In this issue...

Our feature article this month focuses on adherence to antiretroviral therapy in a HIV positive pediatric cohort in a rural area of KwaZulu-Natal, South Africa.

On page 2 we share highlights from the UNAIDS side event of the United Nations General Assembly High-Level Meeting on Ending AIDS held on June 7th 2016.

We congratulate Dr Nesri Padayatchi, Deputy Director of CAPRISA, on her appointment to the Board of The Southern African Clinicians Society on page 3. Also on page 3 we are pleased to announce that the HPTN 081 AMP study is well underway at the CAPRISA Vulindlela Research Clinic.

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Measuring adherence in pediatric patients on ART

Data on adherence to antiretroviral therapy (ART) from CAPRISA’s HIV positive pediatric cohort were recently published in the journal AIDS and Behavior.

This retrospective analysis of routinely collected data from children (n=78) enrolled into the CAPRISA 052 AIDS Treatment Program from June 2008 – September 2013 in a rural area of KwaZulu-Natal, South Africa aimed to assess whether monthly adherence assessment by pill count was a reliable predictor of virological outcomes and to identify reasons for non-adherence.

The study showed that the median monthly adherence to treatment was 87.8% (interquartile range (IQR): 71.0-99.6%) at month six, 88.9% (IQR: 77.1-99.8%) at month 12 and 90.8% (IQR: 79.1-99.2%) at month 24 (Figure 1).

The proportion of children aged 6 months to 13 years (median age of 7.1 years) with an undetectable viral load (<400 copies/ml) were 84.0% (n=63) at month six, 86.6% (n=58) at month 12, and 84.5% (n=49) at month 24. Multivariate analysis demonstrated that children with an overall adherence by pill count ≥95%, children with a baseline WHO stage 3 or 4, if the primary caregiver was a family member instead of the biological parents and if the primary caregiver was the recipient of any financial grant were significantly associated with adequate viral load suppression (<400 copies/ml).

Generally in clinical practice >95% of the prescribed ART doses should be taken for patients to have an undetectable viral load <400 copies/ml. In this study adherence of >95% by pill count was not an ideal indicator of virological suppression in children. Maintaining adherence ≥95% in children on ART is not only challenging but difficult to measure. Barriers to optimal adherence may be related to caregiver’s factors and child/caregiver forgetfulness, taste of medicine, financial constraints in accessing care and side-effects. Viral load assessment remains the gold standard for assessing treatment success in this age group.


Figure 1: Median adherence over time

Chanelle Smith, Research Pharmacist led the research on adherence in the CAPRISA pediatric cohort.
On 7th June, a high-level side event entitled: “Stopping HIV Infection – Investing a Quarter in Prevention” was held at the United Nations General Assembly High Level Meeting on Ending AIDS at the United Nations Headquarters in New York.

The meeting focused global attention on the importance of a Fast-Track approach to the AIDS response over the next five years. The UNAIDS Fast-Track approach aims to achieve ambitious targets by 2020, including: fewer than 500 000 people newly infected with HIV, fewer than 500 000 people dying from AIDS-related causes and the elimination of HIV-related discrimination.

CAPRISA’s Director, Professor Salim Abdool Karim, who moderated the special session, recounts this momentous occasion:

Quarraisha and I attended the United Nations High Level Meeting on AIDS from 7th to 10th June, which was called by the United Nations Secretary-General, Ban Ki-Moon.

It is specifically for High Level country delegations to agree on the future global AIDS response. The meeting, held at the UN in New York, agreed on a declaration that will be critically important for defining the future course of the global AIDS response. To this end, the High Level Meeting’s declaration will galvanise the HIV response and mandate certain UN commitments in the response.

UNAIDS, as the Joint United Nations Programme on HIV/AIDS, is playing a key role in this process. Among the various contributions that UNAIDS made was a focused Symposium (referred to in UN parlance as an official Side Meeting). The purpose of this meeting is to inform delegates on the scientific basis for the UNAIDS goal of the “End of AIDS” as a public health threat by 2030. As I learnt, the Side Meetings are where much of the discussions and debates occur to create a consensus for the politicians to vote on at the High Level Meeting itself.

Quarraisha and I spoke in the UNAIDS Side Meeting – see photos on the right of the Session Room and the panel. It was a fascinating meeting and overall, it went very well. I participated in other panels as well and attended several more – every one of them was good. In one panel, we had a real live African Princess with a royal green dress and tiara!

The highlight for me was the Opening Plenary – what an occasion! One had a sense of history being made! Thankfully, Quarraisha and I had named reserved seats in the VIP section of the packed to capacity General Assembly – with the best seats in the house, we simply absorbed the breathtaking occasion.

Continued on page 3…..

Profs Salim and Quarraisha Abdool Karim at the UN Opening Plenary held at the UN in New York
Michel Sidibe was brilliant in his address to the plenary – he touched on the key issues powerfully and eloquently. He left no-one unsure of what the world’s marching orders needed to be. The talks by Joyce Mujuru (HIV +ve sex worker from Zimbabwe) and Nelson Mandela’s grandson (whose father and mother died of AIDS) followed with moving words.

Once the individual countries started the comments, I felt the push back – Iceland complained about sex work being included in the declaration, others about MSM, etc. But mostly, the comments were positive, with the US delegation making some strong points in support of the declaration.

I came away in no doubt that we have each contributed in our own little way to something truly historic and momentous!

Professor Salim S. Abdool Karim, Director CAPRISA

AMP HPTN study launched in Vulindlela

The CAPRISA Vulindlela Clinical research site enrolled their first participant for the HPTN 081 AMP (Antibody Mediated Prevention) study on Friday 10th June. The screening of eligible participants is well underway to reach the target of 103 participants over the next two years.

This is the first study to see if VRC01, the broadly neutralizing antibody used in this study, can prevent HIV infection in people. In laboratory tests, VRC01 was able to block HIV infection in about 90% of the different samples of HIV it was tested against. Participants will be given an infusion of the antibodies every 8 weeks explained Dr Halima Dawood, Study Investigator of Record.

MDR TB expert appointed to Board

Dr Nesri Padayatchi, Deputy Director of CAPRISA and one of South Africa’s leading TB researchers on clinical aspects of drug resistance and HIV-TB co-infection, has been appointed to the Board of the Southern African HIV Clinicians Society. Lauren Jankelowitz CEO of the Society made the announcement following a nomination process. “The Society’s Board of Directors plays a vital role in making critical decisions and guiding our organisation in order for us to achieve our strategic objectives”, she said.
Scientific papers published in 2016


31 Garrett NJ; McGrath N; Mindel A. Advancing STI Care in Low and Middle Income countries: Has STI Syndromic Management reached its use-by date? *Sexually Transmitted Infection* 2016; doi: 10.1136/sextrans-2016-052581. [Epub ahead of print]


*continuation from previous newsletter

### Scientific Reviews

<table>
<thead>
<tr>
<th>Abstracts submitted for review</th>
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<th>Ancillary studies submitted for review</th>
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# for month, * since committee initiation

### Conference & Workshop Reminders

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<tr>
<th>Conference</th>
<th>Dates</th>
<th>Abstracts</th>
<th>Registration</th>
<th>Website</th>
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Board of Control: AC Bawa (Chair) • O Abdool Karim • SS Abdool Karim • RB Bharuthram • D Clark • LP Fried (US) • S Madhi • LE Mazwai • CT Montague • B Ntuli • N Padayatchi • M Rajab • DP Visser • ZM Yacoob
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Registration number: 2002/024027/08