A study of patients who presented with acute coronary syndrome to an emergency department in a tertiary care hospital in Sri Lanka

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Aims
This study was carried out to assess the burden of acute coronary syndrome (ACS) in an emergency department (ED).

Methods
A prospective observational study was carried out from 1 July 2016 to 30 June 2017 (1 year) to identify the nature of admissions to the ED at Teaching Hospital Kurunegala, Sri Lanka. Patients who were diagnosed in the ED to have ACS were analysed to study the population, mode of referral, presenting symptoms, type of ACS and outcome. Data analysis was done using SPSS (version 21).

Results
There were 49,213 admissions to the ED during the study period. The average number of admissions was 135 (±18) per day. 3,436 (6.98%) of these patients were diagnosed as having ACS (average number of ACS, 9.4±4.3/day). The frequencies of ST-elevation myocardial infarction (STEMI), non-ST-elevation myocardial infarctions (NSTEMI) and unstable angina (UA) were 20.3%, 25.4% and 54.3%, respectively. The mean age of female patients was 64±12 years, while that of male patients was 62±12 years. Their presenting symptoms were chest pain in 95.5%, while 4.5% presented with shortness of breath, faintishness and other symptoms. Mean ages of STEMI for male patients and female patients were 59±13 years and 62±13 years respectively. Deaths in the ED due to ACS were 0.37%. Most of the patients were self-referred (59.7%), while 39.6% were referred from peripheral hospitals and 0.65% by family physicians.

Conclusions
ACS is a common and important medical emergency presentation to the ED. Optimum infrastructure facilities and adequate training of health staff are key to prompt evaluation and management of these patients. A dedicated chest pain unit will help to reduce the burden of ACS in the ED.

Conflict of interest statement
No conflict of interest.