

## BHP Conducts Study on Immune Responses to Covid-19



CoVPN 5001 Study Coordinator, Dr Alice Sehurutshi presenting the study to Stakeholders



BHP Chief Executive Officer, Dr Joseph Makhema presenting on COVID-19 Vaccines

The Botswana Harvard AIDS Institute Partnership (BHP) in collaboration with COVID-19 Prevention Network (CoVPN) is conducting a study called CoVPN 5001 which is a prospective study of acute immune responses to SARS-CoV-2 infection. This is a multisite study conducted in 13 Countries and 53 sites affiliated to the COVPN. These Countries are Botswana, Argentina, Brazil, Kenya, Malawi, Mexico, Mozambique, Peru, South Africa, Tanzania, United States, Zambia and Zimbabwe.

The study is sponsored by the National Institutes of Health (NIH). "Primary objectives of the study are 1: To

characterize innate and cellular immune responses to SARS-CoV-2 infection during infection with SARS-CoV-2 in asymptomatic and acutely symptomatic participants and 2: To generate standardized datasets characterizing the quality, magnitude, and kinetics of humoral immune responses to SARS-CoV-2 infection in asymptomatic participants and symptomatic participants (both hospitalized and non-hospitalized) experiencing a range of clinical outcomes in order to prepare for similar assessments during trials of immune-based preventive strategies" said CoVPN 5001 Study Coordinator, Dr Alice Sehurutshi.

BHP held a stakeholders engagement meeting under COVID-19 health protocols on the 29th January 2021 at Travel Lodge Gaborone to introduce the study to stakeholders and the public.

The study aims to enrol 800 participants across all sites. The Gaborone site enrolled the first of an expected 20 participants on February 17, 2021 with 7 participants (6 female and 1 male) enrolled as of April 13, 2021. The study is enrolling SARS CoV-2 Positive Test (PCR/ANTIGEN) participants aged 18 or older who are able and willing to provide informed consent and allow access to medical records.

These participants shall be enrolled into either of three Cohorts/Study groups; Group 1: Asymptomatic participants with no symptoms within 2 weeks prior to positive test, and have a positive SARS-CoV-2 test within six days prior to enrolment up to 10 days prior to enrolment, Group 2: Symptomatic participants presenting with mild symptoms from onset within 6 to 14 days and have a positive SARS-CoV-2 test within 6 to

10 days or Group 3: Hospitalized, COVID-19 participants within 3 days prior to enrolment.

Stakeholders at the meeting were given presentations on the general Botswana COVID-19 status from BHP Clinical Trials Unit Coordinator Dr Gaerolwe Masheto, Dr Kaelo Seatla PhD fellow at BHP presented “The SARS-CoV-2 pathophysiology” for meeting participants to understand the origin, nature and behaviour of the virus.

BHP CEO, Dr Joseph Makhema presented on COVID-19 Vaccines to give the stakeholders an appreciation of the available COVID-19 vaccines, development and clinical trial process, the different types and efficacy, and expected challenges associated with COVID-19 vaccines and vaccination process, while Community Engagement Coordinator, Ernest Moseki gave a presentation on Community engagement issues, highlighting fake news circulating on various media around the world on COVID-19 vaccines that may cause anxiety, fear and hesitancy of vaccination amongst communities.



Part of the Stakeholders listening to the presentations



Comfort Maphorisa



Dr Gaerolwe Masheto



Ernest Moseki



Dr Mompoti Mmalane

# Sesikalla Pharmacy Open for Business



Sesikalla Pharmacy Technician, Batho Kenosi

The Botswana Harvard AIDS Institute Partnership (BHP) has launched Sesikalla Pharmacy as part of Sesikalla Investment (Pty) Ltd, a business venture initiative established to generate additional and alternative revenue streams for BHP. The BHP Director of Finance and Grants, Cornelius Gaetsaloe made the announcement of the pharmacy launch on February 01, 2021.

“The opening of the pharmacy is an important step in addressing sustainability and diversifying BHP’s revenue streams in line with its strategic plan, and that the BHP looks forward to the success of this venture,” said Gaetsaloe

“The vision for the business was to establish a pharmacy and clinical space within an existing clinic with desired proximity to BHP in order to manage the associated risks and startup costs. I am pleased to announce that the pharmacy side of this endeavour is now operational and the pharmacy doors are open for trade,” said Gaetsaloe.

The pharmacy is located at Plot 2642, Phuti Crescent (off Chuma Drive), Extension 9, Gaborone, and opposite

Avani Gaborone Resort & Casino within the premises of Marymont and Springfield Clinic.

The pharmacy is open to the general public from 7:30am to 4:30pm weekdays from Monday to Friday. Gaetsaloe pointed out that the trading hours and days would be expanded as the pharmacy becomes more established. It is open for both prescription and over the counter sales and BHP staff is encouraged to utilize the pharmacy for both their prescription medication and over the counter purchases.

“We look forward to your participation in growing and contributing to the business of BHP alternative revenues streams which shall provide much needed discretionary funding for the sustainability of the BHP” said the Director of Finance and Grants.

Sesikalla Investment was incorporated as a Proprietary Limited Company in 2017 with the core mandate of generating financial and in-kind resources for the BHP through the provision of clinical, pharmacy and laboratory services based on a commercial private sector business model.

# BHP Wins HPTN Excellence Award



## HPTN 084



In 2019, Gaborone CRS was also recognised for being the only site to enroll a participant with a Modified Voice Risk Score of 9.

The Botswana Harvard AIDS Institute Partnership (BHP) ended the year 2020 on a high note buoyed up by being the recipient of an award from the HIV Prevention Trials Network (HPTN) for excellent retention of study participants on the HPTN 084 study. HPTN 084 study is a Phase 3 Double Blind Safety and Efficacy study of Long-Acting Injectable Cabotegravir (CAB LA) compared to Daily Oral Truvada (TDF/FTC) for Pre-Exposure Prophylaxis (PrEP) in HIV-uninfected women.

The Gaborone CRS (BHP) was recognized for excellent retention at the last two study visits as at September 17, 2020 with less than or equal to 2.2% of study participants missing the last two study visits. According to the HPTN Study Coordinator, Dr Alice Sehurutshi, the site achieved above average retention rate since enrolling in February 2018 which means participants were able to attend scheduled study visits.

To ensure excellent retention, BHP employed different retention strategies to address challenges faced by women which contribute to missed clinical care and study visits. Despite their high risk for HIV acquisition, unaddressed, these challenges very often ultimately interfere with study participation hindering participant retention in HIV prevention trials. Retention strategies included community engagement and education,

interpersonal relationship building with study participants, incentives such as food and air time vouchers, SMS communication, staff capacity building and training, participants' wellness day, home visits and tracing of participants, including provision of transport to attend scheduled study visits.

Dr Sehutshi reiterates that this was achieved as a result of every staff member's effort which ensured that participants received best service including psychosocial support and constant communication with the participants despite the many challenges posed by COVID-19 pandemic. She highlighted that assisting participants with transport to come to site also played a major role.

"The award is an inspiration and encouragement to the team to strive for excellent retention rate and for overall great service during the conduct of all studies at BHP in general," said Dr Sehurutshi.

The award was awarded to Gaborone site amongst 20 sites in seven countries in Sub-Saharan Africa that have been participating in the study. Countries conducting the HPTN 084 study are, Botswana, South Africa, Zimbabwe, Eswatini, Uganda, Malawi and Kenya.

# BHP enforces compliance to COVID-19 Protocols

As COVID-19 positive cases rapidly increase in Botswana, the Botswana Harvard AIDS Institute Partnership (BHP) management has once again appealed to staff and emphasized the need to adhere to all institutional and National COVID-19 protocols and guidelines at all times in order to contain the spread of the disease. To buttress compliance, BHP Chief Executive Officer, Dr Joseph Makhema issued a memorandum to staff on the status of SARS-COV-2 infection at BHP on February 24, 2021.

Since the pandemic, out of the BHP workforce of 231 as of April 13, 2021, there have been 32 total number of BHP staff infections, the majority of which have been community acquired. Fortunately there have been no fatalities. BHP has a strict protocol for masks to be worn at all times and is issuing staff with a box of surgical masks every six weeks translating to one new 3ply mask per day. Work place social distancing and work from home mandate is part of the robust measures being employed.

Dr Makhema emphasized that while it was preferable to use open spaces, occupation of common spaces for socializing and where staff eat and are compelled to remove their masks **should not** exceed 15 minutes at a time and that the number of people in the kitchen or tea rooms at any given time **should not** exceed 3 persons.

He added that each and every person who uses the common spaces for their meals **should** make sure they clear the tables after use as well as wiping the table with sanitizer for the next person to use.

The Chief Executive Officer requested and advised those who have cars or offices to use them for any of their meals, tea or lunch so as to help reduce congestion in the kitchens and tearooms. Other areas that can be used weather allowing, are open spaces outside buildings.

“Study Coordinators and Managers are to ensure that their team members adhere to the requirement that if staff have any suspicious symptoms, or are direct contacts of someone who has tested positive, they must

not come to work until they have been cleared of SARS-COV-2 infection,” he reiterated.

He however explained that during the period that affected employees are self isolating and otherwise well, resources permitting, they must and are expected to continue working from home. Study Coordinators and Managers are to ensure that key staff is facilitated and resourced to work from home consistent with current BHP social distancing protocols as way of further reducing congestion at the workplace.

Dr Makhema pointed out that Drivers should in addition to having sanitizers in their vehicles, be provided with a box of surgical masks specifically to be given to their clients that they pick up to substitute or double mask cloth masks that the passenger may be using.

“These new guidelines are necessary and are to bolster the existing current protocols. Staff is urged to comply, be vigilant and stay safe at all times,” said Dr Makhema.

The Chairperson of the BHP COVID-19 Committee, Dr Ponego Ponatshego had earlier noted that COVID-19 community spread has become well established, especially in the greater Gaborone zone where there has been an upsurge of new infections.

“Despite our best efforts, BHP has not been spared and this speaks to the fact that we cannot afford complacency in following the protocols, guidelines and measures that are in place to control transmission within the BHP and as we interact with the outside community,” said Dr Ponatshego.

He stressed the importance of maintaining discipline in the implementation of all precautionary measures to ensure prevention of the spread of SARS-COV-2 infection which is critical since any increase in infections may spiral to levels that may disrupt the operations at BHP if not controlled. Dr Ponatshego further encourages and appreciates efforts by all staff members to adhere to preventative measures.

# BHP Strives To Build Capacity For Early Stage Investigators



Dr Simani Gaseitsiwe

**B**otswana Harvard AIDS Institute Partnership (BHP) aims to enhance its Capacity Building strategy in order to vigorously develop Early Stage Investigators (ESI) who will contribute to the further growth of BHP. Speaking at the first Study Coordinators Meeting of 2021, Dr Simani Gaseitsiwe emphasized the need for BHP to heighten its development programme by investing in the development of ESI.

Dr Gaseitsiwe described ESI as investigators or research staff that are within 10 years of completing their doctoral studies or equivalent training. He said by facilitating growth of ESI, also known as Early Career Researchers (ECR), BHP would build a pool of Investigator talent who would be adequately trained and could be resourced or lead efforts to independently source resources to lead research projects as Principal Investigators.

“Specific targets could then be set, like increasing of the ESI grants received by BHP in two years which in turn would translate to having a pool of independent ESI who are competitive for bigger grants to drive research excellence and innovation,” he said.

These Early State Investigators shall need mentoring by senior investigators to provide support and guidance throughout the different stages of development from early stage, mid stage to established Investigators as

per their specific research interests. Dr Gaseitsiwe said that in identifying research mentors for ESI, BHP should look for leading experts in the specific areas of research interest locally within BHP and Botswana but also from the region and internationally. He underscored that BHP should leverage on the great collaborations that it has developed over time with different academic and research institutions around the world.

Dr Gaseitsiwe points out that the institutional commitments of BHP should include having a strategic institutional seed funding mechanism to generate pilot data and a proactive linking of researchers/investigators to grant opportunities. He proposed that monthly meetings would be needed to identify, share and strategize. He said there would be need for scheduled regular fora to generate research ideas such as the BHP Research Day to showcase different studies and projects as well as Conference and Workshop attendance.

“In addition BHP should address any identified gaps in skills to conduct research, and provide training on grant and manuscript writing which is vital. We could then challenge and expect that annually at least two manuscripts be published annually and at least two grants be applied for annually by each ESI,” said Dr Gaseitsiwe.

## ESI Research Grants Opportunities

Dr Gaseitsiwe shared a listing of research grant opportunities and experience needed for principal investigators. Below are some identified grant opportunities available for ESI;

- Wellcome Trust International Training and Intermediate Fellowships
- EDCTP Training grants
- Harvard CFAR
- Fogarty training grants
- AAS - Future Leaders – African Independent Research (FLAIR) Fellowships
- AAS/NIH - African Postdoctoral Training Initiative (APTI)
- L’Oreal Women in Science
- Royal Society of Tropical Medicine & Hygiene Small grants programme.

# HBNU 2020-2021 Fellow Spotlight: Kaelo Seatla, MBBS

Working at one of the best research institutions in Africa, the Botswana-Harvard AIDS Institute Partnership for Research and Education (BHP) has exposed me to brilliant, supportive mentors working on HIV-related research. Botswana has a high HIV prevalence of about 20% and has been a leader in responding to the epidemic. Botswana was the first country in Africa to provide free antiretroviral drugs (ARVs) to HIV diagnosed individuals, and the first country to introduce dolutegravir (DTG) based regimens to its HIV treatment programme. DTG is a potent anti-HIV drug with a high barrier to resistance and better safety profile and is recommended as the preferred first line anti-HIV anchor drug by the world health organisation (WHO). However, our group at BHP has shown that resistance to DTG can occur especially amongst treatment experienced patients experiencing virological failure. Furthermore, determining for resistance to DTG is very expensive and out-of-reach of many low- and middle-income countries (LMICs) such as Botswana.

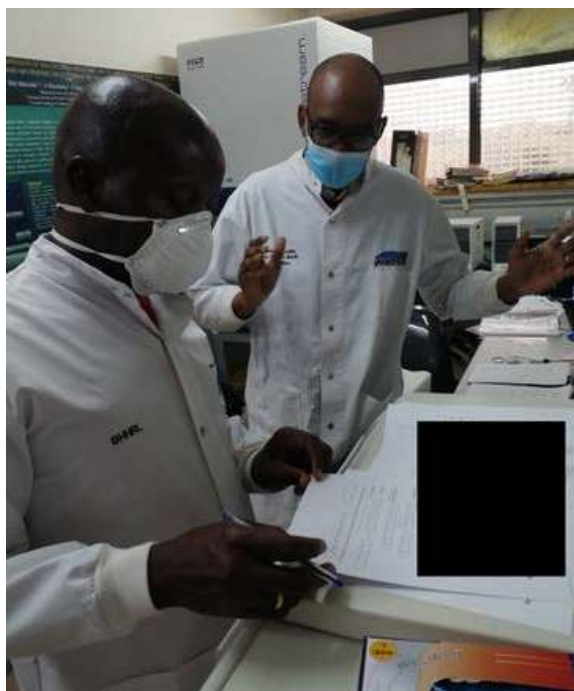
shown in Figure 1. We have also started fieldwork by sensitizing stakeholders from the Botswana Ministry of Health and Wellness and various health facilities about the availability of our in-house assay, as shown in Figure 2.



**Figure 2. Dr Seatla at a field site after sensitizing stakeholders on his homebrew assay**

As part of my PhD work, we have developed a low-cost home brew assay that determines for DTG drug resistance mutations. The in-house assay performs quite well, with similar performance characteristics as the commercial assays, but at about 75% less of the costs of the commercial assay. For my HBNU Fogarty fellowship, we aim to build on this work and perform a WHO validation of our assay to make it available for routine use in Botswana and other LMICs. We believe this work will increase access to low-cost drug resistance testing in LMICs and ensure that HIV diagnosed individuals are afforded a right to have drug resistance testing done if their virus is not suppressed while on DTG based regimens.

Due to travel restrictions and the closure of borders related to the ongoing COVID-19 pandemic, we experienced a delay in receiving some of the laboratory reagents. This challenge has since been overcome with expert guidance from my mentors. I am on track to successfully completing my fellowship and would like to express my sincere gratitude to my mentors, Drs. Simani Gaseitsiwe, Shahin Lockman, HBNU alumnus Sikhulile Moyo and my Supervisor at the University of Botswana- Prof Ishmael Kasvosve. **SOURCE:** [HBNW Spring Newsletter](#).



**Figure 1. Dr Simani Gaseitsiwe supervising lab work**

We have obtained access to WHO recommended Virology Quality Assurance Program (VQA) plasma panels from Rush University representing various HIV subtypes and have begun experimental laboratory work, which is

# HIV Self-testing Shows High Acceptability Among Female Sex Workers

A study on the acceptability of oral HIV self-testing (HIVST) among female sex workers (FSW) in Gaborone also known as Ikitse Study has shown high acceptability of the tool among FSW. The study assessed the acceptability of, obstacles to, and preferred approaches to HIV self-testing in FSW as well as assessing whether FSW would use and/or share HIV self-test kits with others. The Principal Investigator (PI) of the study, Dr Emily Shava shared the study findings with the Ministry of Health and Wellness (MOHW) on February 09, 2021.

Ikitse Study was conducted in Gaborone, estimated to have around 2,000 FSW who work in and around Gaborone. The study was conducted collaboratively by the Botswana Harvard AIDS Institute Partnership and the Nkaikela Youth Group, an organization which provides health care and social support to FSW in the Gaborone area.

Dr Shava explained that the study concept was informed by the much higher HIV prevalence among FSW in sub-Saharan Africa compared to the general population and the need to know HIV testing trends and preferences for HIV testing in this key population in Botswana. In Botswana, HIV prevalence among FSW was found to be very high at 62% according to the 2012 Botswana Biological and Behavioural Surveillance Survey (BBSS) among key populations.

Dr Shava highlighted that HIV self-testing has been approved as a screening test per WHO guidance but has not been well studied in the Botswana context. She said that the study team hypothesis was that HIV self-testing would be useful for increasing testing rates in FSW since sex work is believed to be one of the drivers of the HIV/AIDS epidemic.

“We conducted semi-structured in-depth face to face interviews among FSW, nurses and lay counsellors providing services to FSWs in Botswana and we aimed to gain understanding of perceived acceptability, anticipated barriers, and preferred approaches to HIVST among FSW,” she said.

The study interviews were conducted between February and March 2019 among 30 consenting HIV-negative FSWs (18 years or older) and five health workers at non-governmental organizations (NGOs) that are working



Ikitse Study Principal Investigator, Dr Emily Shava

directly with FSW or involved in providing services to FSW in Gaborone. The Principal Investigator said that they had elicited perceived barriers to, facilitators of, and advantages of oral HIV-self testing among FSW and their healthcare providers. The results indicate that 90% of FSW interviewed expressed great interest in using HIVST kits.

Facilitators of HIVST were awareness of own risky sexual behaviours, desire to stay healthy, and perceived autonomy over one's healthcare decisions. The perceived advantages of HIVST included convenience, privacy, and perception of decreased stigma while barriers to HIVST included lack of knowledge about the HIVST kit, fear of testing due to anticipated stigma, mistrust of the test's accuracy, doubt of self-competency to perform HIVST, and concerns about not linking to care as it is standard care done at testing facilities.



The study also sought to find out if FSW could facilitate sharing testing kits or if they would help each other perform the tests. The findings indicate that assisting someone to test was noted as being good for providing emotional support but can lead to breaches in confidentiality. Care providers expressed concerns over low literacy among FSWs which could affect understanding of testing instructions, competency to perform testing and interpretation of results.

Dr Shava recommended implementing individual HIV self-testing inclusive of FSW and healthcare providers. She stated that both FSW and their care providers recommended that prior to implementation of oral HIV-self testing, there should be wide dissemination of information on HIV self-testing in general using different media and other communication and educational platforms. The information provided should include accuracy of the test, storage of the test kit, how and when to perform the test, how to dispose of the used test kits, and steps to take after obtaining test results. FSW in particular had stressed the importance of

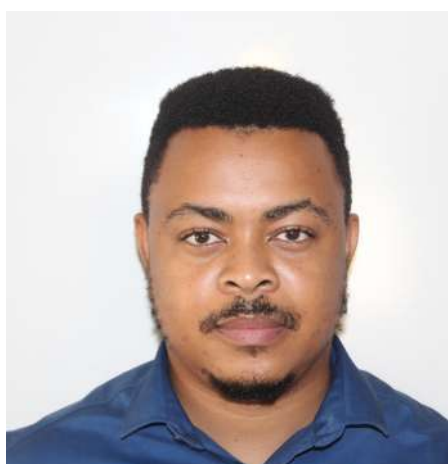
empowering peer counselling by fellow FSW capacitated to provide this information and education, with guidance from healthcare providers.

“Both FSW and healthcare providers emphasized that it would be important to ensure that key populations have access to HIV self-test kits by making test kits available at centers or organizations that provide care and support to these populations,” said Dr Shava.

The study was funded by Harvard University Center for AIDS Research (HU CFAR NIH/NIAID fund).

**Publication:** Shava E, Manyake K, Mdluli C, Maribe K, Monnapula N, Nkomo B, Mosepele M, Moyo S, Mmalane M, Bärnighausen T, Makhema J, Bogart L.M, Lockman S. (2020) Acceptability of oral HIV self-testing among female sex workers in Gaborone, Botswana. PLoS ONE 15(7): e0236052. <https://doi.org/10.1371/journal.pone.0236052>

## Promotions (4th Quarter 2020 to 1st Quarter 2021)



**Name:**  
Kevin Opelkgale

**Previous Position:**  
Grants Officer

**Current Position:**  
Senior Grants Officer



**Name:**  
Ngozana Seonyatseng

**Previous Position:**  
Senior Regulatory Officer

**Current Position:**  
Regulatory Coordinator



**Name:**  
Naledi Kamanga

**Previous Position:**  
Research Assistant-Tsepamo

**Current Position:**  
Research Assistant QA/QC  
-Motheo Study



**Name:**  
Rapelang Mosimane

**Previous Position:**  
Research Nurse

**Current Position:**  
Head Research Nurse -HPTN



**Name:**  
Mpho Raesi

**Previous Position:**  
Quality Assurance Nurse

**Current Position:**  
CRS Coordinator & IMPAACT  
Coordinator



**Name:**  
Lesedi Tirelo

**Previous Position:**  
Head Research Nurse - CTU

**Current Position:**  
QA/QC Coordinator -CTU



**Name:**  
Karabo Gabaikgopole

**Previous Position:**  
Accounts Clerk

**Current Position:**  
Accountant



**Name:**  
Aamirah Mussa

**Previous Position:**  
Project Manager

**Current Position:**  
Senior Programmes Manager-  
CODA & STI studies



**Name:**  
Keatlaretse Tebele

**Previous Position:**  
Cleaner

**Current Position:**  
Administration Assistant

# New BHP Employees from November 2020 to March 2021



**Name:**  
Mompoti Wasekgwa

**Position:**  
Driver -Tshilo Dikotla

**Date Joined:**  
November 2020



**Name:**  
Ishmael Gaontebale

**Position:**  
Procurement Intern

**Date Joined:**  
November 2020



**Name:**  
Kealeboga Malatelele

**Position:**  
Regulatory Intern

**Date Joined:**  
November 2020



**Name:**  
Neo Ndlovu

**Position:**  
Research Assistant-CODA & STI

**Date Joined:**  
November 2020



**Name:**  
Lefhela Tamothiba

**Position:**  
Research Assistant-CODA & STI

**Date Joined:**  
November 2020



**Name:**  
Thato Kgamaetsile

**Position:**  
DMC Intern

**Date Joined:**  
November 2020



**Name:**  
Selebaleng Simon

**Position:**  
Study Nurse Coordinator

**Date Joined:**  
November 2020



**Name:**  
Marian Budu

**Position:**  
Study Phycian -CTU

**Date Joined:**  
December 2020



**Name:**  
Kedibonye Thankane

**Position:**  
Study Nurse - Motheo

**Date Joined:**  
December 2020



**Name:**  
Botshelo Radibe

**Position:**  
Intern - Laboratory

**Date Joined:**  
December 2020



**Name:**  
Boitumelo Zuze

**Position:**  
Intern -Laboratory

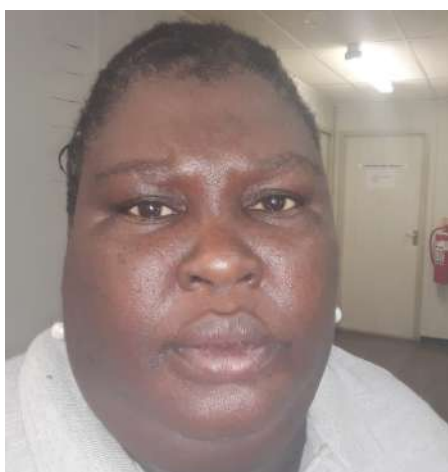
**Date Joined:**  
December 2020



**Name:**  
Olorato Morerinyane

**Position:**  
Statistician Intern- Laboratory

**Date Joined:**  
October 2020



**Name:**  
Gofaone Moatshe

**Position:**  
Cleaner - CTU Molepolole

**Date Joined:**  
December 2020



**Name:**  
Irene Kitsi

**Position:**  
Research Assistant - Motheo

**Date Joined:**  
January 2021



**Name:**  
Aratwa Tumagole

**Position:**  
Research Assistant - Motheo

**Date Joined:**  
January 2021



**Name:**  
Doreen Machete

**Position:**  
Grants Officer

**Date Joined:**  
January 2021



**Name:**  
Olebogeng Selepe

**Position:**  
Research Assistant - Floursih

**Date Joined:**  
January 2021



**Name:**  
Lesedi Makgeng

**Position:**  
Research Assistant - Flourish

**Date Joined:**  
January 2021



**Name:**  
Gaontebale Elija

**Position:**  
Research Assistant - Flourish

**Date Joined:**  
January 2021



**Name:**  
Onalenna Mokoto

**Position:**  
Research Assistant - Tsepamo

**Date Joined:**  
January 2021



**Name:**  
Babusi Phetogo

**Position:**  
Study Physician -CTU

**Date Joined:**  
January 2021



**Name:**  
Patrick Ntshutelang

**Position:**  
Research Nurse-HPTN

**Date Joined:**  
January 2021



**Name:**  
Merlin Alvina Esterhuizen

**Position:**  
Research Assiatant -Phemelo

**Date Joined:**  
January 2021



**Name:**  
Gorata Motaung

**Position:**  
Cleaner - CTU

**Date Joined:**  
January 2021



**Name:**  
Reginah Pheto

**Position:**  
Cleaner- Administration

**Date Joined:**  
January 2021



**Name:**  
Duduetsang Mofokeng

**Position:**  
Accounts Assistant

**Date Joined:**  
January 2021



**Name:**  
Gaokgakala Legotlho

**Position:**  
Research Assiatant - Flourish

**Date Joined:**  
February 2021



**Name:**  
Beauty Malumbela

**Position:**  
HR & Operations Manager

**Date Joined:**  
February 2021



**Name:**  
Omphile Masuku

**Position:**  
Senior HR Officer

**Date Joined:**  
March 2021



**Name:**  
Patricia Ketlogetswe

**Position:**  
Cleaner Supervisor-Admin

**Date Joined:**  
March 2021



**Name:**  
Jaqueline Petros

**Position:**  
Research Assistant - Tsepamo

**Date Joined:**  
March 2021



**Name:**  
Mukani Bhebe

**Position:**  
Cleaner- EIT Francistown

**Date Joined:**  
February 2021

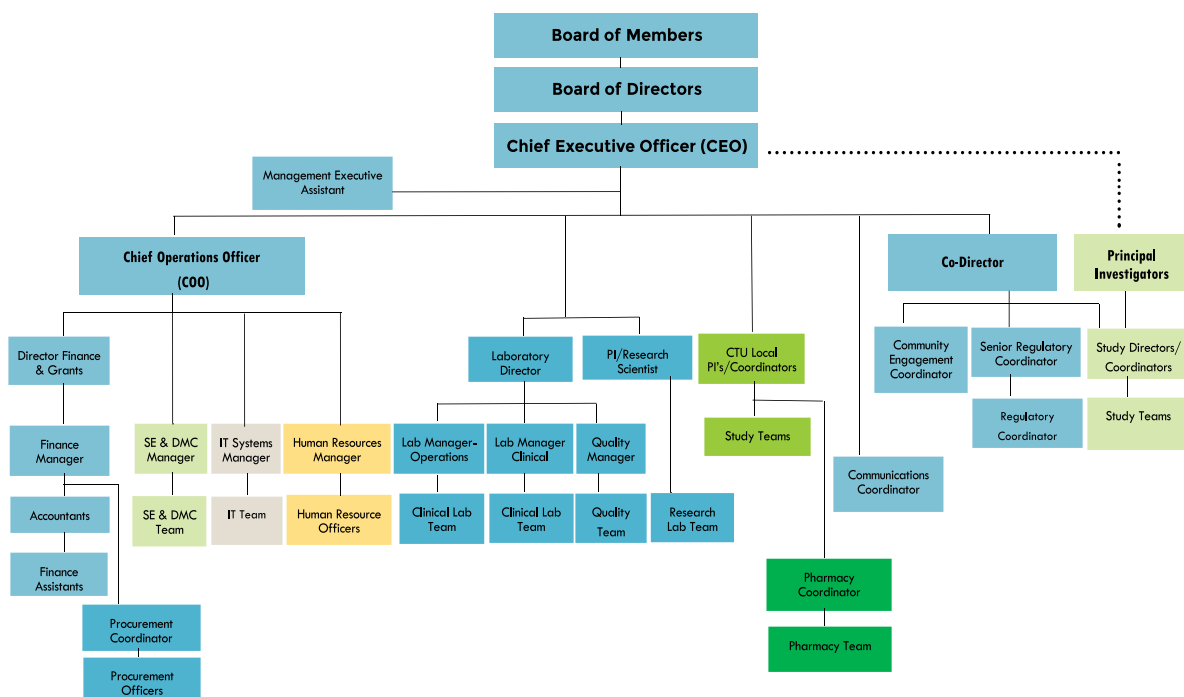


**Name:**  
Koziba Tabokwa

**Position:**  
Accounts Intern

**Date Joined:**  
January 2021

## ORGANISATIONAL STRUCTURE



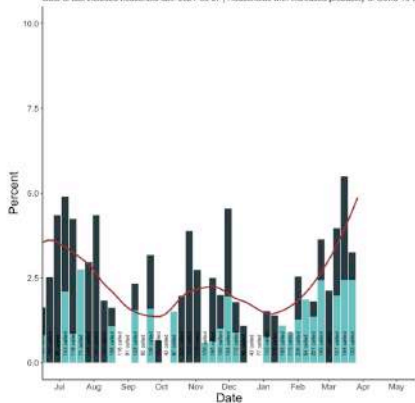


# Thabatsse Covid-19 Syndromic Surveillance



**Households with Member(s) with New CLI Symptoms**  
Thabatsse Cohort, 2020-21

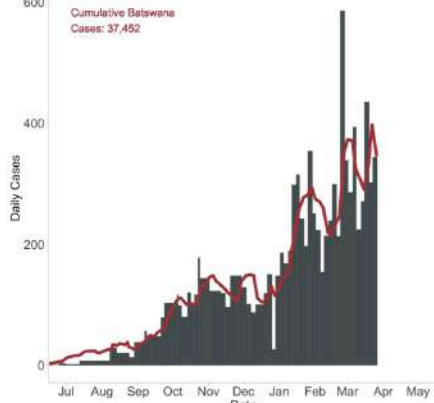
Date of last included household call: 2021-03-27 | Households with increased probability of Covid-19 colored



Note: Bars are weekly totals and the 14-day rolling average by date of call. Households were color-coded by probability of Covid-19 (from multiple symptomatic members, reported Covid-19 cases, or participant had asymptomatic path).  
Source: Thabatsse Cancer Cohort/Botswana Harvard AIDS Institute

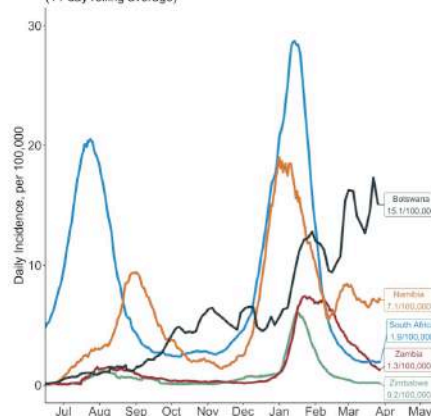
**Daily Covid-19 Diagnoses, Botswana only**

Last data release: 2021-03-26 | 14-day rolling average included



Note: An equal number of daily cases are assumed to have been diagnosed between data releases.  
Source: Public data releases from the Botswana National Emergency Operation Centre (NEOC)

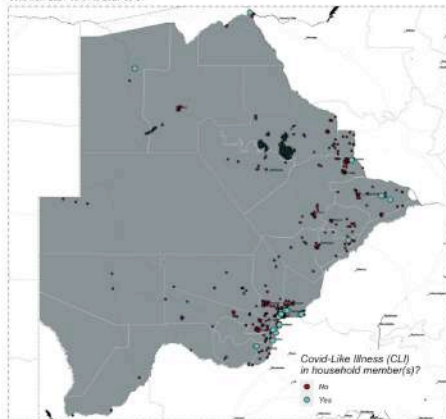
**Recent incidence of Covid-19**  
(14-day rolling average)



Source: Public data releases from the Botswana National Emergency Operation Centre (NEOC) and JHO CSRS

**Households and Covid-Like Illnesses**

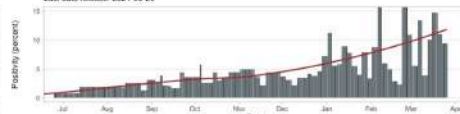
Call from 2021-03-01 to 2021-03-27



Source: House calls and symptom review calls for Thabatsse Cancer Cohort Botswana Harvard AIDS Institute

**SARS-CoV-2 Test Positivity, Botswana only**

Last data release: 2021-03-26



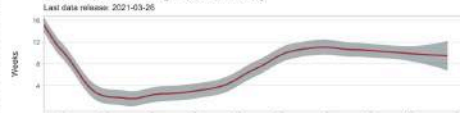
**Daily SARS-CoV-2 Tests Performed, Botswana only**

Last data release: 2021-03-26



**Covid-19 Epidemic Doubling Time, Botswana only**

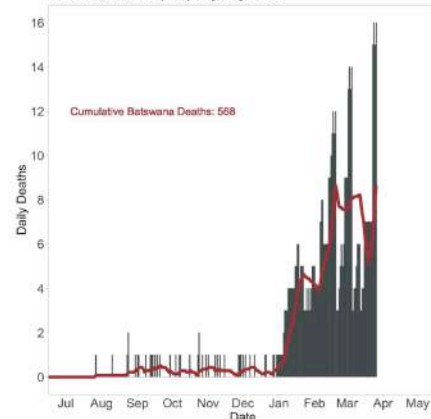
Last data release: 2021-03-26



Note: An equal number of daily infections are assumed to have been diagnosed between data releases.  
Source: Public data releases from the Botswana National Emergency Operation Centre (NEOC)

**Daily Covid-19 Deaths, Botswana only**

Last data release: 2021-03-26 | 14-day rolling average included



Note: An equal number of deaths are assumed to have been diagnosed between data releases.  
Source: Public data releases from the Botswana National Emergency Operation Centre (NEOC)

**Methodology**

The Thabatsse Cancer Cohort (2010-present) includes consenting patients with cancer receiving care at Princess Marina Hospital, Nyangabane Referral Hospital, Botswana Private Hospital, and Gaborone Private Hospital. Approximately 8500 patients have been enrolled to date. Following enrollment, participants are called every three months for up to 5 years to monitor clinical status. Beginning 1 April 2020, to enable facilitation of care, participants are asked specifically about new Covid-19 like symptoms in prior two weeks among household members (sore throat, fever, cough, rhinorrhea). Participants are provided with counseling and referral as necessary. Locations are for the nearest government health facility NOT the actual residence.

**Limitations**

Households included in the Thabatsse Cancer Cohort are NOT expected to fully representative of the Botswana population. It is expected that regions of Botswana with lower cancer incidence or decreased access to cancer care will be underrepresented. Some symptoms of cancer (e.g. cough, shortness of breath) overlap with Covid 19 resulting in a positive screen in the absence of a viral infection. Additionally, individuals living with cancer may have different adherence to social distancing guidelines or likelihood of expressing symptoms of respiratory viral infection than the general population. The symptoms of Covid-19 overlap with other common illnesses (e.g. pneumonia, influenza, obstructive lung disease) and are non-specific. These data are provided as one source of information to be interpreted with caution and in combination with other sources.



# BHP Associated Research, and Associated Investigators Publications (January to March 2021)

1. Ending deaths from HIV-related cryptococcal meningitis by 2030. Shroufi A, Chiller T, Jordan A, Denning DW, Harrison TS, Govender NP, Loyse A, Baptiste S, Rajasingham R, Boulware DR, Ribeiro I, Jarvis JN, Van Cutsem G. *Lancet Infect Dis*. 2021 Jan;21(1):16-18. doi: 10.1016/S1473-3099(20)30909-9. Epub 2020 Nov 30. PMID: 33271065.
2. Utility of CD4 count measurement in the era of universal antiretroviral therapy: an analysis of routine laboratory data in Botswana. Leeme TB, Mine M, Lechiile K, Mulenga F, Mosepele M, Mphoyakgosi T, Muthoga C, Ngidi J, Nkomo B, Ramaabya D, Tau M, Tenforde MW, Hayes R, Jarvis JN. *HIV Med*. 2021 Jan;22(1):1-10. doi: 10.1111/hiv.12951. Epub 2020 Sep 2. PMID: 32876378
3. Detection of Inducible Replication-Competent HIV-1 Subtype C Provirus Despite Long-Term Antiretroviral Treatment in Perinatally Infected Adolescents in Botswana. Koofhethile CK, Moyo S, Kotokwe KP, Chang C, Mokgethi P, Muchoba L, Mokgweetsi S, Makhema J, Lockman S, Gaseitsiwe S, de Oliveira T, Essex M, Shapiro R, Kanki P, Novitsky V. *AIDS Res Hum Retroviruses*. 2021 Jan;37(1):16-23. doi: 10.1089/AID.2020.0097. Epub 2020 Oct 19. PMID: 32935556
4. Impact of Community-Based Clinical Breast Examinations in Botswana. Dykstra M, Malone B, Lekuntwane O, Efstathiou J, Letsatsi V, Elmore S, Castro C, Tapela N, Dryden-Peterson S. *JCO Glob Oncol*. 2021 Jan;7:17-26. doi: 10.1200/GO.20.00231. PMID: 33405960
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7. HIV prevention research and COVID-19: putting ethics guidance to the test. Rennie S, Chege W, Schrumpp LA, Luna F, Klitzman R, Moseki E, Brown B, Wakefield S, Sugarman J. *BMC Med Ethics*. 2021 Jan 25;22(1):6. doi: 10.1186/s12910-021-00575-w. PMID: 33494754
8. The Global Cohort of Doctoral Students: Building Shared Global Health Research Capacity in High-Income and Low- and Middle-Income Countries. Abdelmenan S, Andersen CT, Getnet F, Iyer HS, Molebatsi K, Passarelli S, Sauer SM, Semakula M. *Ann Glob Health*. 2021 Jan 25;87(1):10. doi: 10.5334/aogh.3160. PMID: 33569284.
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