Community medication adherence program for high risk hospital admission elderly patients after discharged from hospital
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Introduction
With the growth of elderly population in Hong Kong, the utilization of acute and chronic healthcare services increases rapidly in the past decades. There are a number of key factors contributing to hospital admission among these elderly people. Medication non-adherence is identified as one of these key factors. However, little data in local aged population is collected for service needs and specific program intervention. Therefore our ICDS team implemented a community medication adherence program for discharged high risk hospital admission elderly patients to manage this health issue.

Objectives
(1) to improve the rate of medication adherence; (2) to facilitate early discharge and minimize hospital admission; (3) to identify the potential risk factors of medication non-adherence in order to develop better needs assessments on admission in the future.

Methodology
High risk hospital admission elderly patients were recruited for ICDS case management service after a comprehensive need assessment and discharge planning during hospitalization. Those discharged patients under ICDS case managers care with medication non-adherence were identified and a specific program was implemented to improve their medication adherence. A ‘Pre-test’ and ‘Post-test’ design and a comparison to other discharged patients under ICDS case managers care without medication non-adherence problem were applied to measure the medication adherence rate, unplanned hospital admission and hospital bed-days.

Result
370 discharged elderly patients were recruited under ICDS case management from April to Nov 2012. 102 patients (27.6%) were found to have medication non-adherence problems on discharge home visit. 67.6% patients had been reported to improve drug adherence with or without family support after program interventions.
There were 64.1% and 64.6% reduction in unplanned hospital admission and hospital bed days. In addition, the unplanned hospital admission and hospital bed days were 7% and 12% respectively lower in comparison with 268 discharged patients who had no medication non-adherence problems.