Improving Medication Safety and Diabetes Management in Hong Kong - A Multi-disciplinary Approach
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Introduction
Diabetes mellitus is a prevalent chronic disease worldwide. Successful diabetes management requires collaboration between healthcare professionals. Pharmacists are ideally-positioned to conduct medication reconciliation and improve medication safety.

Objectives
The study aimed to investigate the epidemiology of drug-related problems (DRPs) and their clinical significance among diabetic patients in an out-patient clinic in Hong Kong. The role of pharmacist in the multi-disciplinary health-care team was explored by evaluating the outcome of interventions.

Methodology
A twelve-month observational study was conducted in Diabetes Clinic of Queen Mary Hospital. Selected high-risk patients were interviewed by a pharmacist for medication reconciliation and medication review. DRPs presented were identified and recorded by pharmacist, which presented with recommendations to physicians to optimize patients’ drug regimens and resolve or prevent potential DRPs.

Result
A total of 201 DRPs were identified by pharmacist. The incidence of patients with
DRPs was 63.0%. The most prevalent categories were dosing problem (n = 70, 34.8%), followed by non-allergic adverse reaction (n = 40, 19.9%). The majority of medications associated with DRPs were drugs targeting the endocrine system (52.1%) and drugs targeting the cardiovascular system (32%). The range of clinical severity scores assigned to DRPs was 0 to 7 with a mean of 2.42 ± 2.11. Half of the DRPs were of moderate severity level while another half of DPRs were of minor level. Ninety-nine (49.3%) DRPs were completely solved and twenty (10%) of DRPs were partially solved with the recommendations from pharmacist. Over half of the DPRs were found to be attributed to patient-related causes. With the effort of pharmacists in conducting medication reconciliation and medication review for patients and maintaining collaborative working relationship within the multi-disciplinary team, positive impact was demonstrated in identifying, resolving and preventing DRPs, ensuring optimal treatment outcome and medication safety.