



In this Issue

Our feature story this month we provide the findings of a qualitative study in rural Vulindlela on the use of vaginal products among adolescent girls and young women.

On page 2, we highlight the achievements Dr Nikita Naicker who was awarded an NRF postdoctoral scholarship, Dr Kumeren Govender a former CAPRISA Clinical Research placement who completed two degrees this year and Resha Boodhram, who graduated with a Master's degree.

We celebrate the rich diversity of cultures and traditions in South Africa with staff and study coordinators on Heritage Day on page 3.


On page 4 we report on the CAPRISA Achievement award presented to Dr Nesri Padayatchi.

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CENTRE FOR THE AIDS PROGRAMME OF RESEARCH IN SOUTH AFRICA

Newsletter

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Use of vaginal products among adolescent girls and young women

The use of vaginal products may increase the risk of HIV infection. The findings of a CAPRISA-led study published in the journal *Culture, Health and Sexuality* shows that understanding what vaginal products young women are using, and why, is important for assessing the complexity of sexual health and HIV risk.

This study, conducted in the Vulindlela district in rural KwaZulu-Natal, South Africa, reports on findings from discussions and focus groups with over 300 adolescent and young women about the vaginal products they use and motivations for using them. The study identified over 26 products that young women used to enhance their sexual experience and found some young women spent time preparing and sourcing products.

Vaginal products, especially if used intra-vaginally may increase a women's risk for HIV acquisition. This may occur by 1) affecting the vaginal biome, and whether it is characterised by the presence of healthy bacteria, 2) facilitating increased friction during sex by drying the vagina and 3) resulting in genital mucosal abrasions which may cause inflammation, thereby further enhancing risk.

The researchers found that knowledge of vaginal products was widespread amongst young women in Vulindlela, and that motivations for using them were often linked to retaining a partner, sexual enhancement and sexual pleasure but were often mediated through gender and power dynamics.

However, while some women perceived that vaginal products could provide a means of outperforming other women, retaining a partner and providing sexual autonomy, there was a stigma attached to using them, many implying these products were used by "loose" women, or to deceive partners.

The findings highlight that vaginal product use could have particularly high social value in settings where partner retention is linked to economic survival. The researchers believe that further research is warranted to expand the understanding on the products used, the reasons young women use them and their impact on biological indicators.

For further reading see:

Humphries H, et al. 'You'll always stay right': understanding vaginal products and the motivations for use among adolescent and young women in rural KZN. *Culture, Health & Sexuality* 2018: doi: 10.1080/13691058.2018.1453086. <https://www.ncbi.nlm.nih.gov/pubmed/29658830>



CAPRISA research fellow earns her PhD and is awarded an NRF postdoctoral fellowship

Dr Nikita Naicker graduated with her PhD in Medical Biochemistry at the University of KwaZulu-Natal's Spring graduation on September 13th, 2018. Her research project focused on the use of herbal therapy as a potential treatment for type two diabetes mellitus. She was awarded a SARChI postdoctoral fellowship from the National Research Foundation (NRF) for a two-year period and will be under the mentorship of Dr Kogie Naidoo, Head of the CAPRISA TB-HIV Treatment research pro-

gramme and Dr Alex Sigal, African Health Research Institute. Naicker will use time-lapse microscopy, an innovative approach to better understand the biologic effect of metformin on the host immune response to *Mycobacterium tuberculosis* (*M.tb*), specifically assessing metformin's effect on macrophage phago-lysosomal activity and intracellular *M.tb* growth rates. Naicker said that the study "will help provide new insights into the potential role of metformin in host directed therapy for TB."



A laudable achievement for former CAPRISA research placement



We congratulate the recent medical graduate who has been doing research at CAPRISA since his first year at medical school, Dr Kumeren Govender.

He earned two degrees this year; he graduated with the MBChB degree (*cum laude*) in April and in September obtained his master's degree in Health Science on a special dual-track degree program at UKZN.

Twenty-five-year-old Govender will

pursue his PhD at Oxford University as a Rhodes Scholar. Under the mentorship of Prof Salim and Quarraisha Abdool Karim and Dr Nesri Padayatchi he developed a keen interest in clinical research during his research placement at CAPRISA as a medical student. Govender has an interest in artificial intelligence, big data and genetics and hopes to pioneer innovative, interdisciplinary solutions to address the burden of diseases and improve the lives of people, particularly in developing countries.

Developing manuscript writing skills among staff and fellows



Several of CAPRISA's fellows and staff who are in the final stages of their Masters or PhD degrees participated in a manuscript writing retreat. The training aimed to equip participants with scientific writing skills and is part of the NIH-Funded CAPRISA Research Administration and Management Training Program.

Study co-ordinator graduates with Masters

We congratulate Resha Boodhram who graduated with her master's in medical science (Obstetrics and Gynaecology) at UKZN. Boodhram is the Study Coordinator at the CAPRISA Springfield Research Clinic at King Dinu Zulu Hospital.





CAPRISA celebrates South Africa’s rich and diverse cultures and traditions on Heritage day



CAPRISA celebrated the rich diversity of cultures of staff and communities on Heritage Day(24 September) which is a public holiday in South Africa to promote social cohesion through an understanding and respect of the traditions, belief systems, cultural practices, cuisine and language of communities. CAPRISA’s Vulindlela Research clinic celebrated national Heritage Day on 21 September and staff looked resplendent in traditional dress as they reflected on their personal heritage and shared traditional meals. “Our Heritage Day

celebration presented a good opportunity for colleagues to learn more about each other’s cultures,” said Dr Pete Zacharias, Director of the clinic. “It was a useful team-building event that will assist in removing cultural boundaries and changing negative perceptions around certain cultures. South Africa is a melting pot of cultures and this cultural diversity affects the way employees behave within the workplace and it is vital that each person’s culture and belief system is respected,” explained Zacharias.



Photo (above: left): CAPRISA’s research partner, the HIV Virology Lab at the National Institutes of Communicable Diseases (NICD), celebrated this year’s Heritage Day in true South African style by sharing homemade traditional dishes and dressing up for the occasion. The CAPRISA Vaccine team celebrated Heritage Day together with 181 study participants at CAPRISA’s eThekweni Clinical Research Site on 22 September. The programme included a performance by the Township Vocals choir from Umlazi, an address by Ivy Kaunde acting Community Liaison Officer, Vaccine Research (Photo above: right) and entertainment by CAPRISA staff.



Scientific papers published in 2018

- 65* **Dookie N, Naidoo K, Padayatchi N.** Whole-Genome Sequencing to Guide the Selection of Treatment for Drug-Resistant Tuberculosis. *Antimicrobial Agents and Chemotherapy* 2018; 62(8). e00574-18.
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- 67 Bekker L-G, Moodie Z, Grunenberg N, Laher F, Tomaras GD, Cohen KW, Allen M, Malahleha M, **Mngadi K**, Daniels B, Innes C, Bentley C, Frahm N, Morris DE, Morris L, Mkhize NN, Montefiori DC, Sarzotti-Kelsoe M, Grant S, Yu C, Mehra VL, Pensiero MN, Phogat S, DiazGranados CA, Barnett SW, Kanesanathan N, Koutsoukos M, Michael NL, Robb ML, Kublin JG, Gilbert PB, Corey L, Gray GE, McElrath MJ, on behalf of the HVTN 100 Protocol Team. Subtype C ALVAC-HIV and bivalent subtype C gp120/MF59 HIV-1 vaccine in low-risk, HIV-uninfected, South African adults: a phase 1/2 trial. *Lancet HIV* 2018; 5(7):e366–e378.
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- 70 Barouch DH*, Tomaka FL*, Wegmann F*, Stieh DJ, Alter G, Robb ML, Michael NL, Peter L, Nkolola JP, Borducchi EN, Chandrashekar A, Jetton D, Stephenson KE, Li W, Korber B, Tomaras GD, Montefiori DC, Gray G, Frahm N, McElrath MJ, Baden L, Johnson J, Hutter J, Swann E, Karita E, Kibuuka H, Mpendo J, **Garrett N, Mngadi K**, Chinyenze K, Priddy F, Lazarus E, Laher F, Nitayapan S, Pitisuttithum P, Bart S, Campbell T, Feldman R, Lucksinger G, Borremans C, Callewaert K, Roten R, Sadoff J, Scheppler L, Weijters M, Feddes-de Boer K, van Manen D, Vreugdenhil J, Zahn R, Lavreys L, Nijs S, Tolboom J, Hendriks J, Euler Z, Pau MG, Schuitemaker H. Evaluation of a mosaic HIV-1 vaccine in a multicentre, randomised, double-blind, placebo-controlled, phase 1/2a clinical trial (APPROACH) and in
- 71 **Humphries H, Mehrou-Loko C, Phakathi S, Mdladla M, Fynn L, Knight L, Abdool Karim Q.** 'You'll always stay right': understanding vaginal products and the motivations for use among adolescent and young women in rural KZN. *Culture, Health & Sexuality* 2018; doi: 10.1080/13691058.2018.1453086

CAPRISA Achievement award for research excellence



Professor Salim Abdool Karim, Director CAPRISA presents the CAPRISA Achievement award to Dr Nesri Padayatchi, Deputy Director CAPRISA, for her accomplishment and achievement recognised by an external credible organisation.

Padayatchi was awarded the SAMRC Scientific Merit Award (Silver) for her outstanding contributions to research in tuberculosis.



CAPRISA hosts a DST-NRF Centre of Excellence in HIV Prevention



UNAIDS
CAPRISA is the UNAIDS Collaborating Centre for HIV Research and Policy



CAPRISA hosts a MRC HIV-TB Pathogenesis and Treatment Research Unit
CAPRISA hosts a DoH-MRC Special Initiative for HIV Prevention Technology



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