
Biopsychosocial factors associated with glycemic control among type 2 diabetic inpatients of Southern Puerto Rico

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Abstract

Diabetes Mellitus is a chronic metabolic disorder and a significant public health concern. Diabetes is linked to poor quality of life and adverse health outcomes in Puerto Rico. Thirteen percent (13.7%) of Puerto Ricans living on the island have diabetes. The aim of this study was to explore the association between psychosocial factors and glycated hemoglobin (HbA1c), a proxy of glycemic control among a sample of inpatients with type 2 diabetes mellitus (T2DM). A secondary data analysis was conducted on biopsychosocial variables from (n=345) inpatients admitted to a general hospital of Puerto Rico. Patients received psychological evaluation from the Clinical Psychology Services Program of Ponce Health Sciences University between January 2015 and December 2017. Non-parametric inferential analyses were conducted to generate a biopsychosocial profile in relation to glycemic control. Fifty-three percent (53%) of this sample were female, mean age was 62.75 (SD = 14.88). Sixty-two percent (62.6%) had poor glycemic control and average HbA1c was 8.18% (SD = 2.27). Relatively younger patients had poorer glycemic control compared to older patients (r , [345] = $-.276$, $p = < .001$). Furthermore, patients with lower monthly incomes were more likely to have had poorer glycemic control, χ^2 (5) = 13.12, $p = .022$. Sociodemographic factors were significantly associated with glycemic control among inpatient type 2 diabetics. These results suggest that psychosocial determinants of health play an integral role in glycemic control among type 2 diabetics. Future studies exploring the mechanisms of to what extent social determinants contribute to glycemic control are warranted.