

BHP responds to COVID-19 and develops capacity to test for SARS-COV-2



Research Nurse, Oitshpile Modise and Study Physician, Dr Ponego Ponatshego

The Botswana Harvard AIDS Institute Partnership (BHP) has developed capacity for SARS-COV-2 (COVID-19) testing in an effort to support the national testing enterprise for the deadly Corona Virus responsible for the global pandemic. This is also to provide capacity for BHP SARS-COV-2/COVID-19 Research capabilities and to test BHP staff and study participants.

By developing this testing capacity, BHP has lived up to its mission of fighting emerging public health challenges through innovative research, education and capacity building that impact on policy and practice. Prior to developing this testing capacity, BHP established COVID -19 Committee and developed COVID -19 work and research guidelines. Case identification and testing

standard operating procedures were also developed. "Since we have now developed internal testing capability, BHP staff shall be offered testing through contacting the BHP COVID-19 committee focal Person," said BHP Chief Executive Officer (CEO) Dr Joseph Makhema in a communication to staff.

Dr Ponego Ponatshego is the BHP COVID-19 Focal Person and has been leading the BHP COVID-19 committee in developing the guidelines and standard Operation Procedures (SOP's) to be followed to contain the spread of COVID-19 in the workplace. Dr Ponatshego has also been spearheading the training of the BHP volunteers who are collecting COVID-19 specimens for testing at the Botswana Harvard HIV Reference Laboratory (BHHRL).

Consistent with BHP principles of collaboration as one its core values, BHP is also participating in the national effort. Firstly, BHP signed an addendum to the Memorandum of Agreement with the Ministry of Health and Wellness for BHP to provide technical and laboratory testing support to the National Health Laboratory and collaborate in various initiatives to mitigate SARS-CoV-2/ COVID-19 pandemic in Botswana.

Secondly, BHP extended testing to Princess Marina Hospital (PMH) to facilitate testing at high-risk identified areas, and for symptomatic members of PMH staff. The initial testing covered the PMH's Accident and Emergency (A&E), Out Patient Department and Theatre and was to be extended to patients admitted with respiratory conditions in medical wards and to obstetric patient.

A testing team of physicians and nurses has been constituted and has been trained on obtaining the samples and on the proper use of Personal Protective Clothing (PPE) and all necessary COVID-19 safety

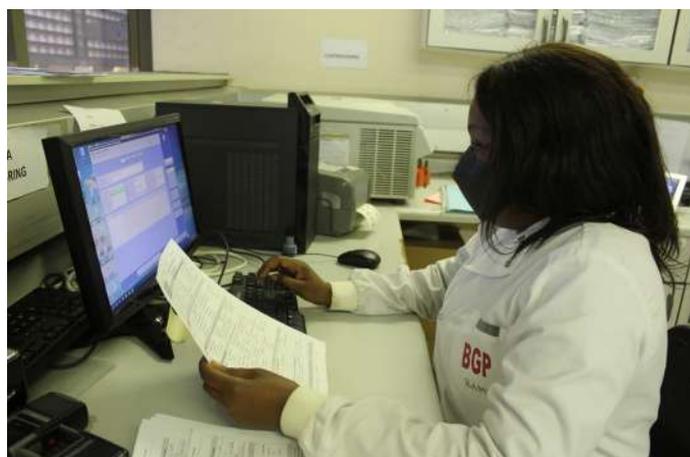
protocols. Furthermore, BHP is honoured to have key BHP affiliated experts solicited to participate in the COVID-19 Presidential Task Force giving valuable advise on the control of the pandemic with Professor Mosepele Mosepele, a BHP Research Associate appointed Deputy Coordinator of the Task Force and The BHP Laboratory Director, Dr Sikhulile Moyo appointed Co-Chief Scientific Officer advising on laboratory scientific and testing strategy.

The Thabatshe Team has been doing a weekly surveillance of COVID-19-like-illnesses and symptoms on the participants of the Thabatshe prospective cohort study. This study has been enrolling consenting confirmed cancer patients receiving specialized care at four referral oncology centers in Botswana since 2010 to assess Cancer treatment outcomes.

The patients are asked specifically about COVID-19-like symptoms (sore throat, fever, cough, rhinorrhoea) in order to provide prompt counseling and linkage to care for screening and testing for COVID-19 as and when need arises.



Sample Reception at BHHRL



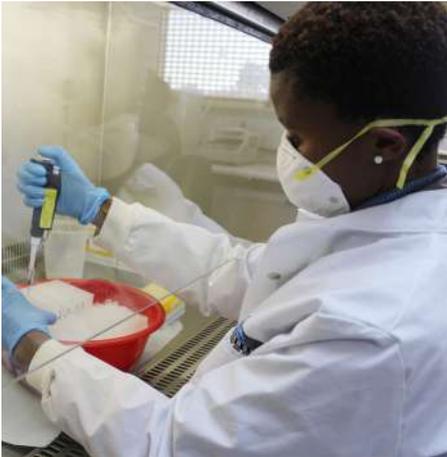
Demographic Capturing



Sample Preparation



Extraction Process



Amplification and Detection

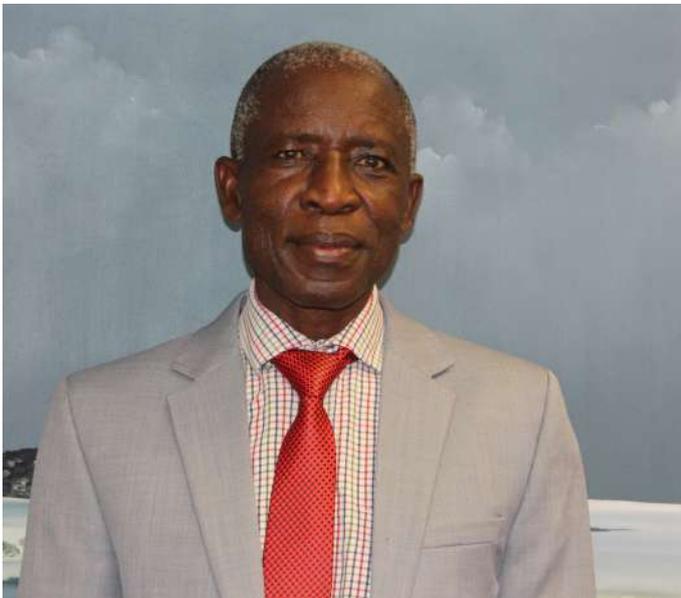


Ordering Extraction on the System



Resulting

BHP remains resilient amid COVID-19 pandemic



BHP Deputy CEO, Dr Mopmati Mmalane

The Deputy Chief Executive Officer (CEO) of the Botswana Harvard AIDS Institute Partnership (BHP) Dr Mopmati Mmalane has commended BHP staff for their collective efforts in mitigating the effects of the fast spreading COVID-19 disease. In a communication to staff, Dr Mmalane has urged employees to continue

being vigilant to ensure that BHP remains resilient amid the global pandemic.

“The world over is going through turbulent times due to the COVID-19 pandemic, a pandemic that none of us has experienced in our living memory. No country, and no organization will remain untouched by this devastating pandemic,” noted Dr Mmalane.

He pointed out that Botswana like other nations is going through uncertain times as evidenced by the ever increasing numbers of people testing positive for SARS-Cov-2 virus in the country, as well as repeat lockdowns. This, Dr Mmalane said calls for all employees, individually and collectively; to do all they can to mitigate the effects of the COVID-19 pandemic.

He said BHP remains committed and determined to overcome all the challenges, noting that management have been observing how staff has skillfully managed to continue with the organisation’s research and capacity building mandate.

...continues on page 4

...continuation from page 3



“As an essential service provider, we have seen you managing your work during the six weeks lockdown in April and May while observing COVID-19 Protocols including working from home and using virtual platforms. Overall while for both staff and patient safety there was deferment of non-essential on site research activity, remote interaction with research participants and tele-visits meant there was minimal disruption of research activities. The mitigating measures established and the operations of the organization remained solid. We would like to recognize and thank you all for a job well done,” said Dr Mmalane.

The Deputy CEO continued: “I applaud you as BHP for rapid response in offering technical advise and assistance to the Ministry of Health and Wellness and consequently to the Government and people of Botswana. You facilitated capacity building to the national laboratory program and volunteered to help with the testing for SARS-CoV-2/COVID-19. In collaboration with the National Health Laboratory, BHP is now one of the leading testing facilities; I thank you for the professionalism, commitment and dedication you all have displayed faced with this national emergency. The management is very appreciative of all the effort you have put in.”

He singled out a few cadres who he said have been going an extra mile in the fight against COVID-19. He revealed

that the Laboratory Team has been working 24 hours per day for two or three weeks. “I would really want to thank them and their leadership for having steered the ship despite the rough waters we faced at the beginning. The country I believe recognizes and appreciates BHP more, because of their effort,” he said.

The drivers also had special recognition. Dr Mmalane stated that the drivers were key in the successful running of clinical visits and transportation of medicines to study participants during the lock down. They were also pivotal in facilitating the 24 hours a day, seven days a week of work at the laboratory by transporting staff to and from work at odd times.

The third team that got special mention is the BHP COVID-19 Testing team of volunteers involved in testing staff and patients at Princess Marina Hospital. This exercise has increased BHP’s visibility within PMH and has positioned itself as an important and dependable partner and stakeholder. Despite mentioning the three teams, Dr Mmalane emphasized that the rest of the BHP staff members were also earnestly involved in the fight.

“With the support of all of you, we are part of the national efforts to defeat COVID-19. The management would sincerely like to thank you all, and urge you to continue with the wonderful job you are all doing. Re tlaa fenywa ntwā e. (We will win this battle).”

BHP resumes recruitment of study participants



Elizabeth Leboile screening staff and visitors at the Laboratory

The Botswana Harvard AIDS Institute Partnership (BHP) studies have been advised to prudently resume recruitment and enrolment of study participants and all components of study conduct. Research activities were affected by the national lockdown that has since been relaxed but remains in effect with movement restricted across zones. BHP Chief Executive Officer (CEO) Dr Joseph Makhema notified the Study Coordinators and all staff members in an email communication on Friday, June 26, 2020.

Dr Makhema said despite the ongoing pandemic, management have carefully assessed the situation and concluded that each BHP study can now cautiously resume recruitment, enrollment and undertake study conduct but should ensure that all activities are consistent with Standard Protocols and Guidelines for COVID-19 mitigation.

“The primary determination should be based on ensuring Staff and Participant safety during all study specific procedures,” he emphasized. The CEO noted that each study should ensure that they have developed

a COVID-19 plan that is aligned to the BHP COVID Guidelines and the Study specific/Network Guidelines for resumption of activities.

He highlighted some specific areas that should inform the decision to resume study conduct including; Maintenance of Study objectives and compliance, IRB approvals for any modification in processes in relation to COVID-19, Risk assessment for on site visits, Full adherence to COVID-19 safety and use of PPE, Development and adjustments of appropriate COVID-19 Work flows, Staff training and orientation as well as addressing concerns of participant transport for on site visits.

“I trust that each study shall work with the PI (Principal Investigator), Coordinator, Site staff, BHP regulatory and Administration to facilitate gradual but safe transition to as near normal operations under COVID-19 as possible,” said Dr Makhema.

He took the opportunity to thank all the BHP staff and PI’s for their understanding and support as they collectively continue to fight COVID-19.

Potlako Plus Study conducts Community Randomization



Kgosi Mosadi Seboko and Bishop Raphael Habibo

Botswana Harvard AIDS Institute Partnership (BHP) conducted community randomization on June 04, 2020 for the Potlako Plus study. Potlako Plus is a multi intervention study to improve timely cancer detection, diagnosis and treatment initiation in Botswana. This is a five year pair-matched randomized study in Twenty rural/peri-urban communities in Botswana sponsored by the National Cancer Institute. Ten communities shall be randomized to receive the intervention with the other ten receiving standard-of-care.

The study aims to develop a multi component intervention that is feasible in a resource limited setting and to evaluate the interventions impact on time from symptoms to presentation to health care facility, and

time from presentation at the health care facility to cancer treatment initiation. The study also seeks to assess the proportion of cancers treated in early stage.

Because the study will rely on community engagement and participation, to ensure community leadership and participation, the Paramount Chief of Balete, Kgosi Mosadi Seboko and Bishop Raphael Habibo of the Assemblies of God Botswana were requested to participate in the community randomization. Ministry of Health and Wellness (MOHW) officials, Dr Gontse Tshisimogo, Non Communicable Disease (NCD) Programme Manager and NCD Officer, Dr Lame Seema, assisted the two community leaders.

The randomization was conducted following a candle lighting ceremony in remembrance of those who have lost their lives to cancer and recently to the COVID-19 global pandemic.

In his welcome remarks at the event, BHP Chief Executive (CEO) Dr Joseph Makhema described cancer as a very insidious disease, which often by the time it is diagnosed, it would have already caused significant harm. "It is time we go to the communities to educate, detect cancer early and link patients to care. We have to do the research and share the data of proven impactful research interventions with policy makers for implementation and transformation of policy to improve our health system," said Dr Makhema.

Giving an overview of the study, BHP Deputy CEO, Dr Mompoti Mmalane revealed that cancers in Botswana and the region are diagnosed late resulting in avoidable deaths and inefficient use of resources. "Potlako Plus will rigorously evaluate an innovative cancer early diagnosis intervention that has potential to save lives and strengthen health systems in Botswana and elsewhere," he said.

The study will enroll Botswana citizens aged 30 years and above residing in the study communities. The anticipated sample size is 1500 cancer suspects and 400 diagnosed cancers.

Dr Mmalane revealed that interventions will include oncology training, standardized referral algorithm, pathology results follow ups, appointment bookings, community awareness campaigns, phone based navigation, short message (sms) visit reminders,

defaulter tracing and provision of transport for the vulnerable. These interventions will be employed only in the communities in the intervention arm while those in the Standard of Care arm will receive the usual health care services.

Bishop Raphael Habibo expressed his appreciation for taking part in the randomization exercise. He also pointed out that his involvement as a Pastor indicates that there is no conflict between the Church and medical health care. Some patients are said to be avoiding medical assistance saying that it is against their religious beliefs but Bishop Habibo said his participation was a show of partnership and support to save lives.

For her part, Kgosi Mosadi Seboko also appreciated having taken part in the randomization, indicating that part of Dikgosi's job is to look after the welfare of the communities. She pointed out the need for BHP to request for a slot to introduce the study to Dikgosi at the next sitting of Ntlo ya Dikgosi (House of Chiefs).

"Bringing us, Bogosi and Pastors together is an indication of your resolve to bring communities together as evidenced by your proposed community interventions to save lives. We will win the fight against all ills if we work together," she said.

In her remarks, Potlako plus Project Coordinator Kutlo Manyake thanked Kgosi Seboko, Bishop Habibo and the Ministry of Health and Wellness officials for being part of this important exercise that ensures the integrity of the study. She promised the community leaders utmost cooperation and respect, as they will be in their respective communities conducting the study.

The Randomization of the 10 Community Pairs is as follows :

Community Pairs	Standard of Care	Intervention
1. Otse, Molapowabojang	Otse	Molapowabojang
2. Oodi, Boka	Boka	Oodi
3. Mankgodi, Mmathethe	Mankgodi	Mmathethe
4. Sefhophe, Lerala	Sefhophe	Lerala
5. Letlhakeng, Lentsweletau	Letlhakeng	Lentsweletau
6. Ramokgonami, Maunatlala	Ramokgonami	Maunatlala
7. Shoshong, Mmadinare	Mmadinare	Shoshong
8. Tati-Siding, Metsimotlhabe	Tati-Siding	Metsimotlhabe
9. Mandunyane, Mathangwane	Mathangwane	Mandunyane
10. Nata, Masunga	Masunga	Nata



BHP CEO, Dr Joseph Makhema



BHP Deputy CEO, Dr Mompoti Mmalane



Project Coordinator, Kutlo Manyake



Dr Mompoti and Dr Anna Mayondi lighting a candle



BHP Community Engagement Coordinator, Ernest Moseki



Group Photo with guests after the Randomization Exercise



Share Facts About COVID-19

Know the facts about coronavirus disease 2019 (COVID-19) and help stop the spread of rumors.

**FACT
1**

Diseases can make anyone sick regardless of their race or ethnicity.

People of Asian descent, including Chinese Americans, are not more likely to get COVID-19 than any other American. Help stop fear by letting people know that being of Asian descent does not increase the chance of getting or spreading COVID-19.

**FACT
2**

Some people are at increased risk of getting COVID-19.

People who have been in close contact with a person known to have COVID-19 or people who live in or have recently been in an area with ongoing spread are at an increased risk of exposure.

**FACT
3**

Someone who has completed quarantine or has been released from isolation does not pose a risk of infection to other people.

For up-to-date information, visit CDC's coronavirus disease 2019 web page.

**FACT
4**

You can help stop COVID-19 by knowing the signs and symptoms:

- Fever
- Cough
- Shortness of breath

Seek medical advice if you

- Develop symptoms

AND

- Have been in close contact with a person known to have COVID-19 or if you live in or have recently been in an area with ongoing spread of COVID-19.

**FACT
5**

There are simple things you can do to help keep yourself and others healthy.

- Wash your hands often with soap and water for at least 20 seconds, especially after blowing your nose, coughing, or sneezing; going to the bathroom; and before eating or preparing food.
- Avoid touching your eyes, nose, and mouth with unwashed hands.
- Stay home when you are sick.
- Cover your cough or sneeze with a tissue, then throw the tissue in the trash.



CS 315446-A 03/06/2020

For more information: www.cdc.gov/COVID19

BHP Board reflects on racism and research



BHP Board Chairman, Prof. Roger Shapiro

The Board of Directors for the Botswana Harvard AIDS Institute Partnership (BHP) led by the Chairman, Prof Roger Shapiro have reflected on racism as a public health challenge following the murder of George Floyd by a white Police Officer in Minneapolis, United States of America. In his message to the BHP community, Prof.Shapiro noted that he is personally shocked and saddened by the racist police brutality in his home country and wanted to convey words of comfort as Board Chairman and on behalf of all Americans who are part of the BHP community.

“The United States has a long fight ahead to end the scourge of racism. I hope that we will get there, and that we will soon live in a more just and equitable world,” he said. Expressing his deepest gratitude for the opportunity to work with all members of the BHP community in their diversity, Prof.Shapiro pointed out that he knows that many people grew up with apartheid at their doorstep and that the images on the Internet and TV are all too familiar.

“But I want to ask you not to lose hope in the United

States. This is a hard thing to ask, and at least for me personally, requires a long view of history and a belief that things can get better,” said Prof. Shapiro.

Board Member, Mr Modise Modise who is an Economist and a Former Permanent Secretary of Development at Office of the President, thanked the Board chairman for his message to the BHP community. “It is reassuring that the BHP and HSPH community realize that they cannot just restrict themselves to hard core health scientific research, but also take into serious consideration the social environment under which they operate. The benefits of solid scientific research in an unequal and unjust society would be seriously degraded,” he said.

The Dean of the Harvard T.H. Chan School of Public Health (HSPH), Prof. Michelle Williams Chair of the BHP Board of Members thanked Prof. Shapiro for his message. “Despite the darkness of this moment, I take heart that we are continuing with our work together to construct a brighter, healthier and more just future, thanks for adding some light our day with your message,” she said.

Prof. Sheila Tlou, Former Minister of Health and UNAIDS Regional Director who is the Co-Chairperson for the Global Health Prevention Coalition also appreciated the Board Chairman's soothing message. "What has happened and is happening in the USA right now behoves us to reflect on and be part of creating a better, non-racist world for our children," she said, noting that the spirit of the BHP and collaboration is a great inspiration.

For her part, Shain Lockman said: "We are horrified and heartbroken at the cruel and senseless murder of George Floyd and so many others. Although I cannot know what it feels like to experience racism every day, I know that we must do whatever we can to listen, learn with humility, speak up, and use whatever energy and power we have to actively combat racism. I am so grateful to work with and be friends with so many of you."

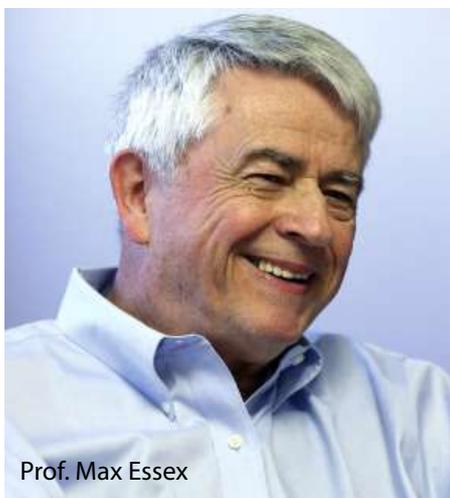
Former BHP Board Chairman, Prof. Max Essex also weighed in on the conversation thanking the Board members for sending their thoughts. Prof. Essex noted that while he is embarrassed by the events in US, bonds of friendship with the BHP comfort him. "The only saving

aspect is that it makes me appreciate even more the true friendship and family-like bonds we have shared with BHP. At times like this, your love and kindness seem so important," said Prof. Essex.

Like a true father, he made the board aware that he is ready to share his insight for a just society. "Please let me know if I can do anything useful" was Prof. Essex's parting words.

BHP Chief Executive (CEO) Dr Joseph Makhema commended the Board for reflecting on this important topic of racism and how it affects public health. He responded individually to their messages of comfort and thanked them for their continued wisdom and counsel as they serve in the BHP Board of Directors.

He took the opportunity to further recognize Prof. Essex's leadership. "As BHP patriarch you have led us to where we are, never ever having race or any prejudices against humanity cloud our relationships and focus for the mandate to serve humanity through our research and yes, true bonds of friendship over the many years," he said.



Prof. Max Essex



Prof. Michelle Williams



Prof. Shiela Tlou



Mr Modise Modise

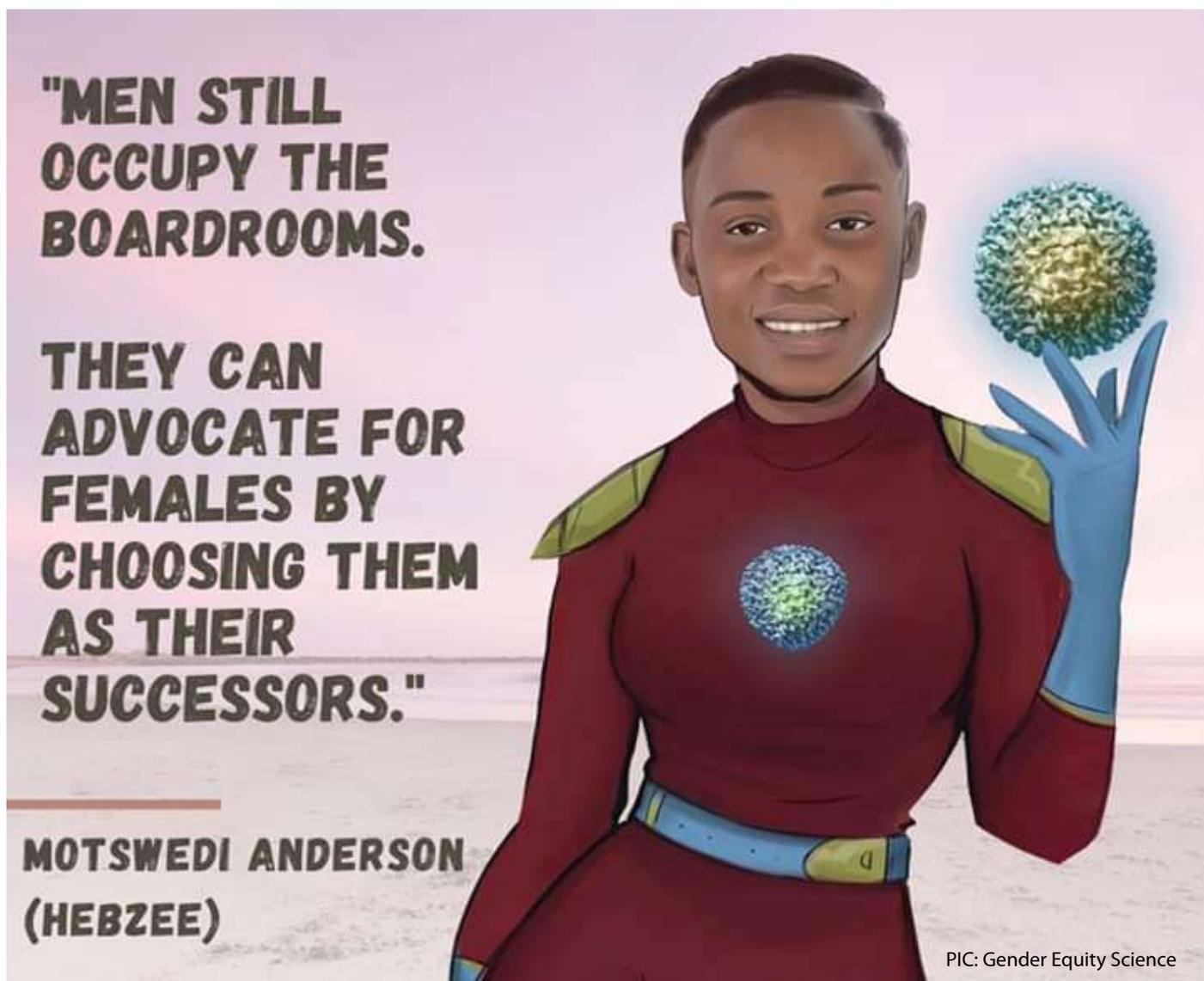


Dr Shain Lockman



Dr Joseph Makhema

BHP Scientists participate in Gender Equity in Science Campaign



Three Botswana Harvard AIDS Institute Partnership (BHP) female scientists recently participated in a three weeks Social Media Campaign dubbed Gender Equity in Science aimed at reframing problematic narratives that contribute to gender inequity in Science. The interactive Social Media Campaign was launched on Africa Day on May 25, 2020 and raised lively discussions on gender biases, cultural stereotypes and problematic narratives that contribute to gender inequity in science. The engagement discussed solutions on how Africa can lead the fight for gender equity in science.

The three BHP Scientists are Dr Motswedi Anderson, Lucy Mupfumi and Monkgomotsi Maseng. They were part of the 24 Sub-Saharan African Network for TB/HIV Research Excellence (SANTHE) scientists from six Sub-Saharan African countries united in the fight against gender equity in their profession.

The project's Principal Investigator, Maphe Mthembu, a SANTHE PhD student at the Africa Health Research Institute (AHRI) in South Africa and her mentor started meaningful discussions between campaign participants,

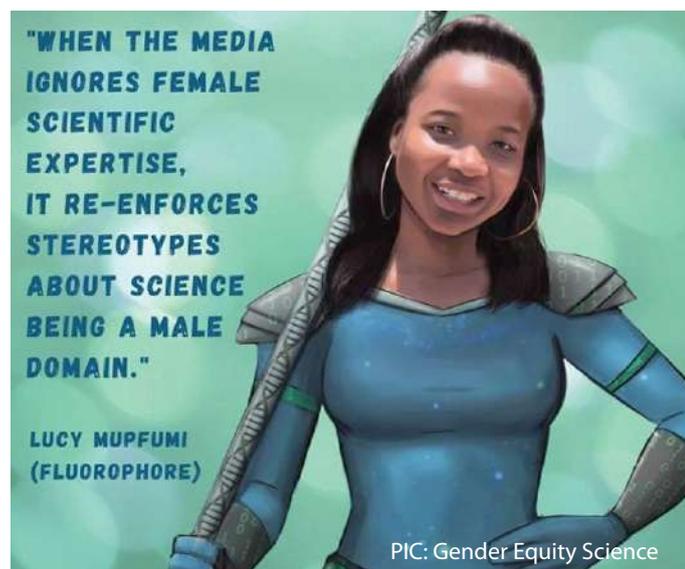
the global scientific community and the general public about gender equity in science. A Community and Public Engagement Seed Grant from the African Academy of Science (AAS) funded the project and the discussions were on Facebook and Twitter.

About The Scientists

Dr Motswedi Anderson

Dr Motswedi Anderson, who was nicknamed HeBzee in the campaign, is a Postdoctoral Fellow at Botswana Harvard AIDS Institute Partnership. Her research interests are in viral hepatitis (B, C, D and E) and human immunodeficiency virus. She completed her PhD in Biological Sciences in 2018 and her project was "Prevalence and molecular characterization of hepatitis B virus infection in Botswana." She did BSc in Biomedical Sciences with University of Kwa-Zulu Natal, Durban, South Africa in 2005. She has been with Botswana Harvard AIDS Institute Partnership since 2006. She aspires to be a renowned researcher and to play a key role in viral hepatitis elimination. Dr Anderson says "Gender inequity in science is rife and that men can help by appointing females as their successors as men currently occupy the boardrooms."

Lucy Mupfumi



Lucy Mupfumi, nicknamed Fluorophore is a Clinical Scientist and Infectious disease researcher, currently pursuing her PhD in Medical Sciences at the University of Botswana. She is a recipient of a SANTHE training fellowship that aims to provide mentorship and training for the next generation of African scientific leaders. Her research interests are in TB immunology, diagnostics

and the control of HIV-associated TB. "I hopes that institutions will start taking deliberate steps to address gender inequities in science, including making relevant policies, tracking and measuring their implementation, and assessing impact of these policies," Said Lucy.

Monkgomotsi Maseng



Monkgomtsi Maseng is a Masters student at University of Botswana and the Botswana Harvard AIDS Partnership. Her Research seeks to assess individual patient response to antiretrovirals in the hope of developing personalised or targeted medicine diagnostics to reduce side effects and have more effective treatment. She studies how patients respond to the HIV antiretrovirals Nevirapine and Efavirinz.

The Tailor, as Monkgomtsi was referred to during the campaign is assessing variations in the gene that codes for Cytochrome P450 and influence on subsequent individual patient response to these medicines and how genetics and susceptibility testing can be individualized , or tailored to patients before they are prescribed a medicine.

"One of the problematic narratives is that women have to combine work with family life and that slows their career progression. Sometimes women are also forced to choose between putting either one on hold, and in doing so, one suffers. I am of the view that women need to be given targeted support due to the gender disparities in science and that both girls and boys need to know they can achieve any career of their choice," said Monkgomtsi.

CTU,HPTN Team trained on DAIDS Applied Research



The Botswana Harvard AIDS Institute Partnership (BHP)'s Clinical Trials Unit (CTU) and the HIV Prevention Trials Network (HPTN) sites on the 15 of May 2020 held DAIDS Applied Research Training (DART) for 11 staff members comprising study Physicians, Research Nurses and Data Managers. DAIDS is the Division of AIDS of the National Institute of Health (NIH) , USA which sponsors HIV/AIDS research in different NIH supported networks including HPTN, ADULT Clinical Trials Group (ACTG) and International Maternal Paediatrics Adolescents Clinical Trails (IMPAACT) to which the BHP/HSPH is affiliated as a CTU. The internal DART training follows the main pilot event that was held in Johannesburg, South Africa in September 2019 attended by five BHP staff members.

The training was attended by teams from different Clinical

Trials sites that include, South Africa, Zimbabwe and Mozambique. The BHP team was made up of Siamisang Balosang, Head Research Nurse-HPTN, Boitshepho Seme, Head Research Nurse -CTU, Moakanyi Ramogodiri, Head Research Nurse-CTU, Omphemetse Motswagole, Data Manager-CTU and Selebogo Mokgweetsi, Quality Assurance Nurse-HPTN.

Balosang told BHP Quarterly that the training came after DAIDS realised that there were many citations discovered during monitoring visits, and decided to train research staff with less than five years in research on DAIDS requirements across all the CTU sites. DART participants were equipped with instructor guides and tool kits to share what they have learned with colleagues at their respective sites.

“We were trained on different topics and each team was tasked with a project of training our team members. Going forward, we intend to train all new staff members to be well conversant with DAIDS requirements from the onset,” said Balosang.

The objective of the internal training was to share important information to site staff, improve the safety of study participants through compliance of DAIDS standards and to improve data integrity. Balosang stated that after the training, there shall be an evaluation by DAIDS to assess improvements in data quality and research conduct processes.

The evaluation outcomes will also help inform future training events. She explained that DART focuses on applied Good Clinical Practice/ International Conference on Harmonization of Research (GCP/ICH) compliance at all clinical research sites to strengthen regulatory compliance across the HIV/AIDS Network enterprise.

The training focused on application-based training, in which attendees worked in small group settings to review specific case studies, designed to enhance clinical GCP/ICH compliance. The application-based training sessions allow learners to use problem solving and critical thinking skills to respond to relevant scenarios that occur in the clinical research setting.

The topics covered include the following:

- Good Clinical Practice
- Source Documentation
- Study Product Administration
- Investigator’s Responsibilities
- Informed Consent
- Audit and Inspection Readiness



STOP THE SPREAD OF GERMS

Help prevent the spread of respiratory diseases like COVID-19.

Avoid close contact with people who are sick.



Cover your cough or sneeze with a tissue, then throw the tissue in the trash.



Avoid touching your eyes, nose, and mouth.



Clean and disinfect frequently touched objects and surfaces.



Stay home when you are sick, except to get medical care.



Wash your hands often with soap and water for at least 20 seconds.



For more information: www.cdc.gov/COVID19

Botswana Harvard AIDS Institute Partnership at a Glance



Establishment

Botswana Harvard Partnership (BHP) is a Not-for-Profit, limited liability organization, established through a partnership between the Government of Botswana, represented by the Ministry of Health and Wellness (MoHW), and Harvard University (HU), represented by the Harvard T.H. Chan School of Public Health (HSPH). It was established in 1996 and registered as a limited liability company in 2009.

Business

Knowledge generation and dissemination, Advocacy, Health Policy Transformation and systems strengthening through research, education and capacity building.

Contact Details

Registered Office: Botswana Harvard HIV Reference Laboratory Plot 1836 (Princess Marina Hospital premises) North Ring Road, Gaborone, Botswana

Mailing Address

Private Bag B0320, Gaborone, Botswana
Tel: (+267) 3902671
Fax: (+267) 3901284
Web: www.bhp.org.bw

Company Auditors: Price Waterhouse Coopers

Company Secretaries: DPS Consulting

Company Attorneys: Armstrongs Attorneys, Notaries & Conveyancers

Main Bankers: Standard Chartered Bank & Stanbic Bank

BHP Associated Research, and Associated Investigators Publications (April to June 2020)

1. Davey S, Ajibola G, Maswabi K, Sakoi M, Bennett K, Hughes MD, Isaacson A, Diseko M, Zash R, Batlang O, Moyo S, Lockman S, Lichterfeld M, Kuritzkes DR, Makhema J, Shapiro R. Mother-to-Child HIV Transmission with in utero Dolutegravir vs. Efavirenz in Botswana J Acquir Immune Defic Syndr. 2020 Mar 16. [Epub ahead of print].
2. Hurt WJ, Tenforde MW, Molefi M, Mitchell HK, Milton T, Azama MS, Goercke I, Mulenga F, Tlhako N, Tsholo K, Srivastava T, Leeme TB, Simoonga G, Muthoga C, Lechiile K, Mine M, Jarvis JN. Prevalence and Sequelae of Cryptococcal Antigenemia in Antiretroviral Therapy-experienced Populations: An Evaluation of Reflex Cryptococcal Antigen Screening in Botswana. Clin Infect Dis. 2020 Apr 1: Online ahead of print. PMID: 32236414
3. Powis KM, Slogrove AL. Setting an appropriately high enough bar when evaluating the safety of antiretroviral drugs for use in pregnancy. Infection. 2020 Apr;48(2):311-312. doi: Epub 2020 Feb 5. PMID: 32026311.
4. Ajibola G, Moyo S, Mohammed T, Moseki S, Jack D, Sakoi M, Batlang O, Maswabi K, Bennett K, Hughes MD, Lockman S, Makhema JM, Lichterfeld M, Kuritzkes DR, Shapiro RL. HIV diagnostic algorithm requires confirmatory testing for initial indeterminate or positive screens in the first week of life. AIDS. 2020 Apr 13. [Epub ahead of print]
5. Petro G, Spence T, Patel M, Gertz AM, Morroni C. Difficult etonogestrel implant removals in South Africa: A review of 74 referred cases. Contraception. 2020 Apr 24: PMID: 32339484.
6. Makhaola K, Moyo S, Kebaabetswe LP. Distribution and Genetic Variability of Sapoviruses in Africa. Viruses. 2020 Apr 27;12(5): PMID: 32349380
7. Nasuuna E, Tenforde MW, Muganzi A, Jarvis JN, Manabe YC, Kigozi J. Reduction in Baseline CD4 Count Testing Following Human Immunodeficiency Virus "Treat All" Adoption in Uganda. Clin Infect Dis. 2020 May 5: Online ahead of print. PMID: 32373932
8. Ian J Bishop, Alinda M Gertz, Boikhutso Simon, Leabaneng Tawe, Kwana Lechiile, Serena Liu, Nicholas Teodoro, Aamirah Mussa, Ava Avalos, Sifelani Malima, Tshego Maotwe, Lesego Mokganya, Carolyn L Westhoff, Chelase Meroni. Etonogestrel Concentrations Among Contraceptive Implant Users in Botswana Using and Not Using Dolutegravir-Based Antiretroviral Therapy. 2020 May 7. Online ahead of print.
9. Painter H, Erlinger A, Simon B, Morroni C, Ramogola-Masire D, Lockett R. Impact of cervicitis on performance of cervical cancer screening using HRHPV testing and visual evaluation in women living with HIV in Botswana. Int J Gynaecol Obstet. 2020 May 25. Online ahead of print. PMID: 32449207
10. Jarvis JN, Tenforde MW, Lechiile K, Milton T, Boose A, Leeme TB, Tawe L, Muthoga C, Rukasha I, Mulenga F, Rulaganyang I, Molefi M, Molloy SF, Ngidi J, Harrison TS, Govender NP, Mine M. Evaluation of a Novel Semi-quantitative Cryptococcal Antigen Lateral Flow Assay in Patients with Advanced HIV Disease. J Clin Microbiol. 2020 May 27: Online ahead of print. PMID: 32461286
11. Neo M, Tapela, Lei Clifton, Gontse Tshisimogo, Moagi Gaborone, Tebogo Madidimalo, Virginia Letsatsi, Tiny Masupe, Mosepele Mosepele, Joseph Makhema, Shahin Lockman, David J. Hunter. Prevalence and Determinants of Hypertension Awareness, Treatment, and Control in Botswana: A Nationally Representative Population-Based Survey. Published 31 May 2020.
12. Ajibola G, Moyo S, Mohammed T, Moseki S, Jack D, Sakoi M, Batlang O, Maswabi K, Bennett K, Hughes MD, Lockman S, Makhema JM, Lichterfeld M, Kuritzkes DR, Shapiro RL. HIV diagnostic algorithm requires confirmatory testing for initial indeterminate or positive screens in the first week of life. AIDS. 2020 Jun 1; PMID: 32287064

13. Wirth KE, Gaolathe T, Pretorius Holme M, Mmalane M, Kadima E, Chakalisa U, Manyake K, Matildah Mbikiwa A, Simon SV, Letlhogile R, Mukokomani K, van Widenfelt E, Moyo S, Bennett K, Leidner J, Powis KM, Lebelonyane R, Alwano MG, Jarvis J, Dryden-Peterson SL, Kgathi C, Moore J, Bachanas P, Raizes E, Abrams W, Block L, Sento B, Novitsky V, El-Halabi S, Marukutira T, Mills LA, Sexton C, Pals S, Shapiro RL, Wang R, Lei Q, DeGruttola V, Makhema J, Essex M, Lockman S, Tchetgen Tchetgen EJ. Population uptake of HIV testing, treatment, viral suppression, and male circumcision following a community-based intervention in Botswana (Ya Tsie/BCPP): a cluster-randomised trial. *Lancet HIV*. 2020 Jun;7(6): PMID: 32504575
14. Ajibola G, Moyo S, Mohammed T, Moseki S, Jack D, Sakoi M, Batlang O, Maswabi K, Bennett K, Hughes MD, Lockman S, Makhema JM, Lichterfeld M, Kuritzkes DR, Shapiro RL. HIV diagnostic algorithm requires confirmatory testing for initial indeterminate or positive screens in the first week of life. *AIDS*. 2020 Jun 1;34(7): 10. PMID: 32287064
15. Bearden DR, Omech B, Rulaganyang I, Sesay SO, Kolson DL, Kasner SE, Mullen MT. Stroke and HIV in Botswana: A prospective study of risk factors and outcomes. *J Neurol Sci*. 2020 Jun 15; PMID: 32244092
16. Kebaabetswe P, Manyake K, Kadima E, Auletta-Young C, Chakalisa U, Sekoto T, Dintwa OM, Mmalane M, Makhema J, Lebelonyane R, Bachanas P, Plank R, Gaolathe T, Lockman S, Holme MP. Barriers and facilitators to linkage to care and ART initiation in the setting of high ART coverage in Botswana. *AIDS Care*. 2020 Jun;32(6):722-728.

Protect yourself and others from getting sick

Wash your hands



- after coughing or sneezing
- when caring for the sick
- before, during and after you prepare food
- before eating
- after toilet use
- when hands are visibly dirty
- after handling animals or animal waste

Botswana Harvard AIDS Institute Partnership
Private Bag BO320
Gaborone, Botswana
Tel: (+267) 3902671
Fax: (+267) 3901284
Web: www.bhp.org.bw