

Beliefs about Medicine Questionnaire: Translation, Validation, and Adaptation for Post-Acute Coronary Syndrome Patients in the South Sulawesi Population, Indonesia

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ABSTRACT

Background: Patients' perceptions of medication significantly influence therapeutic outcomes, particularly among individuals with Acute Coronary Syndrome (ACS). The Beliefs about Medicines Questionnaire (BMQ) is a widely utilized instrument for evaluating patients' beliefs regarding their medications. However, a validated, culturally relevant, and linguistically accurate Indonesian version of the BMQ is currently unavailable. The absence of such adaptation restricts the tool's effectiveness in assessing beliefs among post-ACS patients in Indonesia, where these beliefs may substantially impact treatment adherence and clinical outcomes. Therefore, translation, validation, and cultural adaptation of the BMQ are essential to ensure its accuracy in evaluating patient beliefs within the Indonesian context. **Purpose:** To develop and validate an Indonesian version of the BMQ questionnaire, ensuring its linguistic and cultural appropriateness for use specifically among post-ACS patients in Indonesia. This validated version is crucial for regions with a high burden of cardiovascular disease, where belief patterns can inform tailored adherence interventions. **Patients and methods:** This cross-sectional study was conducted with post-acute coronary syndrome (ACS) patients who received treatment in June and July 2025 at two hospitals in Makassar, South Sulawesi, Indonesia. We adhered to the established guidelines for forward-backward translation and recruited 96 post-ACS outpatients. The inclusion criteria encompassed individuals aged ≥ 18 years who had been diagnosed with ACS, had undergone therapy for a minimum of six months, and had provided written consent to participate. The psychometric evaluation by Horne et al., comprised confirmatory factor analysis, item-total validity assessed through Pearson correlation, internal consistency measured using Cronbach's alpha, and inter-rater reliability. **Results:** The Indonesian-translated BMQ instrument was tested for validity and reliability among 96 post-ACS patients. All 18 items demonstrated strong validity with r -count values exceeding the r -table threshold (0.1996). Cronbach's alpha values were all ≥ 0.750 across domains, indicating high overall reliability. Pilot feedback prompted minor wording refinements to enhance clarity and cultural resonance. These results confirm that the instrument reliably measures patient beliefs about medicine in this population. **Conclusion:** The psychometric properties of the Indonesian version of the BMQ align

with those documented in the original study. Our findings indicate that the Indonesian adaptation of the BMQ is a valid and reliable instrument for evaluating treatment-related beliefs in patients with post-acute coronary syndrome (ACS) in South Sulawesi, Indonesia. However, further psychometric assessments are necessary to confirm its broader