

DEPRESSION AND LIFE SATISFACTION OF DIABETIC PATIENTS IN RANCHI DISTRICT

Meenakshi Akhoury* and Sanjay Kumar Sinha**

Key words : Depression, Life satisfaction, Diabetic patients, Ranchi.

The present study was intended to know the depression and life satisfaction among non-diabetics and diabetic patients. For this a sample of 25 non-diabetic and 25 diabetic patients belonging to Ranchi district of Jharkhand was measured using General Health Questionnaire-12, Beck Depression Inventory and Life Satisfaction Scale. The results showed diabetic patients to be more depressed and on low satisfaction scale than non-diabetics.

INTRODUCTION

Life satisfaction is conceptualized as a key indicator of well-being. Life satisfaction is related directly with the level of fulfillment of the desires of the individuals. Individuals are capable of living by means of fulfillment at varying levels of their vital requirements formed of material and psychological resources, requirements based on relations covering the satisfaction from the relations with individuals and friends and the developmental requirements affecting the functionality. Type 2 diabetes (non-insulin-dependent) mellitus is one of the most complicated diseases managed in primary care (Kerr, 1995 & William, 1994). Standards have been developed to establish uniform care (Alberti *et al.*, 1988; Rutten *et al.*, 1989).

It is noted that life satisfaction of individuals increases with the level of fulfillment of requirements such as material resources (vital level) and inter-individual relations (love and affection) and increased social relation. It may be possible that a person is satisfied with almost all domains (e.g., health, wealth, marriage, education, etc.) of his/her life but may still be not dissatisfied with a particular domain which he/she weighs as most important and, dissatisfaction with this particular domain may negatively affect his/her overall judgment about life satisfaction. Health has been identified as one of the most important factors related to life satisfaction. The concept of life satisfaction is largely related to the concept of quality of life and feeling of subjective well-being which came under consideration in seventies in the field of health (Cotton, 2004). Data suggest that patients with diabetes experience a decrease in their 'quality of life' compared with healthy individuals and that functional health status decreases as complications become more severe (Mitchel *et al.*, 1990; Wandell *et al.*, 1997; Bradsley *et al.*, 1993 & Jacobson *et al.*, 1994).

Thus the present study is an attempt to find out the depression and life satisfaction levels of diabetic patients and healthy control group (non-diabetic).

MATERIAL AND METHODS

SAMPLE

The sample consisted of 50 subjects, 25 in each group *viz.*, diabetic patients and non-diabetic (normal controls). The diabetic patients were contacted at the OPD of Ranchi

Institute of Medical Science (RIMS), Ranchi and non-diabetics were taken from different areas of Ranchi. Only male subjects were taken for the study. Diabetic patients were diagnosed as per physical examination (random blood sugar testing & fasting blood sugar testing) and part history as diabetic for one and half years. Aged between 30-40 years and having studied at least upto matric level were included in the study. The normal control group (non-diabetic) included healthy subjects aged between 30-40 years, educated at least upto matric and scoring less than 3 on GHQ-12. People with history of abuse of any substance, organic illness, mental illness and other physical illness were excluded from the diabetic and normal control groups.

MEASURES

The specific socio-demographic data sheet was used to collect relevant information about each individual such as age, education, income and occupation. **General Health Questionnaire-12** was used to screen any psychiatric morbidity in healthy person of the normal controls. Life Satisfaction Scale was originally developed by Alam (2001). The scale consists of 60 items with the areas of Health, Personal, Economic, Marital, Social and Job. The responses are to be given in Yes/No. Every 'Yes' response is assigned 1 mark. Yes indicates the satisfaction. **Beck Depression Inventory** was developed by Beck (1961). This scale has a series of questions to measure the intensity, severity and depth of depression. The sum of BDI scores indicates the severity of depression : 0-16 indicates no depression, 16-32 indicates mild depression, 32-48 indicates moderate depression and 48-64 indicates severe depression.

PROCEDURE

All the participants were recruited after they gave written informed consent for participation in the study. Diabetic patients fulfilling the above mentioned criteria were included in the study. GHQ-12 was applied on normal control group. BDI and Life Satisfaction Scale was applied on both the groups.

STATISTICAL ANALYSIS

Statistical analysis was done using Statistical Package of Social Sciences (SPSS) 10.0 version. T-test and chi-square tests were used for comparing the continuous and categorical social demographic variables and scores on BDI & LSS.

*Asstt. Prof., Deptt. of Home Science, Ranchi University.

**Asstt. Prof., Deptt. of Education, Kolhan University.

RESULTS AND DISCUSSION

Table -1 indicates no significant difference between non-diabetic and diabetic patients with respect to age, education, habitat, income and occupation.

depression. It was also found from Table-2 that 68% of non-diabetic subjects having no depression in comparison to diabetic patients, only 20% & 8% of non-diabetics having non-diabetic individuals had no depression.

TABLE -1 : Socidemographic details of Diabetic Patients and Non-Diabetics

Variables	Diabetic N=25 (%)	Non-Diabetic N=25 (%)	X ²	Sig.
Age				
30-34	11 (44%)	12 (48%)	.81	0.77
35-40	14 (56%)	13 (52%)		
Education				
Matric	6 (24%)	7 (28%)	.352	0.839
Intermediate	10 (40%)	8 (32%)		
Graduation	9 (36%)	10 (40%)		
Habitat				
Rural	9 (36%)	11 (44%)	.333	0.564
Urban	16 (64%)	14 (56%)		
Monthly income				
Low	4 (16%)	3 (12%)	2.02	0.362
Medium	10 (40%)	15 (60%)		
High	11 (44%)	7 (28%)		
Occupation				
Service	10 (40%)	8 (32%)	.352	0.839
Business	6 (24%)	7 (28%)		
Others	9 (36%)	10 (40%)		

TABLE-2 : Showing Depression Among Diabetic Patients and Non-Diabetics

Depression	Diabetic	Non-Diabetic	X ²	Sig.
No Depression	1 (4%)	17 (68%)	22.50	0.000
Mild Depression	12 (48%)	5 (20%)		
Moderate Depression	8 (32%)	2 (8%)		
Severe Depression	4 (16%)	1 (4%)		

Table-2 shows the depression state of the Non-Diabetic and Diabetic patients. Table-2 indicates significant difference between non-diabetic and diabetic patients. 48% of the diabetic patients were found having mild level of depression, 32% of the diabetic patients having moderate level of depression and 16% of the diabetic patients having severe level of depression. Only 4% of the diabetic patients had no

Gavard *et al.* (1993) and Peyrot *et al.* (1997) found that depression is more common in patients with diabetes than in the general population; further they said at least 15% of patients have clinical depression. This finding supports our result where diabetic patients scored more in BDI. In another study, it was found that depression is associated with worse glycemic control and health complications (Lustman *et al.*, 1986, 1992), as well as decreased quality of life (Jacobson *et al.*, 1997).

TABLE-3. Showing Life Satisfaction Among Diabetic Patients and Non-Diabetics

Life satisfaction	Diabetic N=25 (%)	Non- Diabetic N=25 (%)
High	NIL	9 (36%)
Average	5 (20%)	16 (64%)
Low	20 (80%)	NIL

Table-3 shows the difference in life satisfaction in diabetes patients and normal health group (non-diabetics). Among 25 patients of diabetes, 20 (80%) were found to have low level of life satisfaction, only 5 (20%) having average level of life satisfaction. This was significantly different from non-diabetics where 9 (36%) and 16 (64%) out of 25 had high and average level of life satisfaction respectively. Glasgow *et al.* (1998) found that greater level of social support, especially diabetes related support from spouses and other family members has been associated with better regimen adherence. In our study it was found that low level of life satisfaction and severe level of depression are associated with diabetes patients.

A significant limitation of this study was the small sample size and inclusion of only male patients, so it could not be generalized on all diabetes patients.

CONCLUSION

The study concludes the low level of satisfaction and high level of depression in diabetes patients in comparison to non- diabetes.

References

- Alam, Q. G. & Srivastava, R., 2001 : Life Satisfaction Scale. National Psychological Corporation. 4/230, Kacheri Ghat, Agra.
- Alberti KGMM, Gries F.A., 1988 : Management of non-insulin dependent diabetes mellitus in Europe : a consensus view. *Diabetic Med* 1989; **5**: 275-281.
- American Diabetes. Association., 1989 : Standards of medical care for patients with diabetes mellitus. *Diabetes Care* **12** : 365-368.
- Beck, A. T., & Ward, C. H., 1961 : An inventory for measuring depression. *Arch Gen Psychiatry*, **4** : 561-571.
- Bradsley MJ, Astell S, McCallum A, Home PD 1993 : The performance of three measures of health status in an outpatient diabetes population. *Diabetic Med.* **10** : 619-626.
- Cotton, P., & Kart, P.M., 2004 : Occupational well being and performance : A review of organizational health research. *Australian Psychology*, **38** (1), 118-127.
- Gavard J.A., Lustman P.J., Clouse R.E., 1993 : Prevalence of depression in adults with diabetes : an epidemiological evaluation. *Diabetes Care* **16** : 1167-1178.
- Glasgow R.E., Toobert D.J., 1998 : Social environment and regimen adherence among type II diabetic patients. *Diabetes Care* **11** : 377-386.
- Jacobson A.M., de Groot M., Samson J.A., 1997 : The effects of psychiatric disorders and symptoms on quality of life in patients with type I and type II diabetes mellitus. *Qual Life Res* **6** :11-20.
- Jacobson A.M., de Groot M., Samson J.A., 1994 :The evaluation of two measures of quality of life in patients with type I and type II diabetes. *Diabetes Care.* **17** : 267-274.
- Kerr C.P., 1995 : Improving outcomes in diabetes: a review of the outpatient care of NIDDM patients. *J FamPract* **40** : 63-75.
- Lustman P.J., Griffith L., Clouse R., Cryer P., 1986 : Psychiatric illness in diabetes mellitus : relationship to symptoms and glucose control. *J Nerv. Ment. Dis* **74** : 736-742.
- Lustman P.J., Griffith L., Gavard J.A., Clouse R.E., 1992 : Depression in adults with diabetes. *Diabetes Care* **15** : 1631-1639.
- Mitchell B.D., Stern M.P., Haffner S.M., Hazuda H.P., Patterson J.K., 1990 : Functional impairment in Mexican Americans and non-Hispanic whites with diabetes. *J. Clin Epidemiol*; **43** : 319-327.
- Peyrot M., Rubin R.R., 1997 : Levels and risks of depression and anxiety symptomatology among diabetic adults. *Diabetes Care* **20** : 585-590.
- Rutten Gehm., Cromme PVM., Zuidweg J., Mulder Dzn J.D., 1989 : Huisarts en diabetes type 2. Eenverantwoordingvoor de NHG standaard. *Huisarts Wet* **32** : 7-13.
- Wandell P.E., Brorsson B, Aberg H., 1997 : Quality of life in diabetic patients registered with primary health care services in Sweden. *Scand J Prim Health Care.* **15** : 97-102.
- Williams G., 1994 : Management of non-insulin-dependent diabetes mellitus. *The Lancet* **343** : 95-100.