

SACEMA at SAAIDS and IAS 2013

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The 6th South African AIDS (SAAIDS) conference was held in Durban from 18-21 June 2013. SACEMA presented several posters and a number of talks. **Alex Welte** presented “HIV Incidence Estimation with Biomarkers: Key Concepts, and State of Play” in a session dedicated to new developments in measuring HIV incidence. **Roxanne Beauclair** presented findings of a qualitative study she performed that investigated the perceived risks of age-disparate relationships among women from three disadvantaged communities in Cape Town. The study suggests that in general women were not aware of the risks associated with dating older men, while dating a younger man is seen as a direct sentence to abuse and neglect. **Fei Meng** and **Cari van Schalkwyk** both presented modelling work in a session dedicated to incidence, prevalence and modelling. Fei’s model showed the simulated impact of different treatment strategies on HIV prevalence in South Africa. The results suggest that changing ART eligibility to higher CD4 levels and to stable sero-discordant couples have the best cost-effectiveness ratios and should be considered when universal access is unfeasible. Cari presented the model that has been developed by Wim Delva and MaxART partners that will be used to inform an implementation study in Swaziland. The model allows us to compare the impact on e.g. incidence at different CD4 count thresholds for ART initiation, ranging from the current threshold of 350 cells/ μ L to ART eligibility irrespective of CD4 cell count. This same model was presented by Alex Welte at the 7th International AIDS Society’s conference on HIV pathogenesis, treatment and prevention (IAS), held in Kuala Lumpur, Malaysia from 30 June to 3 July 2013.

A notably interesting session at IAS was entitled “New Approaches to Assess the Population Level Impact of New Prevention Technologies”. The concern has often been raised that the near impossibility of treating people during the early stage of ‘acute infection’ – when they are highly

infectious – poses a severe obstacle to the prevention benefits that can accrue from treatment. The limitations of the naïve view of this effect have been discussed amongst modellers, but the ideas are far from mainstream. Preliminary work shown in this session, from extensive scenario modelling, supports the view that the prevention impact of treatment is relatively insensitive to assumptions about the fraction of new infections which arise from ‘acute infection’ index cases.

The 2013 WHO Consolidated Guidelines on ARVs were launched at IAS. The new Guidelines recommend a move towards the use of viral load monitoring for diagnosing ARV therapy failure. Medecins Sans Frontieres (MSF) hosted a satellite session focused on the feasibility and affordability of viral load scale-up. Dan Keebler presented the results of the HIV Modelling Consortium in this session. The Consortium, of which SACEMA is the second hub, was contracted by the WHO to assess the impact and cost-effectiveness of viral load monitoring versus clinical and CD4 monitoring strategies. Drawing together three mathematical models and twenty co-authors, the work found that while viral load provides the most benefit to individuals, at population level this benefit comes at a much higher cost than the benefits of CD4 or clinical monitoring, and that devoting resources to ART scale-up rather than viral load monitoring brings greater gains in population health. To maximize the benefit of viral load monitoring, it is imperative that advocates and others in public health continue to work aggressively to bring down costs in years to come.

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