Pharmacist-run medication compliance clinic in oncology patients
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Introduction
More oral anticancer drugs are available on the market. It shifts the paradigm for systemic cancer treatment. Patients have to be well trained to be responsible for managing their medications at home. Pharmacist-run medication compliance clinic was therefore established to improve quality and safety of drug management in patients started on oral anticancer therapy.

Objectives
This audit aims to evaluate the number and type of pharmacist interventions made in this clinic including drug related problems (DRPs), referrals and supportive care request by patients.

Methodology
Oncology patients who were newly prescribed oral anti-cancer medications in Queen Elizabeth hospital were referred to the pharmacist medication compliance clinic. Interventions made by oncology pharmacist in the clinic in 2013 were documented in this prospective audit. Details of interventions, recommendations made, outcome and acceptance were recorded systematically into the electronic database. Interventions were then classified according to the nature of problem, cause, type of intervention and outcome using an accredited tool - Pharmaceutical Care Network Europe Foundation (PCNE) Classification scheme for DRPs.

Result
Total of 379 patients attended the clinic in 2013. 185 interventions were recorded of which the top three concerned were inappropriate timing of administration and/or dosing intervals (43%), drug under used/administered, drug not taken/administered.
(21%) and patient unable to use drug as directed (5.9%). Capecitabine (27%), gefitinib (14%) and erlotinib (6%) were the most commonly involved, followed by imatinib, metoclopramide and sorafenib. 84% of problems were rated as significant or above in which three of them were regarded as serious. 13 interventions were made to the prescriber and all were accepted by prescribers (nine referrals and four recommendations). Capecitabine (43%), gefitinib (23%) and erlotinib (11%) were the most commonly encountered in inappropriate time and/or dosing intervals. Capecitabine was failed to be taken after meals or without the recommended twelve hours separation between doses. Drug interactions between tyrosine-kinase inhibitors and gastric acid inhibitors were identified. 31 patients requested for additional supportive care medications. With this compliance clinic, patients can be better trained to responsible for managing their oral anticancer therapy at home in terms of administration method, side effect management and drug interaction management. Compliance assessment at regular intervals and supportive care medication prescribing can be a potential area for further improvement.