Re-engineering of Oncology Services to Enhance Medication Safety by the Multidisciplinary Approach

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Introduction
Service demand of cancer treatment in Queen Mary Hospital is increasing. With the combination of rapidly increasing number of new anticancer drugs and the complexity of treatment regimens, multidisciplinary team work become one of major approach to enhance medication safety. Oncology clinical pharmacy service was implemented since November 2011 and the service is fully supported by the Department of Clinical Oncology. After four years development, the Oncologist collaborated with Oncology Pharmacist and Oncology Nurse to streamline the oncology services in order to enhance the medication safety by the use of multidisciplinary approach.

Objectives
To enhance the medication safety by the collaboration of multidisciplinary oncology services in following scopes: 1. Multidisciplinary team communication  2. Advanced verification for chemotherapy regimen  3. Patient Education on use and care of chemotherapy regimen  4. Standardization of Protocols and Guidelines  5. Inter-department cooperation  6. Professional development and Staff training

Methodology
Before 2011, the pharmacy service was focus on the clinical verification of prescriptions and accurate reconstitution of cytotoxic drug products; the nurse was focus on the safe administration of chemotherapy; and the chemotherapy treatment pathway was mainly decided by the oncologist. There was lack of platforms for the multidisciplinary team decision. The following oncology services were developed and continued to be cooperated in order to enhance the medication safety: Chemotherapy Consultation Clinics; Verification of Chemotherapy Protocols; Standardization of Chemotherapy Protocols; Multidisciplinary Palliative Team Decision; Guidelines Development and Review, and the Management of Neutropenic Pathway.

Result
With successful communication and cooperation, the following services were smoothly implemented and provided: 7573 protocols were verified by the...
multidisciplinary team; 1436 patients were interviewed in Pharmacy Consultation Clinic; 569 patients were interviewed in Nurse Consultation Clinic; 8 guidelines were developed or reviewed; 301 chemotherapy protocols were standardized; 954 patients were benefited by the Multidisciplinary Palliative Team including Oncologist, Pharmacist, Nurse, Physiotherapist, Occupational Therapist, Clinical Psychologist, Medical Social Worker and Spiritual Workers; 8299 bed days were benefited from the multidisciplinary term service at ward D2 from 1st January 2015 to 31st December 2015. The Management of Neutropenic Pathway would be delivered in other study. In conclusion, multidisciplinary team approach was crucial for this project.