Development of KCC Reference Guide on Common Cough and Cold Medications

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Introduction
In collaboration with Q&S, clinical departments and GOPCs, pharmacy has established the Clinical Intervention Reporting System (CIRS) and Prescription Intervention Reporting System (PIRS) since 2012 for documenting clinical interventions so as to identify drug-related issues at prescribing for targeted system improvements. During Jan-Dec 2015, 94,337 (6.21%) MOE prescriptions for children aged <12 years (“paediatric prescriptions”) were handled by QEH and affiliated GOPCs (i.e. YJC, CKC, HHC, LKMD & LKK). For every 10,000 paediatric prescriptions, 34 required pharmacist’s interventions of which over two-thirds (n=23, 68%) were related to commonly-used cough-and-cold preparations.

Objectives
To develop a KCC paediatric reference guide on commonly-used cough-and-cold medications by:
(a) standardizing paediatric dosage recommendations,
(b) providing product-specific information on excipients and preservatives.
To examine effect of this guide on physician’s prescribing of cough-and-cold medications.

Methodology
A multidisciplinary working group involving Pharmacy, Paediatrics, A&E and FM&GOPC was formed in March 2015. With expert advice from physician representatives, the reference guide on commonly-used cough-and-cold medications was finalized, endorsed at Hospital Drug and Therapeutics Committee, and launched on KCC-pharmacy webpage on 8th January 2016 for access by all KCC clinical staff. The types and rates (number per 10,000 prescriptions dispensed) of pharmacist’s intervention related to cough-and-cold medications were analyzed and compared before (Jan-Dec15) and after (Jan-Sep16) the implementation.
**Result**

During Jan-Sep16, QEH and affiliated GOPC Pharmacies handled an overall 73,766 MOE paediatric prescriptions. For every 10,000 paediatric prescriptions, 33 required pharmacist's interventions and 28 (84.8%) were related to cough-and-cold preparations. Interventions related to dosage and frequency were reduced by 29% (before vs. after, 10 vs. 7 per 10,000 prescriptions). The use of selected cough-and-cold medications below recommended age limit was analyzed (number per 10,000 prescriptions) with following results: (1) Use of mucolytics in children <2 years was reduced by 63% (169 vs. 62). (2) Use of Cocillana compound syrup and Pholcodine linctus in children <6 years was reduced by 65% (23 vs. 8). (3) Use of Codeine-containing medications and Ammonia-Ipecacuanha mixture in children <12 years was reduced by 65% (10 vs. 4). The guide was well accepted by medical and pharmacy staff. The result illustrates how data on clinical interventions could be utilized to enhance medication safety.