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A Psychological Study of Diabetic Patients With Reference To Anxiety and Adjustment

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Abstract

There are number of studies suggesting that sugar discharge in the body be the result of stress created due to anxiety and adjustment. Keeping this in view it was decided to study 100 diabetics, 100 nondiabetics and 100 normal person with the help of anxiety and adjustment tests. Result obtained reveal that diabetics are more anxious. There are also found to be maladjusted as a whole and specifically on emotion.

Based on Ph.D. thesis "A Study of Personality pattern and role of stress, Anxiety and adjustment in diabetes mellitus".

Keywords: Diabetes mellitus, anxiety maladjustment Psychological factors Type 1 and Type 2 Diabetes

Introduction

Most recent studies indicate that the complicated chain of endocrine stress reactions are under control of hypothalamic centres. The entire adaptation syndrome may be set in to action not only by chemical, thermal or bacterial agents, but also by anxiety and other emotional stresses.

Main object of the paper is to find out the relationship between anxiety and diabetes and diabetes and adjustment associated with diabetes. Therefore the hypothesis of the paper is (1) Anxiety is associated with diabetes (2) Maladjusted people have more chances of developing diabetic symptoms.

Objective of the Study

A Psychological Study of Diabetic Patients With Reference To Anxiety And Adjustment

Review of Literature

Abdul Rehman A Al- Mohaimeed At all (2017) noted Prevalence and factors associated with anxiety and depression among Type 2 Diabetes. Khuwaja A. K et al (2010) described Anxiety and depression were generally found high in diabetic patients especially among adults. Grigs by (2002) found anxiety in adults as related with diabetes. and other similar studies. Anderson (2001) also found more or less the same results as high level anxiety depression was found in diabetic adults.

Lustman, (1988) examined the interrelationship of anxiety disorders and diabetes mellitus including insulin dependent diabetes mellitus and non insulin dependent diabetes mellitus. Experimental work examining stress and glycaemia instability is reviewed along with more recent data relating anxiety disorders (Particularly generalized anxiety disorder) to diabetic patients. Data indicate that the anxiety disorders are common among patients with diabetes and that they recur in a substantial proportion of cases. The presence of generalized anxiety disorder is associated with both poorer glucose control and increased clinical symptoms of diabetes. Rodin, (1991) reviews literature of 5 health related dimensions of quality of life on persons with insulin dependent diabetes mellitus (IDDM), Physical functioning, social functioning, and emotional/mental state, burden of symptom and sense of well-being. Increased depressive and anxiety disorders have been reported in individuals with IDDM particularly in association with more severe medical complications and low social support.

Skenazy, et al (1985) suggested that the key variable affecting the psychological adjustment of diabetics is not the diabetes itself but the aspect of having a chronic disease. Rahe et al (1964) reported that both physical and mental illness onset seems to follow closely on the experiencing of events more than usual. Life readjustment as measured by the (SRE) schedule of recent event according to the study of surridge, et al (1984) results show that their symptoms often made the ss, lives uncomfortable, reduced their functional capacity, disrupted their family life and disturbed the adolescents adjustment who were affected at an early age. Taking the above factors into consideration it was decided to study the diabetic patients with reference to anxiety and adjustment.



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Material & Method

Sample

Sample consists of 300 subjects: Diabetics 100, Non diabetics' subjects 100, Normal 100.

1. 16 P.F. test, from C, for anxiety based on 2nd order factor.
2. Adjustment inventory, huge M. Bell for Adjustment.

All the groups are matched according to age, Sex, education and duration of disease. The data obtained is statistically analysis with the help of appropriate statistical tools and results are discussed below.

Results and Discussion

Anxiety

Table No. 1 (a)

Source	D.F.	S.S.	M.S.S	F
Bet. Group	2	281.28516	140.64258	115.7640
with-in-group	297	361.10840	1.21585	
TOTAL	299	642.39355	2.14847	

- Significant at 0.001 level

Table No. 1 (b)

Table of means and Significance of the Differences of the means

Groups	Means	Comparison	Difference of means
Diabetes	6.4709	Diabetes-Nondiabetes	+0.6745*
Nondiabetes	5.7964	Diabetes-Nonmal	+0.3065*
Normal	4.1644	Nondiabetes-Normal	+1.6320*

S.E. of Differences = .15594 (Bet.Group)

C.D. at 0.05 level = .30690 (Bet.Group)

G. M. = 5.4772

S D = 1.1027

From the Table of Analysis of variance it is observed that the F. value is highly significant at 0.001 level of significance. This indicates that differences that the differences among 3 groups mean are highly significant with respect to the anxiety.

From the table of means and different comparison it is observed that the highest anxiety is that diabetic group greater than nondiabetic and normal group. It suggests that the diabetics having high anxiety may have some maladjustment being dissatisfied with the degree to which they are able to meet the demands of life and to achieve what they desired. Very high anxiety is generally disruptive of performance and productive of physical disturbances.

There are certain studies supporting the finding of the present work. Daniels (1994) analysed a case of diabetes and anxiety neurosis. Although the patient was not cured but some interesting observations were made concerning the resemblance of the anxiety attacks and hyper insulinism and the relation of hyperglycemia and glycosuria to emotional conflict murawaski et al (1970) noted depression and anxiety in the disease. Sanders et al (1975) evaluated 60 adult diabetics and observed notable. Anxiety and depression.Lustman (1988) and Rodin (1991) have also reported closed relationship between anxiety and diabetes mellitus. It is concluded that anxiety plays an important role in diabetes mellitus.

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Adjustment "Home"

Table No. 2 (a)
Table of analysis of variance

Source	B.F	S.S.	M.S.S.	F.
Bet. group	2	2606.20703	1303.10352	47.4483
With-in-group	297	8156.71094	27.46367	
Total	299	10762.91797	35.99638	

*** Significant at 0.001 level

Table No. 2 (b)

Table of means and Significance of the differences of the means

Groups	Means	Comparison	Difference of the means
Diabetes	16.38	Diabetes-Nondiabetes	+5.29*
Nondiabetes	11.09	Diabetes-Normal	+6.90*
Normal	9.48	Nondiabetes-Normal	+2.61*

S.E. of Differences = .74113 (Bet. Group)

C.D at 0.005 level = 1.45862 (Bet. Group)

G.M = 12.3167

S. D.= 5.2406

The adjustment of all subjects is measured by the adjustment inventory (Haug H. Bell Adult from). The findings are described & discussed below.

It can be seen from the table 2 attached that F. value is highly significant at 0.001 level. This indicates that the differences among 3 groups mean are highly significant with respect to the home adjustment.

From table 2(b) it is observed that the highest average value on home adjustment is that of the diabetic group and significantly greater than nondiabetic and normal group.

It suggests that maladjustment in the home may keep the man disturbed and tense throughout the day leading to lot of psychological disturbances manifesting in somatic changes.

Adjustment "Health"

Table No. 3 (a)
Table of Analysis of Variance

Source	D.F.	S.S.	M.S.S	F
Bet. Group	2	3328.22266	1664.11133	75.4233
With-in-Group	297	6552.89844	22.06363	
Total	299	9881.12109	33.04723	

*** Significant at 0.001 level

Table No. 3 (b)

Table of means and Significance of the Differences of the means

Group	Mean	Comparison	Difference of Means
Diabetes	15.66	Diabetes-Nondiabetes	-0.11N.S
Nondiabetes	15.77	Diabetes-Normal	+7.01*
Normal	8.65	Nondiabetes-Normal	+7.12*

S.E. of Differences = .66428 (Bet. Group)

C.D at 0.005 level = 1.30738 (Bet. Group)

G.M = 13.3600

S. D.= 47.6972

From the table of Analysis of variance it is observed that the F. value is highly significant at 0.001 levels. This indicates that the differences among 3 groups mean are highly significant with respect to the health adjustment.

It suggests that diabetics and nondiabetics patient have scored significantly higher than normal group but they do not differ between themselves. It is indicative of the fact that health maladjustment may be because of any disease.

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Adjustment 'Social'

Table No. 4 (a)
Table of Analysis of Variance

Source	D.F.	S.S	M.S.S	F
Bet.Group	2	4654.41406	3237.20703	85.3896
Withi-in-Group	297	8094.42969	27.25397	
Total	299	12748.84375	42.63828	

*** Significant at 0.001 level

Table No. 4 (b)
Table of means and Significance of the Differences of the Means

Groups	Mean	Comparison	Difference of Means
Diabetes	19.27	Diabetes Nondiabetes	+0.95 N.S
Nondiabetes	18.32	Diabetes-Normal	+8.79*
Normal	10.48	Nondiabetes-Normal	+7.84
S.E. of Differences	= .73829	(Bet. Group)	
C.D at 0.05 level	= 1.45304	(Bet. Group)	
G.M = 16.0233	S. D. = 5.2205		

From the above table it is observed that the F. Value is highly significant at 0.001 level of significance. This indicates that the difference among 3 groups means are highly significant with respect to the social adjustment.

From the table of means and different comparison it is observed that the highest average value of social adjustment is that of the diabetic group and significantly greater than the nondiabetic to normal group.

Diabetic and nondiabetic have scored higher than the normal group but there is no difference between themselves. It suggests that social adjustment is influenced by influenced by any disease.

Adjustment 'Emotional'

Table No. 5 (a)
Table of Analysis of Variance

Source	D.F.	S.S	M.S.S	F
Det.Group	2	3846.89063	1923.44531	58.5098
Withi-in-Group	297	976.54688	32.87389	
Total	299	13610.43750	45.51986	

*** Significant at 0.001 level

Table No. 5 (b)
Table of means and Significance of the Differences of the Means

Groups	Mean	Comparison	Difference of Means
Diabetes	19.34	Diabetes Nondiabetes	+3.01*
Nondiabetes	16.33	Diabetes-Normal	+8.64*
Normal	10.70	Nondiabetes-Normal	+5.63*

S.E. of Differences = .81085 (Bet. Group)

C.D at 0.05 level = 1.59583 (Bet. Group)

G.M = 15.4567

S. D.= 5.7336

Above table reveals that the F. value is highly significant at 0.001 level of significance. This indicates that difference among 3 groups mean are highly significant with respect to the emotional adjustment.

From the table of means and different comparison it is observed that the highest value of emotional adjustment is that of the diabetic group and significantly greater than the patients of nondiabetic and normal group. It means diabetic are unstable emotionally.

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**Adjustment
'Occupational'**

Table No. 6 (a)
Table of Analysis of Variance

Source	D.F.	S.S	M.S.S	F
Bet.Group	2	595.13867	297.56934	22.3390
Withi-in-Group	297	3956.23047	13.32064	
Total	299	4551.36914	15.22197	

*** Significant at 0.001 level

Table No. 6 (b)
Table of means and Significance of the Differences of the Means

Groups	Mean	Comparison	Difference of Means
Diabetes	6.97	Diabetes Nondiabetes	+0.05 N.S.
Nondiabetes	6.82	Diabetes-Normal	-2.91*
Normal	9.88	Nondiabetes-Normal	-3.06*

S.E. of Differences = .51615 (Bet. Group)

C.D at 0.05 level = 1.01584 (Bet. Group)

G.M = 7.8900

S. D.= 3.6497

From the table of Analysis of variance it is observed that F. value is highly significant at 0.001 level of 0.001 level of significance. This indicates that the difference among 3 groups mean are highly significant with respect to the occupational adjustment. This is obtained that there is no significant difference between diabetic and nondiabetic on occupational adjustment suggesting that occupation has no important role to play in diabetic adjustment.

Table No. 7 (a)
Table of Analysis of Variance

Source	D.F.	S.S	M.S.S	F
Bet.Group	2	42030.25000	21015.12500	110.0538
Withi-in-Group	297	56713.12500	190.95328	
Total	299	98743.37500	330.24529	

*** Significant at 0.001 level

Table No. 7 (b)
Table of means and Significance of the Differences of the Means

Groups	Mean	Comparison	Difference of Means
Diabetes	77.62	Diabetes Nondiabetes	+9.29*
Nondiabetes	68.33	Diabetes-Normal	+28.43*
Normal	49.19	Nondiabetes-Normal	+18.14*

S.E. of Differences = 1.95424 (Bet. Group)

C.D at 0.05 level = 3.84615 (Bet. Group)

G.M = 49.19

S. D. = 13.8186

From the table of Analysis of variance it is observed that the F. value is highly significant at 0.001 level of significance. This indicates that the difference among 3 groups mean are highly significant with respect to the 'total adjustment'.

From the table of means and different comparison it is observed that the highest value of Total adjustment is that of the diabetic group and is significantly greater than nondiabetic and normal group.

It is clear from the above data that diabetic group is significantly maladjusted as a whole.

Above description of the findings of adjustment scale clearly suggests that diabetic patients are not adjusted with reference to home, society & emotion. there are number of studies supporting the above findings-mayiu et al (1990) found that most subjects with IDDM reported at least some disruption of their work or social life related to their diabetes, although this disruption tended not to be severe. Swift et al

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(1967) noted increased anxiety, less adequate self-image, and more disturbed and dependency in diabetic group.

Ryan, et al (1986) found differences in coping strategies of diabetic and nondiabetic. M c Gavin et al (1940) evaluated 49 diabetic children and control, nothing increased maladjustment in a substantial number of the diabetics. Hauser, et al (1985) found the family orientations toward independence, participation in social/recreational activities and organization strongly associated with diabetic subjects.

It can be concluded that the diabetics group is more anxious and maladjusted Diabetic patients may be helped by psychological counselling to reduce their anxiety and to increase their coping skill for adjustment.

Conclusion

The finding of this study may throw some light on the psychologica; aspect of the disease which may be useful for physicians and psychologists who may deal more effectively with diabetics for their diagnosis, treatment and prevention.

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