



## ▼ POST GRADUATES ABSTRACTS

### PG -15 : A STUDY OF PREVALENCE AND IMPLICATIONS OF DEPRESSION IN PATIENTS WITH TYPE 2 DIABETES ATTENDING A TERTIARY CARE CENTRE

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**Background:** The association between diabetes and depression is well known. They may have a bidirectional association though the exact mechanism is still not clear. Many of the current literature regarding the intertwined nature of Diabetes Mellitus (DM) and depression are cross-sectional in nature. There are not many longitudinal or prospective studies to determine the association between DM and depression in Indian scenario. Our study was mainly intended to find out the prevalence of depression in diabetic individuals and its impact on diabetes.

**Objective:** To study the prevalence of depression in diabetic patients, its impact on the clinical course of diabetes and to study the association between clinical courses of depression and diabetes.

**Methods:** Sample size was taken as 30 in each group . All patients who fulfilled the inclusion exclusion criteria were taken up for the study. A semi structured data collection proforma was used to record the socio demographic details. (SCIP) Standard for clinicians interview in psychiatry, a screening tool was administered to screen for various mental health problems. Those who were screened positive for depression were further assessed using PHQ9 questionnaire. After that patients were referred to psychiatry for further management.

Diabetic patients were screened for depression till the study sample size of 30 was reached in the group with depression. From the total number of diabetic patients screened, the prevalence of depression was calculated. Equal number of T2DM patients who were screened negative for psychiatric disorders and who consented for 3 months follow up were taken as control. Appropriate treatment for diabetes and depression were administered to subjects of both the groups, in accordance with standard & contemporary practice guidelines. PHQ-9, FBS, PPBS, HbA1c were measured at baseline and repeated at 3rd month of follow-up, to monitor the clinical courses of diabetes and depression.

**Results:** It was observed that 40% of participants with DM and depression were in the age group of 51-60 years. Among 30 participants in DM with depression 56.6% female participants had depression as compared to 43.4% male participants. Majority of the subjects in both the groups were from rural area and most of them were housewives. There was no statistical significance in age, gender, education, occupation, domicile, socio economic status between two groups. It was also observed that 30% subjects with DM and depression having diabetes duration 11-15 years had significant depression, implying that longer the duration of DM,

the greater is the chances of developing depression. There was statistically significant fall in PHQ 9 scores from baseline when compared to follow up showing significant improvement in depression. In our study the prevalence of depression among diabetic individuals was found to be 15%. There was no statistically significant difference in FBS, PPBS and HbA1c between the two study groups, both at baseline and also at follow up. The difference in FBS, PPBS and HbA1c among subjects with mild, moderate and severe depression was found to be statistically significant. It implies that severe the depression, worsen the glycemic control. Among the study participants of DM with depression group, those from urban domicile, co-morbidities, higher baseline FBS, PPBS and HbA1c levels had severe depression when compared to those with mild and moderate depression. The difference in improvement of HbA1c from baseline to follow up was statistically significant when compared between groups having mild, moderate and severe depression, with maximum fall of HbA1c

in the group with severe depression. This implies the positive effect of treating depression on glycemic control.

**Conclusion:** In our study the prevalence of depression among diabetic individuals was found to be 15%. Among the study participants of DM with depression group, those having higher baseline FBS, PPBS and HbA1c levels had severe depression when compared to those with mild and moderate depression implying a negative impact of depression on glycemic control. There was statistically significant improvement in severity of depression on intervention. There was no statistically significant difference in FBS, PPBS and HbA1c between the two study groups, both at baseline and also at follow up. But the fall in HbA1c from baseline to follow up was statistically significant in the group having severe depression showing the positive effect of improvement in depression on glycemic control.