

# The prevalence of medication compliance and associated psychosocial factors among the major multi-ethnics patients with ischemic heart disease patients in Malaysia

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## ABSTRACT

**Introduction:** Ischemic heart disease (IHD) has remained the leading cause of death in Malaysia since 1980. Despite increasing recognition of ethnic diversity in healthcare research, the psychosocial determinants of medication compliance are still not well understood. This study examined the prevalence of medication compliance and its psychosocial predictors among the three major ethnic groups in Malaysia, with the aim of informing culturally responsive strategies for disease management and secondary prevention. **Materials and Methods:** A cross-sectional study was conducted at a major cardiac tertiary center using purposive sampling. Data were collected from 1,200 patients with IHD through validated questionnaires measuring medication compliance and psychosocial factors. Descriptive statistics, chi-square tests, and logistic regression analyses were performed to examine ethnic variations and independent predictors of compliance. **Results:** Significant differences in compliance were observed across ethnic groups ( $p=0.005$ ). Chinese patients demonstrated the highest compliance rate (71.3%), followed by Indians (63.5%) and Malays (60.8%). Logistic regression analyses identified medication barriers (AOR=0.87, 95% CI=0.81–0.94), patient motivation (AOR=0.80, 95% CI=0.68–0.93), and lifestyle factors (AOR=0.88, 95% CI=0.80–0.96) as significant independent predictors of compliance across groups. Ethnic-specific variations further indicated the influence of cultural and social contexts on adherence patterns. **Conclusion:** The study highlights the importance of psychosocial determinants in managing IHD and underscores notable ethnic differences in medication compliance. Findings suggest that effective secondary prevention requires interventions tailored to cultural beliefs, motivational needs, and lifestyle challenges. Integrating these psychosocial elements into patient education, counseling, and health promotion may strengthen medication adherence and contribute to reducing IHD-related morbidity and mortality in Malaysia. [FRGS/1/2023/SS09/UPSI/03/2]

Keywords: Ischemic Heart Disease, Medication Compliance, Psychosocial Factors, Ethnic Difference, Secondary Prevention