An analysis of reasons for emergency referral, hospital admission and day of the week pattern in a Family Medicine Training Centre in Hong Kong

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Introduction
Literature showed cardiovascular mortality and its related hospital admission occur frequently on Mondays. Previous studies have shown that there was a septadian (day of the week) pattern in the reasons for referral from primary to secondary care, in which angina pectoris was observed more commonly on Mondays. There is a limited understanding of pattern of referral from primary to emergency hospital service in our local setting.

Objectives
To review the pattern of emergency referral and subsequent hospital admission in relation to the day of the week in a Family Medicine Training Centre in Hong Kong

Methodology
Retrospective review on electronic medical record (accessible to both primary and secondary public healthcare service) was performed to evaluate reasons of referral to emergency care and subsequent outcome of these patients. All patients referred to Accident and Emergency Department (A&E) from Yan Oi General Outpatient Clinic within one year period from Jan 2015 to Dec 2015 was included, those who did not attend the Accident and Emergency Department were excluded.

Result
609 patient records were reviewed and 598 patients were included. Male to female ratio was 1:1. Mean and median age were 63 and 65 respectively. 60.0% of all the patients referred to A&E were admitted. The frequency of emergency referral was similar from Monday to Friday, while admission rate was also similar on different days of the week: Monday 63.6%, Tuesday 57.7%, Wednesday 54.9%, Thursday 55.8%, Friday 63.0% and Saturday 58.7%. Among various reasons of A&E referral, 18.4% of them were due to chest pain. The referral rate for chest pain was found similar in different days of the week: Monday 20.9%, Tuesday 20.6%, Wednesday 13.5%, Thursday 19.2% and Friday 19.4%. There was no significant association between proportion of referral due to chest pain and referral rate on different days of the week.
by chi-square test. Conclusion: Chest pain is one of the common reasons of referral from primary to secondary emergency care. This review showed an even distribution of septadian pattern in such reason of referral and admission rate in a local primary care Family Medicine training centre, while previous overseas studies showed higher referral rate of chest pain on Monday.