

FACTORS ASSOCIATED WITH POOR GLYCEMIC CONTROL AMONG DIABETES PATIENTS IN SEBERANG PERAI TENGAH DISTRICT

Elliza Mansor
Seberang Perai Tengah District Health Office, Pulau Pinang, Malaysia

ABSTRACT

INTRODUCTION: Diabetes mellitus is one of the leading chronic diseases in Malaysia, with a prevalence of 15.6% among adult populations. It can cause various complications, such as nephropathy, retinopathy, and neuropathy, that contribute to morbidity and mortality. As local healthcare providers, we should prioritize and direct our efforts towards controlling this disease in the community. **OBJECTIVES:** This study aims to determine the factors associated with poor glycemic control among diabetes patients. **METHODOLOGY:** The study was conducted in Seberang Perai Tengah (SPT), one of the districts in Penang. We employed National Diabetes Registry (NDR) data from 1.9.2022 to 1.08.2023 of diabetes patients registered at health clinics under the SPT District Health Office audited in 2023. Factors under study included socio-demographic characteristics, clinical characteristics, comorbidity status, and complications of diabetes. Simple Logistic Regression analysis was performed to determine factors associated with poor glycemic control (HbA1c > 6.5%). The significance level was set at alpha <0.05. **RESULTS:** A total of 905 diabetes patients were successfully audited in 2023. However, 159 did not have HbA1c readings and were excluded. Therefore, the study yielded a total of 746. The prevalence of poor glycaemic control was 67.4%. Factors associated are age < 60 years (OR: 2.19, 95% CI: 1.26 – 3.81); Malay (OR: 1.57, 95% CI: 1.11 – 2.21) and Indian ethnicity (OR: 2.26, 95% CI: 1.41 – 3.61); duration of diabetes ≥ 10 years (OR: 1.67, 95% CI: 1.22 – 2.27); age of diabetes onset was < 40 years old (OR: 2.58, 95% CI: 1.39 – 4.78); BMI obese (OR: 1.53, 95% CI: 1.02 – 2.29); and comorbid hypertension (OR: 0.57, 95% CI: 0.35 – 0.93). **CONCLUSION:** Local healthcare providers should plan and design targeted interventions addressing these identified risk factors to improve glycemic management and health outcomes for diabetes patients.

Keywords: diabetes mellitus, factors, HbA1c, glycaemic control, Malaysia.
