Adverse reactions among patients being treated for multi-drug resistant tuberculosis at Abbassia Chest Hospital

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**Background:** Pulmonary tuberculosis is a major cause of morbidity and mortality worldwide, resulting in the greatest number of deaths due to any one single infectious agent. Drug resistance threatens global tuberculosis control efforts.

**Objective:** The aim of this study was to assess adverse reactions of second-line TB drugs in patients treated for MDR-TB at Abbassia Chest Hospital from 1st of January 2009 to 1st of January 2012.

**Subjects & Methods:** This study included 107 patients admitted at Abbassia Chest Hospital; during the period from January 2009 to January 2012. The patients were resistant to at least rifampicin and INH. All patients’ files were analyzed and the following data were discussed: meticulous history taking, complete clinical examination, drug susceptibility testing, and initial laboratory investigations, adverse reactions were determined by clinical criteria and/or laboratory data, severity code, management of side effects and fate of treatment.

**Results:** 72.9% of the patients were males and 27.1% were females. The mean of age was 37.1 years. The special habits detected among the studied cases were tobacco smoking, drug addiction and alcohol intake. According to type of resistance, acquired resistance was 95.3% and primary resistance was 4.7%. The most common co-morbidities associated with MDR-TB in the studied cases were diabetes (29.9%) and chronic obstructive lung disease (11.2%). Side effects of drugs were; 57% GIT manifestations, 53.3% peripheral neuritis, hypokalemia 26.2%, irritable bowel syndrome 22.4%, ototoxicity 17.8%, skin reaction 10.3%, hypothyroidism 10.3%, hepatotoxicity 9.3%, hypoalbuminemia 5.6%, depression 3.7%, arthritis 0.9%, gynecomastia 2.8%

Advanced clinical pharmacy system in a reformed hospital in China

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HKU-SZH has adopted good pharmacy practices from the West and has implemented an advanced clinical pharmacy system within Pharmacy Department. We hope to use near-patients and near-doctors approach to provide high quality of clinical pharmacy service to the patients and the healthcare professionals to ensure safe and effective drugs usage. The clinical pharmacists join the doctor-led ward rounds regularly on selected clinical areas such as ICU and NICU. For all newly admitted in-patients, the clinical pharmacists take drug histories and carry out medication reconciliation and the information is recorded permanently in the electronic prescribing system. They also check all the in-patient prescriptions for clinical appropriateness using appropriate and approved reference sources. In addition, pharmacists involve actively in the warfarin patient counselling services for in-patients, and stroke clinical pathway patient care contribution on the wards. Since early 2015, clinical pharmacists have participated in the smoking cessation clinic, paediatric and adult respiratory out-patient clinics, diabetic clinic to provide patient counselling services. In addition, clinical pharmacists play a role in the cardiac rehabilitation centre to deliver educational talk relating to cardiac drugs. Furthermore, Clinical Pharmacists have delivered talks to patients regarding drugs use for smoking cessation, safe use of insulin injections, effective use of inhalation devices, medication safety in children such as use of oral syringes and tablet cutter in the out-patient forum. All these improvement action plans are to enhance medication safety and optimization of drugs. Clinical Pharmacists find that this cannot be achieved without an effective multi-disciplinary teamwork.