

Thesis Abstract

The effectiveness of medications used across all national healthcare facilities, is one of the most crucial considerations when assessing a health system. In general, the effectiveness of therapy and the quality of the medications utilized have an impact on the standard of healthcare, especially in developing countries such as Libya that depend on imported medicines from various sources. In this research, we seek to investigate the validity of the prevailing belief in the Libyan community in Benghazi/Libya regarding medicines imported from Turkey by conducting a survey to collect the opinion of the community, represented by physicians, nurses, clinical and community pharmacists, and patients. Followed by a thorough investigation of the quality of generic-branded medicines in comparison to their innovator formulations.

The results show that all used batches of Atacand® (candesartan cilexetil 16 mg) oral tablets met the specifications of the BP for the weight uniformity test, the friability test, and accepted time required for disintegration in distilled water medium. In contrast, we observed statistically significant variations in the content uniformity and in-vitro dissolution study within and between the batches produced in Turkey and those produced in Switzerland. In conclusion, all studied tablets of generic-branded samples of candesartan cilexetil 16 mg tablets exhibit variation from the innovator tablets. These results indicate the need to perform the required quality control tests on all imported medications as well as preventing drug smuggling that results in the presence of below value medications in the market.

Key words: candesartan cilexetil, innovator, generic-branded, quality control test, in-vitro evaluation.