

“To assess the level of anxiety, depression and coping strategy in diabetic mellitus patients.”

¹ Nutan J. Potdar, ^{2*} Mrs. Sangita Sidojirao Patil, ³ Mr. Shivaji Pawar, ⁴ Samir K. Choudhari,
⁵ Mr. Tejas Bhosale, ⁶ Mrs. Sheetal Avinash kadam, ⁷ Ajit Anandrao Pawar

ABSTRACT--As the general population individuals with diabetes are nearly double as probably to suffer from anxiety and depression. ⁶ but this is not recognized early so not treated early.¹ Therefore, there is a necessity to assess the level of anxiety, depression and coping strategy in diabetic mellitus patients. Study assessed the level of anxiety, depression and coping strategy in diabetic mellitus patients. A descriptive survey approach and non-experimental research design was adopted in this study. A survey of 50 patients, selected from hospitals in western Maharashtra by purposive sampling. After obtaining permission from the setting, the patients' willingness was considered to participate in the study and informed consent was obtained. After collecting the demographic data, Structured questionnaire to assess the Anxiety, Beck's depression scale to assess depression and Brief COPE scale to assess coping strategies was used. According to Anxiety scale 90% diabetic mellitus patients were having mild anxiety, 94% diabetic mellitus patients were having severe depression. 90 % of diabetic mellitus patients were using coping strategy. Patients of diabetic mellitus experiences severe anxiety and depression, nurse should focus on the patient care to attained the optimal quality of life.

Key Words--anxiety, depression, coping strategy

I. INTRODUCTION:

The prevalence of diabetes is endlessly rising globally. It is calculable that presently nearly 285 million individuals are affected by diabetes worldwide and also the range is anticipated to rise to 438 million by the year 2030; more than 70% of those individuals reside in developing countries.² Similarly, all populations worldwide affected because of anxiety and depression, however more than two-thirds of the affected people live in developing countries.³⁻⁴

Premature morbidity and mortality are associated with both diabetes and anxiety/depression, and once these conditions co-exist, the danger of developing co-morbidities, complications, patient suffering and associated cost, escalates.⁵⁻⁶

¹ Associate Professor, Krishna Institute of Nursing Sciences, Karad, nutanpotdar@gmail.com

² *Clinical instructor, Krishna Institute of Nursing Sciences, Karad, Sangeetapatil675@gmail.com

³ Clinical Instructor, Krishna Institute of Nursing Sciences, Karad

⁴ Clinical Instructor, Krishna Institute of Nursing Sciences, Karad

⁵ Clinical Instructor, Krishna Institute of Nursing Sciences, Karad

⁶ Assistant Professor, Krishna Institute of Nursing Sciences, Karad

⁷ Clinical Instructor, Krishna Institute of Nursing Sciences, Karad

Within the U. K. A cross-sectional study was done the result says that from the patients of diabetes nearly one-fourth patients suffer from depression and one-third from anxiety⁷.

Diabetes is a burdensome and challenging chronic disease of the twenty first century, and it is a growing threat to the world's public health⁸. Diabetes and its associated health-risk factors treatment is very complex and it require health education and medical checkup frequently.⁹At the same time, diabetes people suffer from anxiety and depression. People who receive insulin must learn to monitor blood glucose levels by regulating blood sugar level. Proper food intake and an exercise regimen should be followed daily¹⁰.

Patients have so much strain as well as their families that is the reason for getting depressive and anxiety disorders.¹¹⁻¹²

Chronic stress, associated with illness and its treatment, requires appropriate preventive measures.¹³⁻¹⁴

To regulate the emotion, particularly anxiety, throughout the ill health method of patients with diabetes, several studies have shown that problem-focused coping methods are related to less anxiety, where as emotion-focused ones are related to additional anxiety. However, the adaptive qualities of various coping strategies must be evaluated in the specific context where they occur.¹³

So, it is important to study the level of anxiety and depression and coping strategy in the diabetic mellitus patient.

II. METHODOLOGY:

A descriptive survey approach and non-experimental research design was adopted in this study. A survey of 50 patients, selected from hospitals in western Maharashtra by purposive sampling and inclusion criteria was kept in mind that was willingness of patients to participate in the study, patients understand the Marathi language, those are not willing to participate were excluded from the study. After obtaining permission from the setting, informed consent was obtained. After collecting the demographic data, Structured questionnaire to assess the Anxiety, Back's depression scale to assess depression and Brief COPE scale to assess coping strategies was used.

III. RESULT:

Table1: Frequency and percentage distribution of samples according to socio demographic variables.

N=50

Table no 1 shows that, Majority 56% of patients were in age group of 61-70, Majority 52% were male, Majority 96% were married. Majority 26% were not educated, Majority 70% were farmers, Majority 52% were from joint family and Majority 52% of patients were suffering from diabetes from 1year-3years and Majority 84% were not having any bad habit.

5	Occupation		
	Worker	4	8
	Self-worker	7	14
	Retired	4	8
	Others	35	70
6	Type of family		
	Nuclear	24	48
	Joint	26	52
7	Duration of disease		
	6 months-1 year	5	10
	1 year- 3 years	26	52
	4 years-6 years	9	18
	7 years-10 years	10	20
8	Habits		
	Tobacco chewing	8	16
	Cigarette smoking	0	0
	Alcohol	0	0
	No any habits	42	84

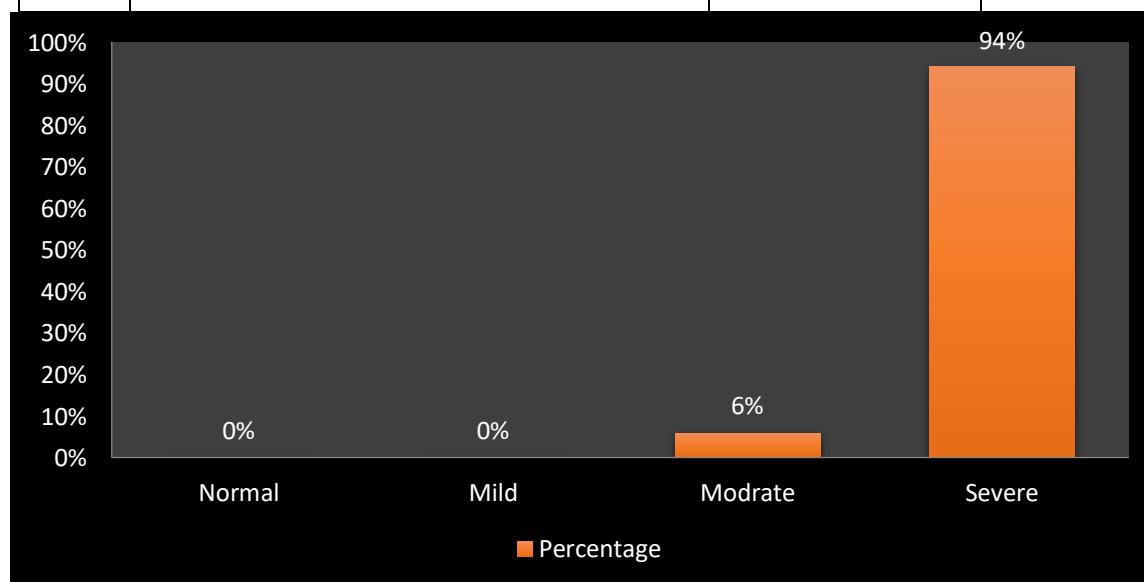


Figure 1: Frequency and percentage distribution of sample according to depression
N=50

Figure No.1 shows that 94% patients have severe depression.

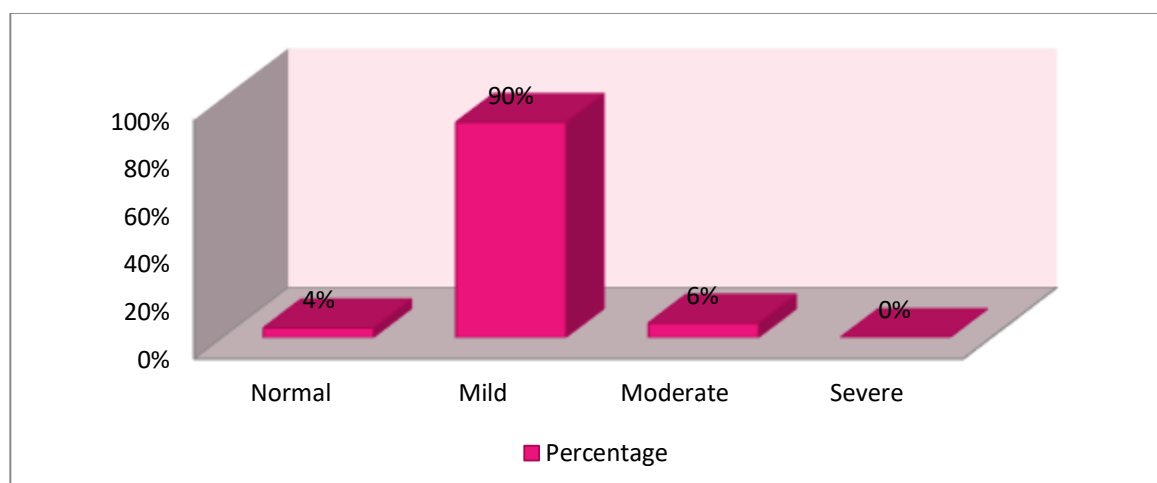


Figure2 : Frequency and percentage distribution of sample according to anxiety. N=50

Figure No.2 shows that 90% patients have mild anxiety.

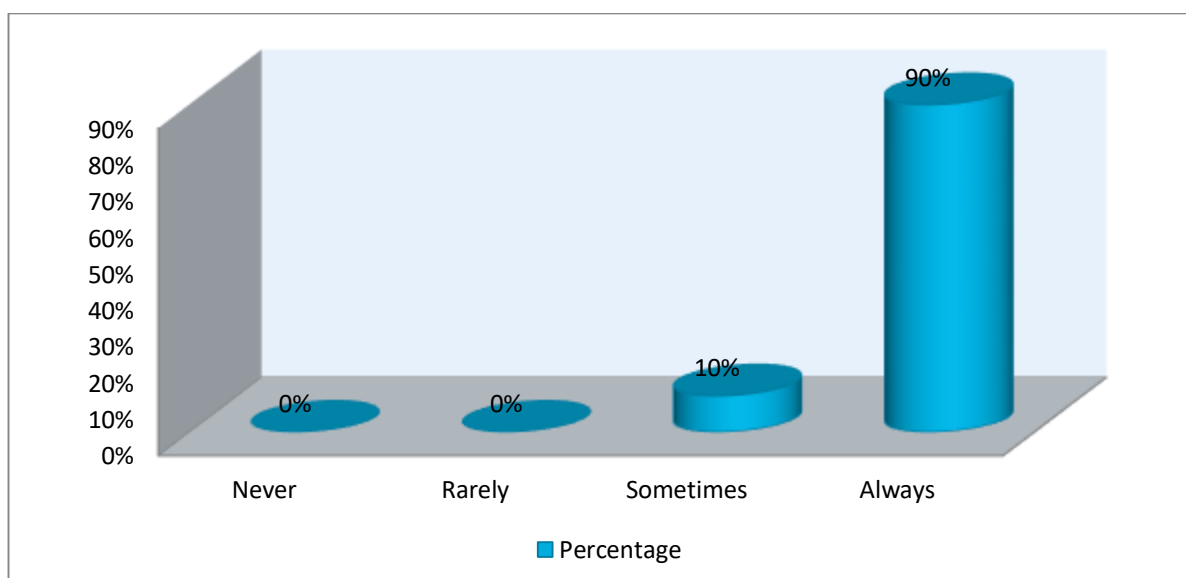


Figure 3: percentage of coping strategy of diabetic mellitus patients. N=50

Figure no 3 shows that 90% patients were using coping strategy always.

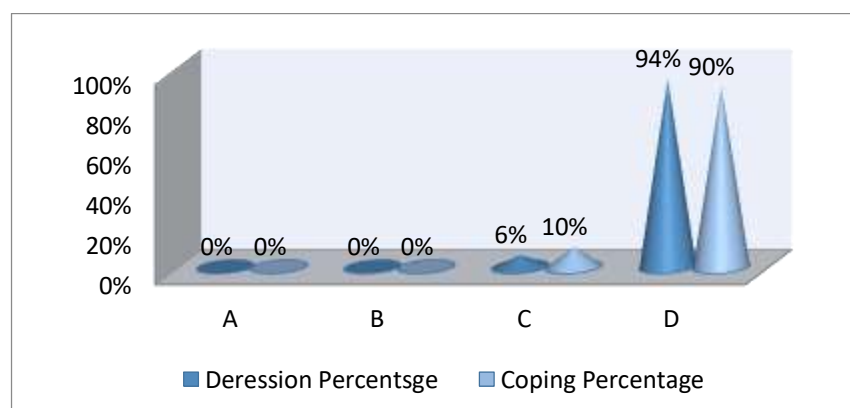


Figure 4: Shows correlation between depression and coping strategy.

Figure No.4 Shows that there was no any correlation between Depression and coping strategy.

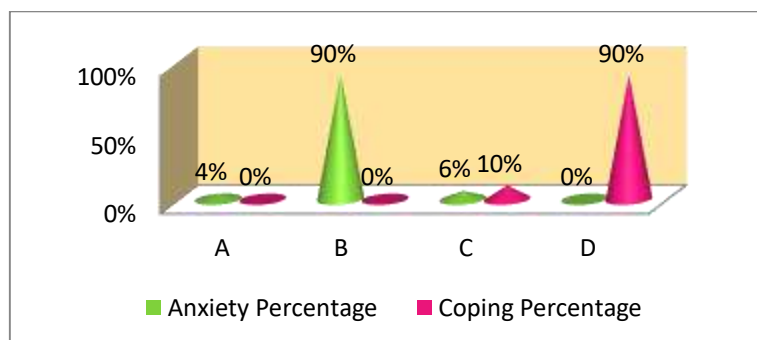


Figure 5 : Shows the correlation between Anxiety and coping strategy.

Figure No.5 shows that there was no any correlation between anxiety and coping strategy.

IV. DISCUSSION:

The findings of the study discussed under following parts.

Finding related to demographic variables

In the present study it was found that out of 50 diabetic mellitus patients' majority were belong from age group 61-70 years (56%), Male 26(52%) and 48(96%) were not educated, 35(70%) were farmer, 26(52%) were from joint family. 26(52%) were suffering from 1 year -3 year and 42(84%) patients were not having any bad habit.

Similar results are found by Hulya Parildar, Ozlem Cigerli, Nilgun Guvener Demirag in their study. Hundred and ten samples were chosen from that (mean age was 57.9 (10.5) years, 56.4% female), 59.1% had diabetes for less than five years where as new-onset diabetes was known in 33.6% of patients. Case history of diabetes mellitus was evident in 11.8% of study population.¹⁵

Finding related to depression among diabetic mellitus patients

This shows that 94% patients have severe depression.

Finding related to anxiety among diabetic mellitus patients

This shows that 90% patients have mild anxiety.

Similar findings were noted by Turkish Tuncay in his study that are almost 79% of the participants in his study experienced anxiety related to their diabetes ¹⁶.

Finding related to correlation between coping strategy and level of anxiety, depression among diabetic mellitus patients

$p > 0.05$ so there was no correlation between anxiety and coping strategy.

$p > 0.05$ there was no correlation between depression and coping strategy.

V. CONCLUSION:

Patients of diabetic mellitus experiences severe anxiety and depression, nurse should focus on the patient care to attained the optimal quality of life.

VI. ACKNOWLEDGEMENT:

Our sincere thanks goes to all the study participants who have provided us their valuable time and willingness to participate in the study.

Conflicts of interest: There are no conflicts of interest.

Financial Support and sponsorship: Nil

REFERENCES

1. Bouwman V, Adriaanse MC, van't Riet E, Snoek FJ, Dekker JM, Nijpels G: Depression, anxiety and glucose metabolism in the general Dutch population: the new Hoorn study. *Plos One*.2010.
2. International Diabetes Federation. *Diabetes Atlas*. Accessed May 3rd 2010
3. Khuwaja AK, Qureshi R, Azam SI: Prevalence and factors associated with anxiety and depression among family practitioners in Karachi, Pakistan. *J Pak Med Assoc*. 2004;54: 45-49.
4. Khowaja LA, Kjuwaja AK, Cosgrove P: Cost of diabetes care in Out-patient clinics of Karachi, Pakistan. *BMC Health Serv Res*. 2007, 21:189-10.1186/1472-6963-7-189.
5. Lin EH, Rutter CM, Katon W, Heckbert SR, Ciechnowsky P, Oliverr MM, et al: Depression and advance complication of diabetes a prospective cohort study. *Diabetes care* 2010, 33:264-269.10.2337/dc091068.
6. Nichols I, Barton PL, Glazner J, McCollum M: Diabetes, minor depression and health care utilization and expenditures: Retrospective database study. *Cost Eff Resour Alloc*. 2007;5:4-10.1186/1478-7547-5-4.
7. Simon GE, Katon WJ, Lin EH, Rutter C, Manning WG, Von Korff M, Et al: Cost effectiveness of systematic depression treatment among people with diabetes mellitus. *Arch Gen Psychiatry*. 2007, 64:65-72. 10.1001/archpsyc.64.1.65.
8. King H, Aubert Herman WH Global burden of diabetes,1995-2015- Prevalence , numerical estimates, and projection. *Diabetic care* 1998, 21:1414-1431.
9. King H Gruber W Lander T Implementing National Diabetic Programes. Report of WHO Metting Geneva: World Health Organisation Division of Non-ommunicable Diseases;1995
10. Koopmanschp M: Coping With type 2 diabetes the patient's perspective. *Diabetologia* 2002;45: s18-s22.
11. R. J. Anderson, K. E. Freedland, R. E. Clouse, and P. J. Lustman, "The prevalence of comorbid depression in adults with diabetes: a meta-analysis," *Diabetes Care*, vol. 24, no. 6, pp. 1069–1078, 2001.
12. A. Nouwen, K. Winkley, J. Twisk et al., "Type 2 diabetes mellitus as a risk factor for the onset of depression: a systematic review and meta-analysis," *Diabetologia*, vol. 53, no. 12, pp. 2480–2486, 2010.
13. R. S. Lazarus, "Coping with the stress of illness," *WHO Regional Publications*, vol. 44, pp. 11–31, 1992.
14. D. DeJean, M. Giacomini, M. Vanstone, and F. Brundisini, "Patient experiences of depression and anxiety with chronic disease: a systematic review and qualitative meta-synthesis," *Ontario Health Technology Assessment Series*, vol. 13, no. 16, pp. 1–33, 2013.

15. Hulya Parildar, Ozlem Cigerli, Nilgun Guvener Demirag, Depression, Coping Strategies, Glycemic Control and Patient Compliance in Type 2 Diabetic Patients in an endocrine Outpatient Clinic. Pak J Med Sci. 2015 Jan-Feb; 31(1): 19–24.
16. Tatik tuncay, Ligen Musabak, Deniz Engin Gok and Mustafa Kutlu, The relationship between anxiety, coping strategies and characteristics of patients with diabetes,” Health and Quality of Life Outcomes 6(1):79 · November 2008:1-9.