

Press release

What would be the impact of universal Test and Treat on the HIV pandemic?

The lower the viral load in a person living with HIV, the lower the risk of transmission of the virus to his (her) partner or offspring.

This statement is based on results, which have become available in recent years, from clinical trials and observational studies of people treated with antiretroviral drugs (ARVs). The most reliable evidence comes from studies on mother-to-child transmission of HIV infection from which we have learnt that providing ARVs during pregnancy, labour and breastfeeding can prevent most, if not all, cases of paediatric HIV infection. Further, findings from studies of sero-discordant couples (one partner living with HIV and the other not) suggest that when the HIV-infected partner receives ARVs for his (her) own health, the likelihood of sexual transmission to his (her) partner is substantially reduced. Thus, taking all this evidence together, we can conclude that controlling viral load through the proper use of ARVs can drastically reduce the risk of, or even prevent, transmission from one person to the other.

Can we interpret these individual observations to indicate that ARV therapy (ART) could impact on the pandemic at the population level? Results from mathematical models in the past two years have suggested this might well be the case. However, scientific confirmation of this hypothesis from clinical trials is not yet available. In particular, it remains unclear what proportion of a population living with HIV should receive ART and for how long before an effect can be obtained in terms of reduction of the incidence of HIV, i.e. the number of new cases of HIV infection in a community as a result of sexual transmission. We also do not yet know how feasible and acceptable a population-based programme will be of HIV testing with early initiation of ART, which is needed to implement this novel public health strategy. A group of French and foreign experts has been working on this important question under the auspices of the French Agency for Research on HIV/AIDS and viral hepatitis (ANRS) in order to design a research proposal to investigate this hypothesis and to clarify the questions of feasibility, acceptability and efficacy at a population-level while avoiding stigmatization and guaranteeing the protection of the human rights.

ANRS announces today its support for an intervention study entitled Treatment as Prevention (TasP or Ukuphila kwami, ukuphila kwethu) to be conducted in a rural area of the Republic of South Africa, hardest hit by the HIV pandemic with a prevalence >20% in the general population. HIV counselling and testing will be offered to all people in the study area at the start of the project, and subsequently on a bi-annual basis. Using cluster randomisation of groups of about 1400 people per cluster, in the intervention area all people identified as HIV infected will be offered immediate ART irrespective of their CD4+ T-lymphocyte count (CD4) or clinical status. In the remaining clusters, HIV-infected people will be provided ART based on their CD4 count or clinical status according to the South African

HIV treatment guidelines, which are in line with the most recent World Health Organization recommendations. The total population to be covered by the TasP study is an estimated 40 000 residents, of whom about 22% will be HIV infected at baseline. All study participants will have access to appropriate HIV preventive and supportive services.

The first phase of the TasP study will be funded by ANRS for a total amount of 3 million €. This initial phase is scheduled to start in 2011, will involve about 15% of the total study population and inform understanding about the feasibility and acceptability of this new approach of regular testing and ART delivery. If this first phase is successful, TasP ANRS 12249 will continue and expand until 2015 to evaluate the overall efficacy of this strategy, conditional on additional and international funding becoming available.

At the end of the TasP study, it will be clear whether widespread HIV testing with immediate ART for all those identified as infected significantly reduces the spread of HIV in the corresponding community. “Having demonstrated the benefits of ART as a life-saving intervention for individuals and its critical role for the prevention of mother-to-child transmission of HIV, researchers now enter a new era with a critical question to be answered: is the preventive effect of ART highly beneficial at the population level? Should this concept be proven, it would have major implications for the public health approach of prevention and treatment” says Pr Jean-François Delfraissy, the Director of ANRS.

This research project is developed as a partnership between a South Africa-based team and local stakeholders. The principal investigators are Prof François Dabis (Inserm Unité 897, University of Bordeaux, France) and Prof Marie-Louise Newell (Africa Centre for Health and Population Studies, University of KwaZulu-Natal, Somkhele, KwaZulu-Natal). Prof Bernard Hirschel (Geneva University Hospital, Switzerland) is the Chair of the TasP Scientific Board. Discussions are ongoing with National and Provincial South African authorities to agree on the optimal conditions of conducting TasP in accordance with the national policy and ethical requirements.

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