Introduction
Chemotherapy is one of the major treatment modalities for cancer disease control but has many undesirable side-effects. Patients’ knowledge on chemotherapy is vital to their management of the side-effects resulting from the drug therapy and crucial for maximizing the efficacy of the supportive medications prescribed.

Objectives
To evaluate the improvement in patients’ knowledge on chemotherapy after receiving medication counseling from oncology clinical pharmacists at the outpatient oncology clinic.

Methodology
The clinical pharmacists in the oncology clinic provide medication counseling for cancer patients receiving chemotherapy. Two sets of questions were developed for knowledge assessment on the administration method, frequency of treatment, handling missed doses, use of supportive medications, diet restrictions and management of side-effects. Assessment A was designed for patients on parenteral chemotherapy/targeted therapy (IV Group) and Assessment B for patients on oral cancer chemotherapy/targeted therapy (PO Group). Assessment was done prior to receiving their first episode of pharmacist chemotherapy counseling (pre-counseling) and at their subsequent visit (post-counseling). The improvement in patients’ chemotherapy knowledge was assessed through comparing the knowledge scores achieved in the pre-counseling and the post-counseling episodes.

Result
A total of 90 patients were assessed over a 12-week period from 15 Aug 2014 to 7
Nov 2014. Fifty-one of the assessed patients received parenteral cancer chemotherapy (IV Group) and 39 received oral cancer chemotherapy (PO Group). Out of a total knowledge score of 100, the average scores achieved by the PO Group were 25.6 (pre-counseling) and 95.4 (post-counseling). The average scores achieved by the IV Group were 35.3 (pre-counseling) and 98.8 (post-counseling). Both groups showed statistically significant improvements in the post-counseling assessment scores (p<0.001). In the IV Group, the most significant score improvement was achieved in the optimal use of anti-emetics. In the PO Group, the most significant score improvement was achieved in the area of safe and proper handling of tablets and capsules. Patients' knowledge on chemotherapy and side-effect management substantially improved with the education provided by clinical pharmacists in the setting of an outpatient oncology clinic.