Prevalence and Factors Related to Depression in Type 2 Diabetic Patients

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Background: Type 2 diabetes mellitus (T2DM) is one of the chronic diseases with a great impact on Thai population’s health and depression is associated with hyperglycemia and higher risk for diabetic complications. An accurate estimate of depression prevalence is needed to determine the impact of depression management in T2DM.

Objective: The purpose of this study was to determine prevalence and factors related to depression in T2DM patients at HRH Princess Mahachakri Sirindhorn Medical Center (MSMC).

Methods: A cross-sectional study was conducted. All 251 T2DM patients underwent 2Q and 9Q test for screening and estimating risk for depression. Patients were divided into 2 groups: Depression test positive group and Depression test negative group. Depression positive group was defined as positive result at least 1 point in 2Q test and at least 7 points in 9Q test. Their baseline characteristics and blood chemistry test were collected in order to evaluate risk factors.

Results: A number of 59 patients showed positive results. The prevalence of depression was 23.5%. After multivariate logistic regression, risk factors associated with depression in T2DM patients were female gender (OR, 2.02; 95% CI, 1.03 to 3.97; P=0.042), poor functional status (OR, 3.19; 95% CI, 1.24 to 8.23; P=0.016), comorbidity of stroke (OR, 2.98; 95% CI, 1.40 to 6.35; P=0.005), and hypoglycemic episode in 1 year (OR, 3.57; 95% CI, 1.87 to 6.80; P<0.001).

Conclusion: The prevalence of depression in T2DM patients at MSMC is 23.5%. Factors with a statistically significant relation to depression include female gender, poor functional status, comorbidity of stroke, and hypoglycemic episode in 1 year.

Keywords: Depression, 2Q9Q test, Complication of diabetes mellitus