

# Prevalence and factors associated with loss to follow-up among type 2 diabetes patients attending public health clinics in Negeri Sembilan, Malaysia

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## ABSTRACT

**Introduction:** Although diabetes is highly prevalent in Malaysia and public health facilities are the main care providers, information on the loss to follow-up (LTFU) of diabetes patients in routine care is scarce. Understanding LTFU is essential to improve the quality of care and clinic efficiency. We aimed to determine the prevalence and factors associated with LTFU among type 2 diabetes patients attending public health clinics in Negeri Sembilan, Malaysia. **Methods:** A five-year retrospective open cohort study was conducted using National Diabetes Registry data from 2013 to 2017. The study setting was all 47 public health clinics in Negeri Sembilan. LTFU was defined as non-attendance to clinics for  $\geq 1$  year. The diabetes treatment goals were HbA1c $<7.0\%$ , blood pressure $<130/80$  mmHg, and LDL-cholesterol $<2.6$  mmol/L. Multivariate proportional hazard modelling was conducted to determine the factors associated with LTFU. **Results:** Among 18,341 patients, there were more females (55.8%), Malays (64.7%), and older patients  $\geq 60$  years (49.4%). Around 4.6% (95% CI: 4.3-4.9%) of patients were LTFU over a mean follow-up duration of  $2.5 \pm 1.1$  person-years. Older age groups, females, Chinese ethnicity, overweight patients, and those with dyslipidaemia were less likely to LTFU. Patients on more intense diabetic and hypertension treatment regimens and those who achieved more treatment goals were also less likely to LTFU. **Conclusion:** Certain demographics can be targeted for interventions to reduce LTFU in public health clinics. Appropriate use of pharmacological agents and the achievement of diabetes treatment goals are important as they may improve LTFU in diabetes care in Malaysia.