information schedule developed by investigator was used to collected some necessary information like, age, area, gender, marital status etc. To measure depression of the people both: diabetic and non- diabetic Beck Depression Inventory BDI was used. The test result reliability for BDI is 0.86 as well as validity is 0.66.

**2.3. Procedure**

The present study conduct on 160 participants both: diabetic and non- diabetic people of urban and rural area. All the respondents voluntarily participated in the present study. After establishing report with the participants the questionnaires were administrated (their convener times) with the necessary instruction and data was collected. All the participants were assured that their responses could be kept confidential. After the compellation of the whole information was statistically analyzed.

**2.4. Statistical Analysis:-** The researcher put the data edited and coded together in a carefully designed table for statistical analysis t-test was applied to see the significance of the difference between diabetic and non. Diabetic people with special reference to their place of living. On the basis of their depression scores.

**3. Result and Dispasion**

**3.1. Findings related to hypothesis:** - The present study aimed to investigated difference of level of depression between diabetic and non- diabetic people of urban as well as rural area. The research findings are based on the responses of 160 diabetic and non – diabetic male of urban and rural area. First hypothesis put forward that hypothesis, No significant difference exists between diabetic and non- diabetic people of urban area in relation to their score of depression. To assess this hypothesis, t- test was used. Result showed that there are significant differences between diabetic and non- diabetic male people of urban area in respect to their score on depression, as the t- value (2.69) is found to be significant at 0.01 level. Hence the null hypothesis is rejected and its alternative hypothesis is supported it is clearly indicated that diabetic male of urban area had high level of depression than the non- diabetic male people of urban area.

**Table 1:** Showing results of t - value of depression of two comparative groups of diabetic and non-diabetic male of urban area.

People	No.	Mean	S.D.	t-value	Sig.
Diabetic	40	27.21	12.3	2.69	0.01
NonDiabetic	40	22.04	10.9		

**Table 2:** Showing results of t – value of depression of two comparative groups of diabetic and non-diabetic male of rural area.

People	No.	Mean	S.D.	t-value	Sig.
Diabetic	40	26.87	11.8	2.09	0.05
NonDiabetic	40	21.77	10.02		

Second hypothesis put forward that hypothesis that, No significant difference exists between diabetic and non-diabetic people of rural area in relation to their score of depression. To assess this hypothesis t- test was used. The

difference in level of depression of diabetic and non-diabetic male of rural area showed from table-2. Comparison of mean scores of depression showed that diabetic male has (M= 26.87) and non-diabetic male has (M= 21.77). The results of t-test applied between the mean scores of depression of two comparative groups indicate that they differ statistically significant and the t-value of t-test is (2.09) significant at 0.05 level. Hence the null hypothesis is also rejected and it is found that the depression level of diabetic male of rural area is high as compared to the non-diabetic male of rural area. Overall the results of present study indicated that there exists significant difference between depression level of diabetic and non-diabetic people of urban as well as rural area. People with diabetes are more likely to suffer depression than the non-diabetic people.

#### 4. Conclusions

After analysis and interpretation the following conclusions were drawn.

The findings concluded that significant difference observed between diabetic and non-diabetic male of urban area as regarding to their score of depression. As regarding the rural area significant difference also found between diabetic and non-diabetic male with regard to their level of depression.

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#### 6. References

1. Collins M, Corcoran, P (2008) Psychology anxiety and depression symptoms in
2. patients with diabetes, Sonora, Uni. Of California cooperative extension.
3. Cox K. Gonder, Frederick (1992) Major developments in behavioural diabetes research, Journal of consulting and clinical psychology, 60 P. 628-638.
4. Gafvels, Lrthner (1993) Living with diabetes: A survey in northern Sweden Diabetes Med. 10 p. 768-773.
5. Gratt, H. E. (1971) Statistics in Psychology and Education, Vakils Feffer and
6. Simons Private Limited, 6<sup>th</sup> Indian Addition Mumbai.
7. Kalpan, H. B. (1996) Psychological Stress, New York, Academic press
8. Khan, A.P. (2004) Diabetes causes, prevention and treatment, Orient Paperbacks Publication, Delhi.
9. Leo, H. (1993) Periodontal Disease, The sixth complication of diabetes mellitus, Diabetes Med. 15, P. 539-553
10. Mangal S. K. (1992) Statistics in Psychology and Education, Tata McGraw Hill
11. Publication Company Limited New Delhi.
12. Schwartz, C. (1995) Assessment of diabetes related distress, Diabetes care 18 P. 754-760
13. Shukla, K. C. (2005) Encyclopedic Dictionary of Psychology, Vol. – 1 -3, Pub. Ajey Verma For Commonwealth Publishers, Darya Ganj, New Delhi.