April 2015
© National Cardiovascular Disease Database (NCVD)

Publisher:
Jointly published by the National Heart Association of Malaysia (NHAM) and the Ministry of Health Malaysia

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Funding
The National Cardiovascular Disease Database (NCVD)-Acute Coronary Syndrome (ACS) Registry is funded with grants from the Ministry of Health Malaysia (MOH) and the National Heart Association of Malaysia (NHAM)

ISSN Number: ISSN 1985-4757
CHAPTER 5: OUTCOME
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Summary
1. There was improvement in the overall 30-day outcome compared to the last NCVD-ACS Registry in 2006-2010.
2. STEMI remained as the highest risk of mortality. Advanced age, female gender and higher TIMI risk score and Killip class were identified as predictors of mortality.
3. Patients who received fibrinolytic therapy had better outcome than those who did not.
4. Hospitals with cardiac catheterisation facility registered lower in-hospital and 30-day mortality.
5. Patients who underwent urgent cardiac catheterisation and urgent PCI had better outcome than those who did not.

Overall in-hospital and 30-day mortality
From the year 2011 to 2013, the overall (all-cause) in-hospital and 30-day mortality rate had been constant at around 7.6% and 9%, respectively. [Table 5.1] There was no obvious change in the trend of mortality across all ACS strata within this three-year period. The STEMI group appeared to have the highest mortality rate. In-hospital mortality for STEMI was (10.6%) followed by NSTEMI (7.6%) and UA (1.2%). The 30-day mortality for STEMI was (11.8%) followed by NSTEMI (9.2%) and UA (2.4%). [Table 5.8] There was similar in-hospital outcome between patients treated at physician and cardiologist centres. However, we noted a slightly favourable outcome in the patients treated at the cardiologist-centre at 30-day (mortality physician 9.2% vs. cardiologist 8.2%). [Table 5.7] There was a marked improvement in the overall 30-day mortality rate compared to our previous 2006 to 2010 registry (9% vs. 14%). Nevertheless, our overall mortality rate was still far higher than that of other worldwide registries.

Outcome by Patients Characteristics

STEMI
Multivariate analysis of patients' baseline characteristics showed that female gender, higher Killip class at presentation and age > 60 years were poor prognostic factors for in hospital mortality. No significant difference was noted in adjusted mortality among the three major ethnic groups. Within all the conventional cardiovascular risk factors, we found that hypertensives and HF had higher adjusted mortality. The adjusted mortality risk was also higher with higher TIMI risk score. [Table 5.11.1]

NSTEMI/UA
The adjusted mortality showed that age was an important determinant of in-hospital mortality. Female gender seemed to have similar outcome compared to their male counterpart unlike the STEMI group and the Indian ethnic group had a better outcome compared to the Malays and Chinese. Higher Killip class also conferred poorer outcome in this group of patients. Among the cardiovascular risk factors, diabetes mellitus was associated with a significantly worse outcome. [Table 5.11.2]