A Three Year Overview of Drug Poisoning Pattern in a regional Emergency Department

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Introduction
The incidence of psychiatric illness and substance abuse are increased significantly in recent year. Drug poisoning / overdose are a common phenomenon between teenager and young adult. The underlying causes are closely related to stressors from school and family, influences from peer group, lack of social support and financial problem.

Objectives
This study aims to examine the characteristics of drug poisoning pattern in one regional Emergency Department (ED), and to provide a guideline for public health education and poisoning prevention.

Methodology
It is a retrospective record review on all drug-poisoning patients from 2009 to 2011. All patients attending ED due to drug overdose are recruited in the study. Those patients attending ED due to poisoning of other agents are excluded from the study.

Result
From 2009 to 2011, there were 85 drug poisoning patients attending ED in Alice Ho Miu Ling Nethersole Hospital. The mean age was 41.6 year old (95% C.I.: 37-46 year old) and 58.8% poisoning cases were female patients. Most of their clinical presentation at triage was hemodynamic stable with Glasgow Coma Scale 15. The four commonest categories of pharmaceutical agents were own medical disease drug (25.9%), sedatives / hypnotics (23.5%), antidepressants (23.5%) and analgesic / flu medication (20.0%). Only 20% drug overdose patients consumed with alcohol intake. Most of them (62.4%) have no suicidal intent. The main reasons for drug overdose were accidentally intake (31.8%), due to family problem (28.2%), low mood (16.5%) and abusive habit (12.9%). Half of the patients (49.4%) were predisposed to psychiatric illness. For emergency management, only 21.2% poisoning patients need gastrointestinal decontamination with activated charcoal in ED. Most of them were admitted into medical unit with uneventful recovery. The median length of stay in hospital was 37 hours (interquartile range: 80.9 hours). Conclusions: In Tai Po District,
young adult was the main drug-poisoning group, predisposed to psychiatric illness. The epidemiological pattern provides a guideline on poisoning prevention.