

Changing in antiretroviral therapy regimens in Iranian HIV/AIDS patients

H. Khalili¹, H. Rezaee^{2*}

¹*Department of Clinical Pharmacy, Faculty of Pharmacy, Tehran University of Medical Sciences, Tehran, Iran*

²*Department of Clinical Pharmacy, Faculty of Pharmacy, Shahid Beheshti University of Medical Sciences, Tehran, Iran*

Background and Aims: Application of antiretroviral drugs has made a significant advance in the management of HIV positive patients. Restriction in drug availability, experience of adverse drug reactions and patient's preference are the most known causes of antiretroviral regimens change or discontinuation. HIV resistance is a more considerable consequence of the treatment interruption in HIV positive individuals. It is reasonable to evaluate reasons of drug discontinuation or regimen changes in this population in a periodical manner.

Methods: This retrospective study was done in the HIV clinic of Imam Khomeini Hospital, one of the main referral centers for HIV positive patients' care, in Tehran, Iran. Medical records of 100 HIV positive patients receiving antiretroviral therapy, was evaluated. Factors such as, drug shortage, side effects, poor compliance of patients with prescribed regimen, and drug resistance were evaluated.

Results: Thirty six percent of patients had changes in received antiretroviral regimen, in which drug shortage, adverse drug reactions, poor compliance of patients with prescribed regimen and resistance to therapy were responsible for changing antiretroviral regimen in 50%, 30%, 12% and 8% of patients, respectively.

Conclusions: According to this research, it seems that drug shortage and adverse drug reactions are the most important factors in changing antiretroviral regimens. Global planning in the country and correct drug management for preparing enough drug resources, can have an important role in resolving drug shortage problems and can prevent from changing regimen due to drug shortage and consequently prevent from possible resistance to therapy. Also with using therapeutic methods for managing adverse drug reactions and regular monitoring of patients for any possible adverse drug reactions, unnecessary stopping or changing in antiretroviral regimen can be prevented.

Keywords: HIV/AIDS; Antiretroviral regimen; Changing therapy; Resistance