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EDITORIAL

The need for revision of antiretroviral treatment in Iran

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Standard antiretroviral therapy (ART) consists of the use of at least three antiretroviral (ARV) drugs to maximally suppress the HIV virus and stop the progression of HIV disease. Huge reductions have been seen in rates of death and suffering when use is made of a potent ARV regimen.

About 33.4 million people are now living with HIV, of whom more than 30 million live in low- and middle-income countries. WHO estimates that at least 9.7 million of these people are in need of ART. As of the end of 2008, 4 million people had access to ART in low- and middle- income countries. WHO is providing countries with ongoing guidance, tools and support in delivering and scaling up ART within a public health approach (1).

WHO now recommends earlier initiation of antiretroviral therapy (ART) for adults and adolescents, the delivery of more patient-friendly antiretroviral drugs (ARVs), and prolonged use of ARVs to reduce the risk of mother-to-child transmission of HIV. For the first time, WHO recommends that HIV-positive mothers or their infants take ARVs while breastfeeding to prevent HIV transmission (2).

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The first key recommendations is start antiretroviral treatment in all patients with HIV who have CD4 count ≤350 cell/mm^3 irrespective of clinical symptom and CD4 testing is required to identify if patient with HIV and WHO clinical stage 1 or 2 disease needs to start antiretroviral treatment. Furthermore, it is recommended that antiretroviral treatment to be started in all patients with HIV and WHO clinical stage 3 or 4 irrespective of CD4 count.

The early initiation of antiretroviral therapy has high value on avoiding death, disease progression and HIV transmission over and above cost and feasibility. The recommendations are supported by moderate quality of evidence for critical patient and public health outcomes from one randomized control trial, in a single centre trial in Haiti and one post hoc analysis in a randomized control trial, the trial in a multicentre study in 33 predominantly high income countries (3,4). The pooled data from these two studies provide moderate evidence that starting ART at CD4 levels higher than 200 or 250cells/mm^3 reduces mortality rates in asymptomatic, ART–naive, HIV-infected people. The authorities also reviewed large observational data sets from both resource limited and high resource settings which are consistent with data from the randomized control trial but these did not add to the overall quality of the evidence (5). They considered that starting ART earlier is feasible if introduced in a phased manner, with the speed and

completeness determined by health system capacity, HIV burden, ART coverage, equity of access and funding.

Considering the uncertain prognostic value of some WHO clinical stage 2 conditions and recent modeling and observational data suggesting that more than 50% of HIV- infected patients with this clinical stage have a CD4 count of ≤350 cells/mm^3, hence, they recommended HIV-infected individuals with WHO clinical stage 1 and 2 should have access to CD4 testing to decide if treatment should be initiated.

The second key recommendation is starting ART with available less toxic antiretroviral drug such as (AZT+3 TC+EFV) or (AZT+ 3TC+NVP) (2).

In Iran, the technical committee of HIV & AIDS Care and Treatment in Ministry of Health and Medical Education has observed final revision according to these guidelines. We believed that the program select the preferred regimen(s) applicable to the majority of Iranian population. The introduction of safer but currently more expensive first line antiretroviral treatment needs to be phased- in as currently they may not be feasible or affordable in many high-burden setting with low coverage, less developed health facility, limited laboratory capacity and finite budgets.

Advanced health system, better surveillance and early detection and case finding with treatment of HIV patient in early stages are promising.

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