

# Is Health Literacy Associated with Cardiac Rehabilitation Attendance in Patients After Myocardial Infarction?

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## Abstract

**Aim:** Health literacy is an important determinant of health that affects people's ability to process information. This study aims to explore associations between health literacy and cardiac rehabilitation (CR) attendance rates and cardiac self-efficacy following myocardial infarction (MI).

**Method:** Longitudinal analysis of the ENHEARTEN study - a multicentre, prospective observational study of Victorian adults with first MI (n=440). Health literacy was measured at baseline and 6-months post-MI using the 12-item European health literacy survey (HLS-12) and four scales of the Health Literacy Questionnaire (HLQ3, actively managing my health; HLQ4, social support for health; HLQ6, engaging with healthcare providers; and HLQ7, navigating the healthcare system). Cardiac self-efficacy was measured using the validated scale. CR attendance was collected at 6-months through self-reported surveys and validated through electronic medical records. Associations between health literacy and CR attendance were analysed using univariate logistic regression.

**Results:** CR attendance was associated with older age (60.7 vs 57.9 years,  $p=0.01$ ), having private health insurance (43.7% vs 33.1%,  $p=0.03$ ), and being less likely to have depression symptoms (15.9% vs 30.6%,  $P<0.001$ ). CR attenders demonstrated higher baseline HLQ3 (2.8 vs 2.6,  $p=0.01$ ) and HLQ4 (3.0 vs 3.0,  $p=0.04$ ) scores than non-attenders. At six-month follow-up, participants who attended CR reported significantly higher cardiac self-efficacy and health literacy in all HLQ scales compared to non-attenders.

**Conclusion:** This study highlights the important role of health literacy in CR attendance. Further studies should explore how to implement targeted interventions for patients with low health literacy to improve uptake and adherence to CR.