**BMC Nursing**

CrossMark

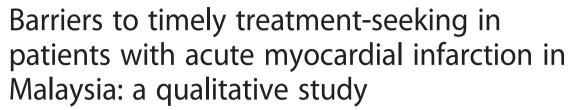# Barriers to timely treatment-seeking in patients with acute myocardial infarction in Malaysia: a qualitative study

Li S. Chai, Zabidah Putit and Sidiah Siop[*]

## Abstract

**Background:** Persisting delay in seeking treatment among Acute Myocardial Infarction (AMI) patients was reported in Malaysia despite intensified efforts in educating the public on symptoms of AMI and the importance of seeking prompt treatment. Studies outside Malaysia have shown that patients' personal thoughts during symptom onset could contribute to the delay. The purpose of this study is to explore the barriers of AMI patients prior to the decision of seeking treatment in Malaysia.

**Methods:** A qualitative descriptive research approach was chosen. Individual in-depth interviews were conducted among 18 patients with AMI. Data were analysed using thematic analysis. Recordings were transcribed and coded, codes were subsequently organized into categories. The stages of coding and identifying categories were repeated before themes were identified.

**Results:** Three meaningful themes with nine sub-themes that may have influenced the delayed decision to seek treatment were identified. Some themes identified were culturally bound.

**Conclusions:** The findings of this study give insights on barriers prior to the decision of seeking treatment when patients were experiencing AMI. Findings indicates that interventions targeted at increasing knowledge about AMI symptoms and correct actions using an informative approach at the current practice may not be adequate to reduce patient delay. The findings of this study could provide basis for the development of interventions that are culturally relevant to the Malaysians setting to promote behavioural change in the population and reduce pre-hospital delay.

**Keywords:** Barrier, Thoughts, Beliefs, Acute Myocardial Infarction, Delay, Decision time

## Background

Coronary Heart Disease caused 2.3 million deaths globally in 2012 [1]. In Malaysia, it remains the leading cause of death from 2000 to 2012, and accounts for 20.1 % of all deaths in 2012 [2]. Acute Myocardial Infarction (AMI) is the most deadly presentation of Coronary Heart Disease. In-hospital and 30-day mortality following AMI is high at 7 and 13 % respectively in 2010 [3].

In the management of AMI, delay in seeking treatment after symptom onset could have great consequences on prognosis. Early reperfusion with thrombolytic therapy has been shown to reduce mortality by up to 50 % when it is

given within two hours from symptoms onset [4–7]. In Malaysia, thrombolytic therapy constitutes the main reperfusion strategy (74 %) in the treatment of AMI due to limitation of resources for angioplasty in the local hospitals [3]. Efforts have been intensified in Malaysia to reduce the delay to treatment including educating public on symptoms and importance of early treatment for AMI [8]. Despite these efforts, the in-hospital mortality rate for AMI was reported to remain consistent between 8 and 10 % from 2006 to 2010 and it was higher compared to other global registries within the same period [3]. Delay to treatment after symptoms onset has been found as the main cause of high mortality for AMI [8]. A constant mean of this delay was reported between 3.7 and 4.4 h from 2007 to 2012 [9]. In addition, a proportion of AMI patients did not receive any form of primary revascularization

* Correspondence: jsidiah@unimas.my
Department of Nursing, Faculty of Medicine and Health Sciences, Universiti Malaysia Sarawak (UNIMAS), Jalan Datuk Mohd Musa, 94300 Kota Samarahan, Sarawak, Malaysia