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Editorial: Immediate challenges for HIV/AIDS

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As we have come to expect, this latest edition of SACEMA's quarterly epidemiological update touches once again on questions raised by the HIV epidemic. The HIV research and activist communities are also counting down to the big AIDS conference in Melbourne (20-25 July 2014). Last year, new WHO treatment guidelines were the big news, presenting a major shift from years of conservative 'rationing' based thinking towards a bolder interventionist approach, aimed at extracting from anti-retroviral treatment (ART) the double benefit of clinical stabilisation and transmission reduction. This was big news for the developing world, though rationing is not dead yet, and many who are aware of their HIV infection still lack ready access to treatment. This year one wonders if the ever greater buzz around 'cure', which has attracted so much attention in the last few years, will translate into the hot topic of AIDS 2014. This may be exciting basic science, and offer the (hardly imminent) promise of something better than decades of drug regimens for those infected, but it should not detract attention from the complex immediate situation still faced by much of sub Saharan Africa, and other countries, where access to cure is a very hypothetical lofty goal.

Among those immediate challenges is continued lack of clarity on the role of Karposi Sarcoma, long famous as a signature of advanced AIDS, but playing out very differently in Africa, compared with the North American context where it first became a household term. As explained by Mhairi Maskew in this edition (See her table 1 for a summary of recent findings), infection with the underlying cancer-inducing virus (Karposi Sarcoma Herpes Virus – also mundanely known as Human Herpes Virus 8) is of no clear negative consequence in study cohorts, though presenting for treatment with more advanced KS disease is clearly linked to poorer outcomes for ART.

Sabina Alistar considers a variation on the age old conundrum of investing in prevention or treatment, and finds, perhaps not shockingly, that with HIV these boundaries are non-traditional, as there are few clear cut traditional prevention interventions that are not ultimately based on treatment. Lacking meaningfully effective vaccines, the only clear cut programmatic 'biomedical' anti-HIV 'prevention' measures still appear to be Medical Male Circumcision and ART based Pre-Exposure Prophylaxis (PrEP) regimens – using the same ingredients, but in different combinations, as used to treat HIV positive individuals. Glossing over the details of metrics of effects/benefits – the presented findings are supportive of emphasising investment in universal access to treatment for infected individuals, and PrEP focused on / prioritised for a small sub population at highest risk.

Turning away from HIV, Damian Kajunguri reflects on lessons learnt during his Ph.D. project about the control of Trypanosomiasis (colloquially sleeping sickness) - spread among multiple species including cattle and humans. This complex kind of ecological problem is being increasingly studied as the microbes featuring in new outbreaks are traced in ever greater detail to their pre-human hosts (they do, after all, come from somewhere) and disease control takes on new dimensions in data gathering, modelling, and implementation. Damian's work on of insecticide treatment of cattle (ITC) suggests that while 'Whole Body' application is the most effective, most of that benefit, and a smaller proportion of the downside (in cost and side effects), can be obtained by 'Restrictive Application' to the most bitten cattle parts (the legs and bellies of older animals).

This quarter's short items focus on the first systematic study of which we are aware on the epidemiology of 'community assault' (mob attacks) – which gains frequent unsystematic attention in the press. And on the challenge of estimating the number, and age distribution of malaria cases in Africa - with all the attention that HIV receives, malaria, still a leading killer in Africa, should not be allowed to become a neglected tropical disease, or one about which we lack basic quantitative epidemiological insights.

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