

BHP and German Embassy hold a Conference on Climate Change and Pandemic Preparedness



Climate Change Conference Delegation

BHP in collaboration with the German Embassy in Gaborone organized a Conference on Climate Change and Pandemic Preparedness on 26th to 27th October 2023 at Sanitas Gardens and UB Conference Centre respectively. The conference discussed environmental challenges, climate change, climate-amplified diseases and epidemics, and their impact on public health. The two-day conference was a platform for

scientists, researchers, policymakers, public health professionals, and environmental experts to collectively appreciate the complex interactions and connections between climate change and public health.

Day One of the conference brought together scientists from Germany, Botswana, and other countries in Southern Africa, for an expert/think tank meeting of scientists and researchers. This initiative

was to incubate opportunity for collaborative projects, facilitate shared experiences and results with a view to positively influence policy and mitigation strategies for climate change and pandemic preparedness at community, regional and global level.

The discussions covered areas such as Infectious diseases, pathogenomics and climate change, neglected tropical diseases and climate change, Climate-amplified

diseases, and epidemics as well as Food security and climate change. The deliberations sought to identify strategies for pandemic preparedness, identify joint interdisciplinary mitigation strategies, research projects and other opportunities for interdisciplinary interventions as well as how to enhance and promote community and media sensitization and involvement on climate change science. Furthermore, how to enhance North-South and South-South collaboration and networking on climate change projects and opportunities between German Scientists and Regional scientists through identified scientific representatives from German, Botswana and other regional institutions and respective scientists.

The second part of the conference which took place at UB Conference Centre, was held as a panel discussion open to the public and the media. This session presented the scientific think tank outcomes and raised awareness about the effects of climate change on public health.

The discussions highlighted a multi-sectoral approach as crucial to ensure preparedness for future pandemics. The conference recommended the following:

- To arrange meetings with the Permanent Secretaries of the Ministry of Health and Ministry of Environment to present outcomes and resolutions from the conference
- To establish effective institutional units to monitor and develop the capacity of pandemic preparedness.
- To identify sponsors and funding opportunities for joint research on climate change and pandemic preparedness
- To have a follow up dialogue to discuss mechanism to apply for such joint projects.

This conference was funded by the German Embassy in Gaborone and it was inspired by the [German Africa Award for 2022](#) which was awarded to BHP's Prof. Sikhuklile Moyo and Prof. Tulio de Oliveira from South Africa for the discovery and their research on the Omicron variant of the SARS-COV-2, COVID-19 virus. Meanwhile, their research focus is shifting to climate-amplified diseases, future pandemics and how best to prepare for them.



German Ambassador Margit Hellwig-Boette (L) and Professor Sikhuklile Moyo (R)



Conference Delegates

BHP launches Tshireletso Study



Tshireletso Team with Ministry of Health Deputy Permanent Secretary Mr. Moses Keetile, Dr. Nkomo and Mrs Ramaabya

The Botswana Harvard Health Partnership (BHP) on November 28, 2023 launched the Tshireletso Study which is offering long-acting injectable cabotegravir (CAB-LA) to post-partum women immediately after delivery to prevent new HIV infections. This study aims to determine whether starting long-acting injectable cabotegravir for HIV Pre-Exposure Prophylaxis (PrEP) immediately after delivery is a good strategy for preventing HIV infection in women in Botswana. The study will further ascertain if the injection form of cabotegravir is acceptable and feasible for mothers who are breastfeeding. The study was launched by the Ministry of Health Deputy Permanent Secretary responsible for Health Policy, Research and Development, Mr Moses Keetile at the BHP Conference Room.

Keetile noted that in the absence of a proven HIV cure and or HIV vaccine, HIV prevention remains key. He said that the Ministry of Health is excited at the initiation of yet another study that targets a key at-risk population (mothers and babies) and was hoping for a positive outcome which would provide a new strategy to prevent HIV acquisition in this vulnerable population.

“We at the Ministry of Health recognize the importance of research and its impact on the transformation

of policy and the establishment of evidence-based programmes. These efforts are also very much aligned the country’s aspiration of positioning Botswana as a knowledge-based economy. This necessarily speaks to a vision linked to science, technology, innovation, and creativity,” he said.

Study Physician, Dr Rogers Moeng gave a presentation on the evolution of PrEP, highlight on its history, benefits and challenges which include access and cost. Tshireletso Study Coordinator, Dr Marcella Yoseph explained that the study is building on the breakthrough of the [HPTN 084 study](#) which was carried out in multiple sites in sub-Saharan Africa, including Botswana, and demonstrated that CAB-LA injection taken once every eight weeks was safe and about ten times more effective than daily oral FTC/TDF (Truvada) for HIV prevention among women.

Dr Yoseph stated that following the positive results of the HPTN 084 Study, the United States Food and Drug Administration (FDA) approved CAB-LA for use as an HIV Pre-Exposure Prophylaxis (PrEP) agent in December 2021 and the World Health Organization (WHO) also recommended it as PrEP in July 2022. Botswana has included CAB-LA PrEP in the 2023 HIV treatment guidelines, though it is not yet available in the country.

She explained that Tshireletso study will be the first study to implement CAB-LA among people who are breastfeeding and intended to provide data on the real-world effectiveness of CAB-LA outside of a randomized controlled trial. She said that the study will also be the first to look at the effectiveness of CAB-LA in the immediate post-delivery period as well as the first study to evaluate implementation challenges.

“Tshireletso is targeting breastfeeding mothers to maximize the public health impact of CAB-LA PrEP. Multiple studies have shown that the risk of acquiring HIV is 2-4 times higher in the post-partum period. In Botswana, the prevalence of HIV increases from 10% in the first pregnancy, to 22% in the second pregnancy and to 39% in the third or higher pregnancy,” she explained.

Dr Yoseph added that preventing HIV among women who are breastfeeding is one of the elements to eliminating new pediatric HIV infections, explaining that when a nursing mother is prevented from acquiring HIV, her infant is also prevented from acquiring HIV through breastfeeding.

Dr Yoseph further revealed that breastfeeding women have often been excluded from research and end up being treated with older, less effective interventions. She said BHP has been a global leader in conducting high-impact studies that include pregnant and breastfeeding women, and researchers at BHP believe that the best way to protect them is through inclusion in well-designed research studies.

Tshireletso is a 5-year study, funded by the National Institute of Child Health and Development (NIH/NICHD, USA) and aims to enroll 500 women without HIV and their infants (mother-infant pairs) who are admitted at the postpartum maternity ward after delivery and are followed up for 24 months. The study is taking place in Gaborone and at Molepolole.



MoH Deputy Permanent Secretary Mr. Moses Keetile



Tshireletso Study Coordinator Dr. Marcella Yoseph



Tshireletso Study Team

BHP partners with CEYOHO on HIV Cure Literacy Project



A group photo of attendants at the CEYOHO HIV Cure Literacy Project Launch

BHP has partnered with the Centre for Youth of Hope (CEYOHO), a non-profit organization in Gaborone on an **“HIV Cure Literacy and Advocacy Project”** to build HIV Cure literacy and advocacy skills among HIV long-term survivors in Botswana. CEYOHO is a non-profit organization focusing on enhancing health among Botswana’s youth. It specializes in HIV-related education, treatment, and prevention strategies. It also promotes overall well-being, integrating physical, mental health, and advocacy efforts. The project was launched on November 23, 2023 at Sanitas Gardens in Gaborone.

The Botswana HIV Cure Research Literacy Initiative organized by CEYOHO, aims to enhance understanding of the HIV cure research agenda among long-term HIV survivors and communities most affected by HIV. The initiative’s primary objectives include enhancing knowledge by creating awareness in communities impacted by HIV to enable them to contribute meaningfully to the HIV cure research agenda.

CEYOHO Executive Director, Kennedy Mupeli told attendants of the launch that the project seeks to dispel

the myths surrounding HIV by addressing community-based misconceptions about HIV and the ongoing research towards finding a cure. He said the project will also equip individuals with the knowledge they need, to decide about voluntary and confident participation in clinical trials related to the HIV cure research agenda, thus empowering informed decision making.

He explained that involving long-term survivors in HIV cure research is crucial as they can provide unique insights and experiences on long-term effects and impact of HIV/AIDS and antiretroviral therapy, important in understanding how to develop an effective and safe cure. Long term survivors provide diverse perspectives as people who have lived with HIV for a long time and may have experienced different treatment regimens, side effects, and health complications.

“For representation and advocacy, including long-term survivors in research ensures that their voices and concerns are represented. This is important for ethical reasons and to ensure that the research is aligned with the needs and priorities of those most affected by HIV,” he said.

He further postulated that indeed long-term survivors might have unique immune responses that have allowed them to live with the virus for an extended period and thus studying these responses could provide clues about how to control or eliminate the virus in other individuals.

“Long-term survivors can share insights into the psychosocial impact of living with HIV, including stigma, mental health challenges, and social support needs,” he added. Mr Mupeli further said such individuals can also help in addressing adherence and treatment challenges as they can offer firsthand knowledge about the challenges of adhering to HIV treatment over a long period.

Contributing on research literacy, BHP investigators, Dr Ayotunde Omoz-Oarhe, Dr Catherine Koofhethile and Dr Gbolahan Ajibola gave presentations on HIV Cure related research that is currently being conducted at BHP. These investigators shared information on understanding ongoing research on HIV treatment, cure strategies and prevention methods. They also shared knowledge on the role and importance of clinical trials, how they are conducted, and the ethics involved. The

HIV Cure Literacy and Advocacy project also seeks to equip people with the knowledge of evolving treatment strategies like gene editing, vaccine research, and new antiretroviral drugs.

Drs. Omoz and Ajibola presented the Analytical Treatment Interruption (ATI Study) and the Tatelo Study. Both studies are investigating treatment with Broadly Neutralizing Antibodies (bNAbs). These are proteins produced by individuals immune system to fight HIV following infection and work by neutralizing multiple HIV-1 viral strains.

The ATI study is investigating the use of Antiretrovirals Combined with bNAbs for HIV-1 Cure in adults living with HIV in Sub-Saharan Africa while Tatelo is studying treatment with bNAbs in Children with HIV in Botswana. Dr Koofhethile presented her study “Proviral reservoir characteristics in adolescents and young adults on long-term ART for >15 years: advancing HIV cure research in Botswana,” which is a study of HIV reservoir, immune cells in the body that are infected with HIV but are not actively producing new HIV but periodically are activated and seed HIV regarded the biggest obstacle to HIV cure.

BHP seeks to broaden understanding of HIV



BHP Staff addressing the community of Nata

On December 1, 2023, Botswana Harvard Health Partnership (BHP) joined the rest of the world to commemorate World AIDS Day in Nata under the theme “Let Communities Lead.” This annual event serves to unite the world in the fight against HIV/AIDS, to honour those who succumbed to HIV, fight HIV/AIDS related stigma, and to address various challenges related to the global struggle to end the HIV/AIDS pandemic. As a leading health research institute whose research output has informed global health policies on HIV prevention, treatment and care, BHP continues to participate annually in this event as it reaches out to communities to share knowledge on HIV/AIDS response and other public health challenges. BHP is proud to have significantly contributed towards Botswana being one of the five countries in the world that have attained the [UNAIDS 95-95-95 targets](#).

BHP’s portfolio of research addresses laboratory, clinical and biomedical research, that impacts HIV/AIDS prevention, treatment, policy and programming.

The institution thus uses platforms such as World AIDS Day not only to raise awareness about HIV/AIDS but to engage the community, disseminate research outcomes and educate people about the research it conducts. BHP takes pride in the collective progress that is being made in the fight against HIV/AIDS by communities, research institutes, governments, funders, and various entities worldwide which has resulted in tremendous strides being made towards ending the HIV pandemic through innovative research, interventions and strategic collaborations.

Because the national commemoration was held in the northern part of Botswana in Nata, BHP decided to showcase its studies that are being conducted in the northern part of country. The studies include [Tsepamo study](#) which is an observational surveillance Study of birth outcomes in 16 public hospitals throughout Botswana, [Tatelo Study](#): Treatment with Broadly Neutralizing Antibodies in Children with HIV in Botswana, the [Moso Study](#): Point-of-Care HIV Testing and Early Dolutegravir Use for Infants as well as [Potlako+](#) : A multilevel intervention to improve timely cancer detection and treatment initiation in Botswana which is a cancer study.

When officiating at the commemorations in Nata, the Assistant Minister of Health Hon. Sethomo Lelatisitswe explained that the theme for World AIDS day 2023 “LET COMMUNITIES LEAD” places emphasis on the sustainability of the country’s response to the HIV pandemic being dependent on strong community participation, drawing attention to the work done by the communities in fighting HIV/AIDS. The day was graced by the First Lady of the Republic of Botswana, Mrs Neo Jane Masisi and other senior government officials.



Community Engagement Coordinator, Mr Ernest Moseki interacting with the community



Assistant Minister of Health Hon. Sethomo Lelatisitswe (L) and the First Lady Mrs. Neo Jane Masisi (R)



BHP Team at World AIDS Day

All White Affair: BHP ends the year in style



BHP Staff

BHP organized an all-white-themed year-end event on November 25th at The Wheelbarrow Gardens in Notwane, an end of year celebration for its employees away from their usual place of work. The event served as a platform to reflect on the company's accomplishments and challenges over the course of the past year and to present the company vision for the year to come.

While the attire for last year's end of year event was formal, resulting in a contract of different colours and looks, this year, to emphasize "oneness," as one BHP team, everyone wore white. Despite wearing the same colour, there was still ample room for individuality and personal expression. Some chose skirts or dresses, some trousers and others jeans, a variety of outfits of different designs and labels...all in white.

Addressing staff at the event, Deputy Chief Executive Officer, Dr Gaerolwe Masheto preached unity, calling upon all BHP employees to embrace one another and to work together as a team. He implored the staff members to build trust amongst themselves and always pull together in one direction to ensure that BHP achieves its goals.

Dr Masheto noted that the year-end event is a meaningful platform and an opportunity to impact

the culture of teamwork and recognition. He said that employees need to feel valued, acknowledged in their contributions and encouraged to discharge their duties to affirm the role they play and their worth in the company.



Dr. Masheto giving welcome remarks

To further reflect upon the collective achievements, dedication, and unwavering commitment that each and every one of the employees has demonstrated, 21 employees received certificates of appreciation for excellent service and P1000 gift vouchers to honor and recognize the exceptional contributions that they have made. These are employees who have consistently gone above and beyond to achieve exceptional outcomes in their respective jurisdictions within the BHP.

By acknowledging and appreciating the valuable contributions of team members, BHP seeks to not only boost morale and job satisfaction but also inspire others to strive for higher attainment, thereby fostering a culture of excellence.

This year the appreciation awards had three trophies for Employee Excellence Award, awarded to the overall best employee for the year, Team Excellence Award for the best team of the year and the CEO Excellence Award, which is awarded to an individual recognized by the CEO to have made significant contributions throughout the year towards the organization's overall success.

Project Scientist Assistant at the Laboratory, Kedumetse



Kedumetse Seru receiving her Employee Excellence Award



CEO Excellence Award Winner Dr. Gbolahan Ajibola

Seru was celebrated and awarded the Employee Excellence Award and a P1000 cash prize while HPTN 084 team won the Team Excellence Award and P2000 cash prize. Dr Gbolahan Ajibola, Principal Investigator for Moso Study and Study Coordinator for EIT and Tatelo Studies received the coveted CEO Excellence Award and a P1000 cash prize.

A key feature of this year's event was that entertainment was also provided by BHP staff. Demonstrating the multiple skills and talents bestowed to BHP staff. Laboratory Scientist Kesego Motsumi, HIV Cure Researcher and Principal Investigator, Dr Catherine Koofhethile and Digital Marketing and Communications Officer, Topo Mosinyi serenaded the crowd with duets or trios of religious, popular or classical music.

The BHP Choir had everyone in stitches as they staged a theatre of a wedding celebration and sang wedding songs. A different dance group showcased a variety of dance styles much to the awe of the onlookers. All these entertainment acts were surprises as the lineup of entertainers were not shared with the rest of the staff prior to the event, bringing an element of fun and spontaneity.



HPTN Team receiving their Team Excellence Award



BHP Choir entertaining revellers





Shining a light on pathways to fight hepatitis B in Botswana

Bonolo Phinius is rewarded for her work as it shines the light on the prevalence of the hepatitis B virus (HBV) in Botswana, where a lack of research on the disease has prevented progress on treatment and prevention. Her circle of mentors and supporters has been integral to navigating her research journey and achieving a work-life balance.

How did your interest in science begin?

With an inquisitive mind, I followed a scientific path from an early age, enjoying mathematics, chemistry and biology. I was fortunate to have been encouraged by family, friends and teachers. Learning more about infectious, incurable diseases that impact people's quality of life inspired me to dream of closing the

gaps in research to find a cure.

Could you present your research and its practical applications?

The lack of nationally representative HBV data in Botswana catalyzed my journey to determine hepatitis B virus (HBV) prevalence and diversity in my country. I'm studying participants in 30 rural and peri-urban communities in Botswana, some of which are understudied. My findings have identified potential HBV hotspots and may guide policy on prevention strategies.

What does being a woman in science mean to you?

I'm contributing to closing the gender gap in science and empowering other women through shared experiences. It brings me joy to push boundaries and excel in my field. Women scientists must

continue to be activists, breaking barriers with their achievements and pursuing their passion with the utmost persistence. Gradually, their efforts are bearing fruit. By reaching gender equality, we will encourage more brilliant minds that could contribute to solving the world's great challenges.

Source: Foundation L'Oréal



Human Resources updates

New employees as of October 2023.



Pearl Kgoreletso
Research Assistant
(Phodiso Study)



Aobakwe Mooki
Intern
(IT)



Relebohile Sekoboto
Pharmacist
(Pharmacy)



Thero Molefhe
Research Nurse
(Tshireletso Study)



Ishmael Gaontebale
Procurement Assistant
Officer (Procurement)



Lebogang Baotsenye
Research Assistant
(Flourish)

New promotions as of October 2023.**Gaontebale Elijah**Senior Research
Assistant (Flourish)**Pearl Maano**Senior Research
Assistant (Flourish)**Georginah Modise**Head Research Nurse
(CTU)

Selected Publications

1. Cryptococcal meningitis. Tugume L, Ssebambulidde K, Kasibante J, Ellis J, Wake RM, Gakuru J, Lawrence DS, Abassi M, Rajasingham R, Meya DB, Boulware DR. *Nat Rev Dis Primers*. 2023 Nov 9;9(1):62. doi: 10.1038/s41572-023-00472-z. PMID: 37945681
2. Case series and literature review of chlamydial ophthalmia neonatorum in Botswana. Yang K, Babalola CM, Mussa A, Ryan R, Wynn A, Simon S, Bame B, Morroni C, Klausner JD. *Int J STD AIDS*. 2023 Oct;34(12):860-868. doi: 10.1177/09564624231173028. Epub 2023 Jun 20. PMID: 37338101
3. Immune Modulation of HIV-1 Reservoir Size in Early-Treated Neonates. Hartana CA, Broncano PG, Maswabi K, Ajibola G, Moyo S, Mohammed T, Maphorisa C, Makhema J, Powis KM, Lockman S, Burbelo PD, Gao C, Yu XG, Kuritzkes DR, Shapiro R, Lichterfeld M. *J Infect Dis*. 2023 Aug 11;228(3):281-286. doi: 10.1093/infdis/jiad173. PMID: 37201510
4. The case for precision medicine in the prevention, diagnosis, and treatment of cardiometabolic diseases in low-income and middle-income countries. Misra S, Aguilar-Salinas CA, Chikowore T, Konradsen F, Ma RCW, Mbau L, Mohan V, Morton RW, Nyirenda MJ, Tapela N, Franks PW. *Lancet Diabetes Endocrinol*. 2023 Nov;11(11):836-847. doi: 10.1016/S2213-8587(23)00164-X. Epub 2023 Oct 4. PMID: 37804857
5. Further Considerations Regarding Molecular Screening and Treatment of Bacterial Vaginosis. Wynn A, Morroni C, Klausner JD. *JAMA Pediatr*. 2023 Nov 6. doi: 10.1001/jamapediatrics.2023.4755. Online ahead of print. PMID: 37930708
6. The impact of free antiretroviral therapy for pregnant non-citizens and their infants in Botswana. Fennell C, Escudero D, Zash R, Diseko M, Mayondi G, Mabuta J, Sekoto T, Gaolathe T, Mmalane M, Lockman S, Makhema J, Shapiro R. *J Int AIDS Soc*. 2023 Oct;26(10):e26161. doi: 10.1002/jia2.26161. PMID: 37885157
7. Standard of care in advanced HIV disease: review of HIV treatment guidelines in six sub-Saharan African countries. Scheier TC, Youssouf N, Mosepele M, Kanyama C, Adekanmbi O, Lakoh S, Muzoora CK, Meintjes G, Mertz D, Eikelboom JW, Wasserman S. *AIDS Res Ther*. 2023 Nov 23;20(1):83. doi: 10.1186/s12981-023-00581-5. PMID: 37996881

VISION

To Be a World-Renowned Public Health Institute.

MISSION

To Fight HIV/AIDS and Emerging Public Health Challenges Through Innovative Research, Education, and Capacity Building That Impacts Policy and Practice.

CORE VALUES

BENEFICENCE

INNOVATION

COLLABORATION

EXCELLENCE

BOTHO

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