

Changes in Health-Related Quality of Life in Vivax Malaria Patients: Measurement and Valuation in Indonesia and Cambodia



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Introduction

This study aimed to evaluate whether the EQ-5D-5L survey was sensitive to changes in quality of life among patients with acute uncomplicated vivax malaria from time of diagnosis to recovery after treatment.

Method

- The EQ-5D-5L was used alongside an ongoing clinical trial for vivax malaria patients in Cambodia and Indonesia at three time points: day 0 when they were acutely sick, day 21, and 6 months.
- We valued health states with local value sets (using Thailand’s value set for Cambodia) to get the index scores.
- Linear regression was performed to assess the change in mean index score between time points.

Result

- At day 0, over half of the patients in Cambodia reported pain/discomfort (75%), problems with usual activities (65%), and mobility (54%), while only 27% experienced problems in self-care and anxiety. For Indonesia, 75% of patients reported pain/discomfort, but less than half reported issues with usual activities (48%), mobility (32%), anxiety/depression (26%), and self-care (13%).
- Linear regression showed a significant difference between the mean index score at baseline (day 0) and both follow-up time points (p-value <0.05).

Figure 1. Change of decreased reported problems by dimension from Day 0 to Day 21 in Cambodia and Indonesia

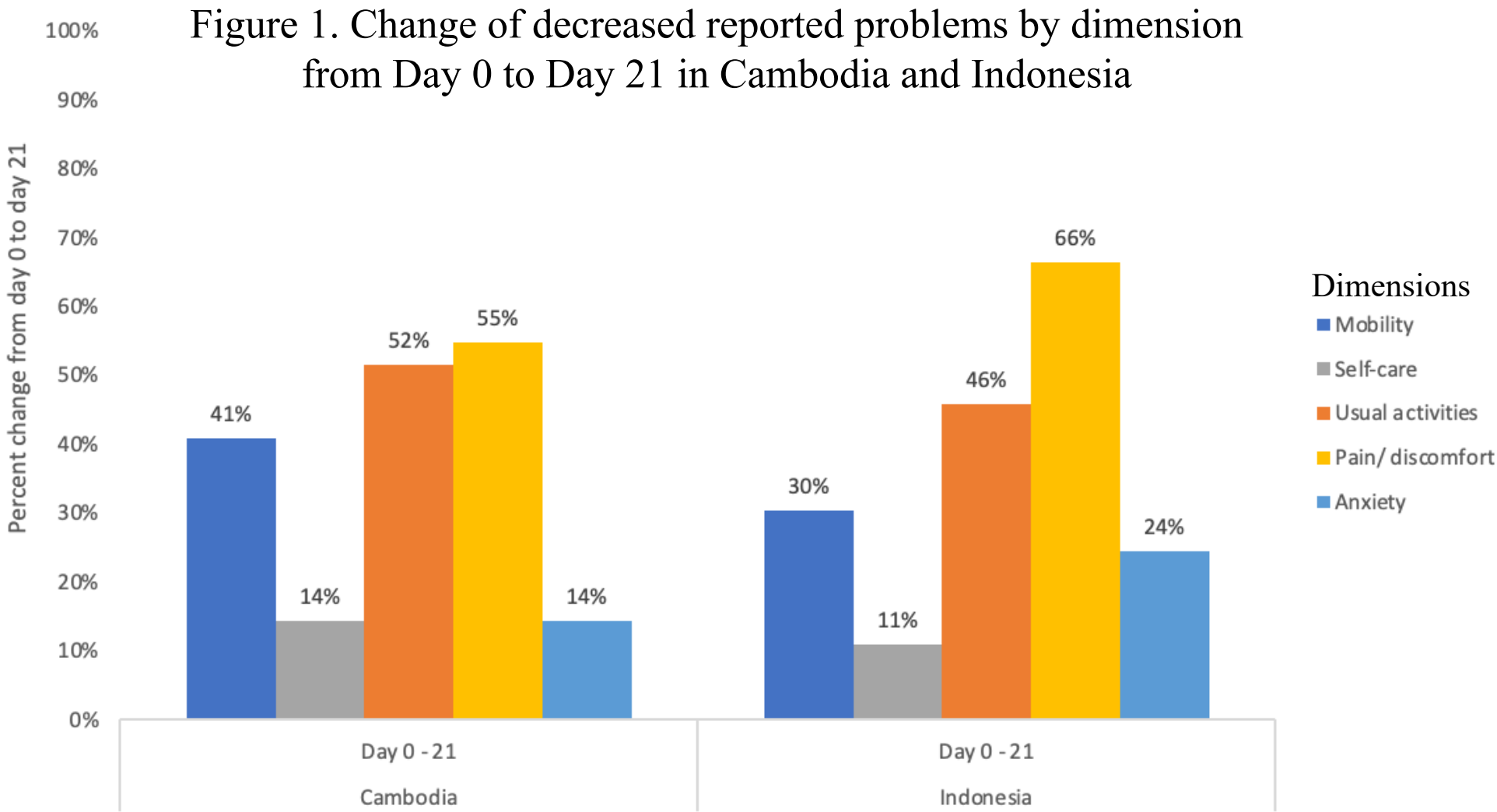


Table 1. The EQ5D-5L Index Score by Country Setting and Time of Measurement

	Indonesia (N = 149)		Cambodia (N = 220)	
	Mean	SD	Mean	SD
Day 0	0.816	0.147	0.814	0.174
Day 21	0.985	0.052	0.946	0.123
Month 6	0.997	0.015	0.993	0.038

Conclusion and Future Direction

- We found significant changes in quality of life from acute illness with vivax malaria to recovery, demonstrating that the EQ-5D-5L instrument is sensitive enough to capture differences in quality of life in these settings.
- With decreasing rates of malaria mortality and a growing number of available value sets, future malaria studies should consider including the EQ-5D-5L to capture morbidity.