



YES NEWS

A NEWSLETTER FOR THE YOUNG EMERGING SCIENTISTS

Volume 2 Issue 1

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Quarterly theme: Role of evidence-based practice and data science: Understanding Global pandemics

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Editorial

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Welcome to the first edition in the volume 2 series of the YES News. The theme to mark the inaugural edition of the second series is: “The role of evidence-based practice and data science: understanding global pandemics”. Three months ago in December 2019, YES Zambia ran a data analysis and manuscript writing Bootcamp in collaboration with the Institute for Medical Research and Training (IMReT) and Trials of Excellence in Southern Africa (TESA) as our mandate for continued capacity building in evidence-based practice and data science. This short course was made open to anyone from any field of expertise provided the applicant had their own raw data set to use during the training among other requirements. The number of applications received exceeded our expectations, with more than 70 applicants against a limited capacity of 20 slots, the selection committee had the task of choosing the best candidates to undergo the training. This amplifies the need of such courses. Local researchers are becoming more and more interested in these courses. Thus, we intend to run another short course in data analysis and manuscript writing at the end of the year.

Currently we are in a period when the world has come to a standstill due to the COVID-19 pandemic with so many changes instigated to help curb the spread of the disease. How does evidence-based practice and data science come into play? In order for clinicians and researchers to have come up with the recommended preventive measures guidelines, it is because with evidence-based practice they are able to determine what works and what does not work by following up on what was done and what the outcomes were and if they have been supported scientifically. Therefore, it is imperative that as one continues to clinically practice, research questions are made along the way with different situations and hopefully answer them through conducting a good research. This is what forms the basis of evidence-based practice in the day-to-day management of cases. It further may be an anchor to understanding global pandemics and help to navigate the waters when hit by a pandemic.

Obviously, data science will play even a bigger role in understanding global pandemics like in the case of COVID-19

due to its multifaceted impact. Now is the time to collect good data to understand how the pandemic will affect the health, socioeconomic, cultural, and education sectors. Mathematical models of data science are being used currently to predict certain effects and outcomes of the disease to enhance the preparedness of all parties involved. Good policies that will have positive impact on forging the way forward for any cohort are those that will emanate from the data that has been derived and can be used in implementation science. Recommendations cannot be made based on hearsay; they must be supported evidently by data. So then in this face of

the COVID-19 pandemic, what questions are you asking that can be answered by a good research question whatever your field of practice? Is there anything outside the norm or what has been so far reported that could make a good case report for others to learn from your experience? What innovations will you bring on board to help with this global crisis in any way?

#This too will pass# #Stay home, stay safe# #shout out to all frontline health workers#

To all Young Emerging Scientists across all fields of science in both private and government institutions, if you would like to share your work through the YES NEWS, we accept well written articles in the form of:

Abstracts

Perspectives

Reports

To submit an article email: yesnewseditors@yeszambia.com



Data Analysis Boot Camp

Bootcamp Narrative- Dr. Jane Mumba and Dr. Christabel Phiri

As the world moves towards evidence-based medicine, the importance of producing quality and statistically sound research cannot be overemphasized. As such, in a quest for continued quality research output, YES Zambia collaborated with IMReT/Trials of Excellence in Southern Africa (TESA) to host a Data Analysis and Manuscript writing boot camp in December 2019. The 10 days training which took place in Livingstone was facilitated by Dr. Duncan Chanda, Dr. Peter Chipimo, Dr. Sikhulile Moyo and Prof Simbarashe Rusakaniko. The importance of this training was evidenced by a rich and diverse participation by scholars from different disciplines including Agriculture, Medicine, Health care and social sciences. In total, 19 participants were present with 11 females and 8 males with the former encompassing 1 medical student, an intern medical doctor, a physician, an obstetrician/gynecologist, 2 masters of public health, 3 Doctors of Philosophy in the fields of nursing, neuroscience and educational psychology respectively, a masters of philosophy in monitoring and evaluation and lastly but not least, a pharmacist with a master's degree. The latter and of course male

participation were graced with a general surgeon, a urologist, 2 masters of public health in epidemiology and biostatistics respectively, and finally 4 PhD students from the fields of otorhinolaryngology, agricultural science and educational psychology. Data analysis is a process of systematically applying statistical and/or logical techniques to describe and illustrate research findings. Data fluency is an essential tool necessary for optimizing the power of results found in research.

The first week of training gave an overview of how data should be analyzed through practical sessions where participants had a chance to synthesize their own data and interpret it in front of an audience. This gave room for positive criticism and built confidence for future presentations. In the second week, key components of a good research paper with full anatomy of each section and importance of using scientific grammar were outlined. This was strategically done to encourage researchers to publish their work in high impact journals with confidence. By the end of day 10, participants had gathered the essentials necessary to carry out good research and pass the knowledge on to others.

BOOTCAMP FACULTY

Professor Simbarashe Rusakaniko

DPhil, MSc Epidemiology and Biostatistics, Diploma in Epidemiology & Medical Statistics, BSC Honours in Mathematics (Statistics)



Prof. Simba Rusakaniko (PhD) is a professor of Biostatistics, Research & Epidemiology and Director for the Training Centre for Research & Training in Clinical Epidemiology & Biostatistics Department of Community Medicine at the University of Zimbabwe College of Health Sciences. He has served consultancies in development and public health in Zimbabwe and Africa, and a grant recipient for several awards including NIH, WHO, ICF, USAID and JHPIEGO to name a few. He has supervised and mentored more than 50 Masters' and PhD students and serves as a reviewer and editorial board member for the Central African Journal of Medicine. He has previously

conducted short courses for postgraduates, held by University of Witwatersrand, South Africa where he has been a visiting Professor and a distance education tutor in HIV/AIDS, at the London School of Tropical Hygiene and Medicine. His peer reviewed publications are in the links:

https://www.ncbi.nlm.nih.gov/pubmed/?term=Rusakaniko%20S%5BAuthor%5D&cauthor=true&cauthor_uid=31647837

https://www.researchgate.net/profile/Simbarashe_Rusakaniko

Dr Duncan M Chanda
MBChB, Dip.T.M., MSc



Dr Chanda is the PI for TESA and Medical Director for IMReT with over 10 years' experience as a clinical researcher with a focus on clinical/field trials of therapeutics and diagnostics in the field of HIV/AIDS and associated opportunistic infections including tuberculosis and cryptococcal meningitis research. His interest has been in health systems research which is critical to the delivery of diagnostics and therapeutics.

He has collaborations across the Southern and East African regions, London School of Hygiene and Tropical Medicine (LSHTM), University College London (UCL) and St George's Hospital among others. He is also a reviewer on a number of journals both locally and internationally. He served on the interim National Health Research Ethics Board (NHREB) and he has more than 25 publications in peer review journals. He also mentors students in research and supervise dissertations at the MSc level at the University of Zambia Medical School.

Dr Peter J. Chipimo
BSc. HB, MBChB, MPhil, PhD



Dr Chipimo is a Medical Epidemiologist with over 10 years' experience in Infectious Disease Epidemiology. His research interests include, outbreak investigation, population-based surveys on HIV, TB, Malaria and Maternal Child Health with a focus on disease prevention, risk assessment and prediction based on large longitudinal cohort studies, and casual inference, especially approaches to simulate randomization and generate causality from observational studies. More recently he has added Mental Health to his list of interests. He also has passion for teaching and holds a part-time Faculty position and teaches and supervises both Master's and PhD students. Dr Chipimo has previously worked as the Associate Director for Science with the US Centre for Disease Control and Prevention in the Zambia office. He currently works as the Chief HIV surveillance advisor at the National Public Health Institute and is part of the WHO regional pool of Afro-Experts in Epidemiology to reinforce capacities in response to health emergencies in the African region.

Dr Sikhulile Moyo

MSc, MPH, PhD (Research Scientist/Virologist), Laboratory Director at the Botswana-Harvard AIDS Institute Partnership (BHP) and a Research Associate with the Harvard T.H. Chan School of Public Health



Sikhulile Moyo MSc, MPH, PhD is a researcher based at the Botswana-Harvard AIDS Institute Partnership (BHP). He is the laboratory Director for BHP Clinical Trials and a Research Associate with the Harvard T.H. Chan School of Public Health. He oversees the design and implementation of laboratory components of clinical trials, observational and surveillance studies & mentoring of students/fellows. He has made a number of significant contributions in the prevention of mother-to-child HIV transmission studies and studies that have informed birth outcomes, health of HIV-exposed uninfected infants, surveillance of HIV incidence and monitoring of HIV mutations associated with drug resistance. He has over 125 publications in peer reviewed journals. His research interests are focused on characterization of acute

and primary HIV-1 subtype C infection, HIV cure, molecular epidemiology of HIV-1C infection, drug resistance, dynamics of viral evolution, design and evaluation of cross-sectional methods for estimating HIV incidence, including improved accuracy and incorporating analysis of HIV diversity and estimation of transmission time into multi-assay algorithms. He actively involved in capacity building initiatives including training and mentoring post graduate students and researchers.

Publications:

PubMed: <https://www.ncbi.nlm.nih.gov/myncbi/1xEvrNnomxt5f/bibliography/public/>

Researchgate: https://www.researchgate.net/profile/Sikhulile_Moyo

Bootcamp Testimonials

By Christabel Phiri



“constructive space to learn and get inspired to read more...”

“Train hard or go home!” were the words chanted as we made way to the conference hall on the first day of the Data Analysis and Manuscript training boot camp in Livingstone. Since the boot camp was being held in the tourist capital of the land, Livingstone, my spirits were excited as this meant loads of tourism on my part but little did I know a surprise was brewing. What actually obtained was two weeks filled with lectures and tasks from dawn to dusk and as if that was not enough, homework and timely assessments were the day’s order. As the room filled with different faces from various fields of academia, we all finally took our seats and were ready to begin. Short

introductions were made and the guest lecturers from Zimbabwe and Botswana gave the structure and overview of the two weeks that lay ahead.

Day 2 hit with a new surprise, a pre course assessment!” Who knew I would still be sitting for tests after years of writing exams” I thought. The exam was packed with questions on research, all things I had learnt about in my 6th year of community medicine and immediately forgot. At this point I realized learning had not taken place and that this boot camp was a huge leap if I am to pursue a career in research.

The following days were packed with intense lectures in biostatistics, practical analysis sessions, manuscript writing and several tasks to be completed by the next morning. The aim was to have our data analyzed and a draft abstract to be ready by day 10 of the camp. An opportunity was availed to present our work and receive harsh peer critique which created a constructive space to learn and get inspired to read more and consequently write better. The positive criticism and constant guidance from the facilitators aided me patch up many gaps in my data analysis and abstract write up.

By day 10, I was able to boldly present my abstract which was received with more positive than negative remarks. TESA and YES Zambia had successfully unleashed

the researcher in me, fully equipped with analytical skills and St-English (Statistical English) as our guest professor would call it.

On the last day, another exam was administered and this time around I answered it with confidence and ease. Congratulations were in order and a certificate of completion awarded. Who would have thought how much 12 days of undivided attention would yield? Of course, it would not be a complete camp without a visit to the mighty Victoria Falls.

On day 13, we had trained hard and could finally go home!

By Ella Zingini



The boot camp experience was a great awakening of the mind in relation to research applications and how to go about them. Sometimes as an academican

I tend to mechanically move through having acquired the basics a long time ago. The boot camp brought it all out in a brilliance that makes you re-embrace what makes scientific research fun and all enlightening. Thank you so much for reawakening the joy.

By Isabel M Mukali



At the time when I applied for the Boot camp, I was collecting data for my school evaluation assignment. I had no idea the different kinds of analysis I could do with my data and the rich information that was contained in my data until the Boot camp. Attending the Boot camp enriched my understanding and the skills I gained are priceless-key in my decision making and career. Thank you for the sponsorship!!!

By Jacob Ng'ambi



“...the boot camp was a game changer in my career of research...”

I'm Jacob Ng'ambi a Public Health Specialist for Ndola District Health Office. I'm a medical officer with 10 years practice in both public and private. I'm currently in stage IV studying Masters in public health at the University of Lusaka. I only knew about SPSS as a software for data analysis and had no experience with Stata before the boot camp. Learning Stata from the boot camp was a game changer in my career of research.

Reading journals and understanding the methods and results has been enhanced

by the training from the boot camp. Many thanks go to YES Zambia, IMReT and TESA for according me this priceless opportunity to train in data analysis and manuscript writing.

It would be great if our Schools of Medicine can adopt this model of the boot camp and incorporate it into the curriculums for our students to be exposed to research at an early stage when the interest is high as opposed to just fulfilling the training requirement at post graduate.

Previously, we had to hire statisticians to do our analysis without understanding what they were doing when writing papers but after the boot camp yes we could hire them but with insight academically and statistically of what is happening! My “statinglish” is better now.

Thank you Prof RAS, Dr Peter Chipimo, Dr Sikhulile and Dr Chanda for starting my new career in biostatistics.

By Sebean Mayimbo

“...it was a great motivation in my career...”

Sebean is a Lecturer at the University of Zambia who is currently pursuing a Doctor of Philosophy in Midwifery and Women’s Health. She has been working for the University of Zambia for over seven years now. Sebean acquired her BSc in Nursing at the University of Zambia from 2002 to 2005 after which she worked at Mufulira School of Midwifery as a Tutor. From 2007 to 2008 she pursued her Masters in Nursing at the University of Zambia. In 2010 she worked as a Tutor under the Maternal Help Project during the inception of Lewanika School of Midwifery in Mongu. In 2011 she joined Cavendish School of Medicine and facilitated in the inception of the Bachelor of Nursing and Midwifery Sciences. She later joined the University of Zambia in 2012 where she is currently a lecturer in School of Nursing sciences.

I attended the Data Analysis and Writing Boot camp in December, 2019. The information obtained was very helpful as I learnt the basics on Stata and managed to master a number of commands. This was greatly helpful as I managed to apply most of the principles that I learnt to my

study. The encouragement to publish was equally overwhelming. In other words, the Boot camp has changed my focus towards research as it was a great motivation in my career.



Sebean second from the left receiving her certificate of completion from lead trainer Professor Simbarashe Rusakaniko.



Participants and some faculty members take a break session from the course and enjoy a good laugh



International faculty members and part of the Bootcamp secretariat pose for a photo



A participant presents a summary of his research to the rest



“Train hard or go home!” This is how the bootcamp was...

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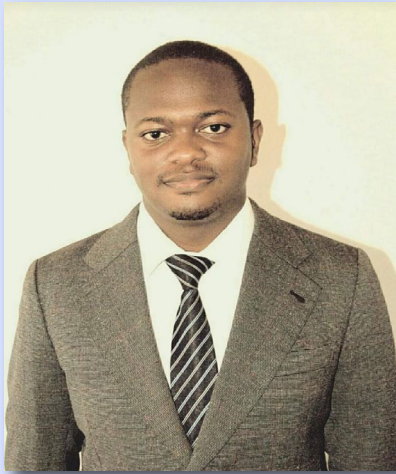
Faculty members (L-R): Dr Sikhulile Moyo, Dr Duncan Chanda, Prof Simbarashe Rusakaniko (lead trainer) and Dr Peter Chipimo.



Participants and Faculty pose for a photo after successful completion of the Data analysis and manuscript training.

Coronavirus Disease 2019 (COVID-19)

By Dr. Alinani Sikombe



What is it?

The Coronavirus Disease 2019 (COVID-19) is a respiratory disease caused by a new coronavirus 2019. The virus causes a respiratory illness similar to common cold and in severe cases leads to pneumonia, kidney failure and can result in death. The virus was identified in China in 2019 and has since spread to over 70 other countries.

Coronaviruses are a large family of viruses that are common in people and many different species of animals, including camels, cattle, cats, and bats. Rarely, animal Coronaviruses can infect people and then spread between people. These viruses mostly have their origins in bats. Sequences from this current outbreak suggest a likely single, recent emergence of this virus from an animal reservoir.

Since its discovery, COVID-19 is rapidly evolving and a lot of information is being discovered about the disease. The lack of

clinical trial data has made the treatment of infected persons challenging. Much of what is known today is likely to change as the disease evolves and is happening on a daily basis.

Clinical picture

There are a limited number of reports that describe the clinical presentation of patients with confirmed COVID-19, and most are limited to hospitalized patients with pneumonia. The incubation period has a wide range from 4-21 days.^{1,2} Frequently reported signs and symptoms include fever (83–98%), cough (46%–82%), myalgia or fatigue (11–44%), and shortness of breath (31%) at COVID-19 illness onset.^{3,5} Sore throat has also been reported in some patients early in the clinical course. Less commonly reported symptoms may include sputum production, headache, hemoptysis, and diarrhea. Some patients have experienced gastrointestinal symptoms such as diarrhea and nausea prior to developing fever and lower respiratory tract signs and symptoms. The fever course among patients with COVID-19 is not fully understood; it may be prolonged and intermittent. An asymptomatic infection has been described in one child with confirmed COVID-19 and chest Computed Tomography (CT) abnormalities.⁶

Risk factors for severe illness are not yet



clear, although older patients (median age 59 years) and those with chronic medical conditions (including diabetes, hypertension, and cardiovascular disease) may be at higher risk for severe illness.^{1,3,4}

But in short, common signs and symptoms in majority of the cases include; fever, chest pains, cough, difficulty in breathing, headache, shortness of breath and sore throat.

Clinical presentation among reported cases of COVID-19 varies in severity from asymptomatic infection or mild illness to severe or fatal illness. Some reports suggest the potential for clinical deterioration during the second week of illness.³ In one report, among patients with confirmed COVID-19 and pneumonia, just over half of patients developed dyspnea with a median of 8 days after illness onset (range: 5–13 days). Disease severity ranges: severe acute respiratory infection (SARI) or pneumonia, acute respiratory distress syndrome (ARDS) to sepsis and septic shock.³⁻⁵ Other reported complications include acute cardiac injury, arrhythmia,

shock, and acute kidney injury. Among hospitalized patients with pneumonia, the case fatality proportion has been reported as 4–15%.³⁻⁵

Transmission

The disease is transmitted from animals to humans and also spreads from person to person. A person can get the disease through:

- Close contact with a person who has the disease
- Contact with animals infected with the virus
- Touching an object or surface contaminated with a virus and then touching the eye, mouth or nose
- Air droplets dispersed by coughing and sneezing
- Eating contaminated meat and meat products

Everyone is at risk of getting the virus; however, others are more at risk particularly; anybody in close contact with

CORONAVIRUS: THE FACTS

1 Virus enters through the nose and mouth

2 It then finds a 'host cell' in the respiratory system

3 The host cell then bursts and infects other cells nearby

SYMPTOMS



Runny nose



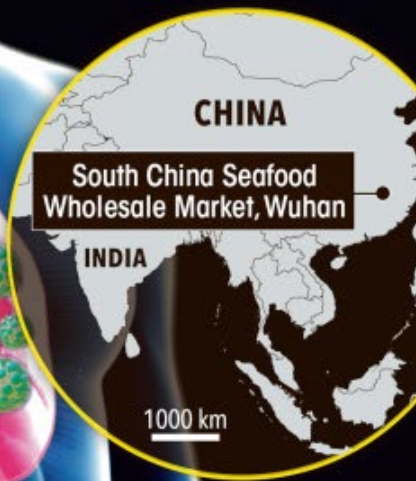
Cough



Sore throat



High temperature



HOW IT SPREADS

Novel coronavirus first spread to humans from an animal – thought to be a snake – at the South China Seafood Wholesale Market.

The virus is transmitted between humans in droplets from coughing and sneezing and touching or shaking hands.

HOW IT CAN KILL

Most victims of the virus die from complications including pneumonia and swelling in the lungs.

The virus also causes swelling in the respiratory system, which can make it hard for the lungs to pass oxygen into the bloodstream – leading to organ failure and death.

Severe pneumonia can kill people by causing them to 'drown' in the fluid flooding their lungs.

a person infected with the virus, health care workers, travelers to areas affected with the disease, airline workers and those working at border posts, chronically ill persons, persons handling the infected or contaminated meat and meat products.

Prevention Measures include:

- Wash your hands frequently with soap and water or use an alcohol-based hand sanitizer
- Avoid close contact with people who have symptoms of Coronavirus Disease.
- Avoid touching your eyes, nose and mouth with unwashed hands.
- When coughing or sneezing cover mouth and nose with flexed elbow or tissue paper
- Cook all your meat and meat products thoroughly before eating.
- Avoid unprotected contact with live wild or domesticated animals
- Avoid spitting in public
- Health Care Workers must practice standard Infection Prevention measures
- Avoid travel when you are not feeling well
- Avoid non-essential travel to areas where there is transmission of the disease.
- Avoid eating meat from animals that have died of diseases.

Investigations

The most common laboratory abnormalities reported among hospitalized patients with pneumonia on admission included leukopenia (9–25%), leukocytosis (24–30%), lymphopenia (63%), and elevated alanine aminotransferase and aspartate aminotransferase levels (37%).³⁻⁵ Most patients had normal serum levels of procalcitonin on admission. Chest CT images have shown bilateral involvement in most patients. Multiple areas of consolidation and ground-glass opacities are typical findings reported to date.³⁻⁵

Treatment

There is no specific treatment for coronavirus disease 2019. All current protocols mainly target resuscitation and symptomatic relief and management. But Neuraminidase inhibitors like oseltamivir, zanamivir and peramivir which are normally used for influenza A and B are being evaluated for clinical trial protocols. Antibiotic coverage is also given as prophylaxis against other types of pneumonia.

It's of note that there are currently no antiviral drugs licensed by the U.S. Food and Drug Administration (FDA) to treat patients with COVID-19. Some in-vitro or in-vivo studies suggest potential therapeutic activity of compounds against related coronaviruses, but there are no available data from observational studies or randomized controlled trials in humans to support recommending any investigational

therapeutics for patients with confirmed or suspected COVID-19 at this time. Remdesivir, an investigational broad-spectrum antiviral drug, was reported to have in-vitro activity against SARS-CoV-2.^{2,5} A small number of patients with COVID-19 have received intravenous Remdesivir for compassionate use outside of a clinical trial setting. A randomized placebo-controlled clinical trial of Remdesivir for treatment of hospitalized patients with pneumonia and COVID-19 has been implemented in China. A randomized open label trial of combination Lopinavir-ritonavir treatment has also been conducted in hospitalized patients with pneumonia and COVID-19 in China, but no results are available to date. Clinical trials of other potential therapeutics for COVID-19 are being planned. It is clear however, that more clinical research is urgently needed so as to identify novel chemotherapeutic agents for treating COVID-19 infections.

There is currently no vaccine to protect against the Coronavirus Disease (COVID-19). The best way to prevent infection is to follow the recommended prevention measures.⁷

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REFLECTIONS – Tepwanji Mpetemoya (BSc HB)

Five Highlights in the health sector in the period 2015-2019



Zambia is a developing nation making positive strides towards the provision of world class health care. As we plan for the future of healthcare in our country, it is important to look back and reflect on what we have achieved so far. Join me on a road trip down memory lane as we recollect five stories that made the news over the past five years.

2019

UTH 2019 high achievement- Open Cardiac Surgery

In 2019, Zambia's largest referral hospital, the University Teaching Hospital (UTH), recorded several medical surgical milestones. UTH chronicled a major landmark¹ on July 16, 2019 when a team totally composed of indigenous

Zambian surgeons performed an eight-hour open heart operation on a 52-year-old female patient.

A myxoma measuring 7 x 6 x 5 cm was removed from the left atrium of the heart and the surgery reported to have been the first successful major open-heart surgery in the country. The lead surgeon was cardiac surgeon Dr Chileshe Mutema, assisted by doctors: Michelo, Nyimbili and Mashata.

2018

The University Teaching Hospital conducts its first ever kidney transplant surgery successfully.

A team of medics and surgeons from India and Zambia successfully conducted the kidney transplant surgery on Zambia's 54th Independence anniversary². Zambian surgeon, Dr. Michael Mbambiko lead the surgery, being supported by an expert surgeon from India and a team of specialists from India and the University Teaching Hospital.

In an interview with Dr Mbambiko on the 23rd March 2020, he informed us that both the donor and recipient of the 2018 kidney transplant are currently well. He further detailed the reasons why the surgery was so ground-breaking stating that previously, many of the patients with chronic kidney disease (CKD) were limited to having dialysis as the only available treatment option locally. "Dialysis has an important role in management of

CKD,” he said, “however, it is ideally regarded as a holding measure until a kidney transplant can be performed.”

This is because though dialysis does perform the kidney’s function of filtering blood, it cannot replace the other essential kidney functions such as the production of erythropoietin which is necessary for blood formation. Additionally, dialysis requires a lot of time consumption for the patient, sometimes requiring 4-hourly appointments 3 times a week. With regards to subsequent kidney transplant surgeries, Dr Mbambiko says that though there have not been any transplant surgeries since 2018, he hopes that in the future, kidney transplants will be routine surgeries as it will improve the quality of life of the CKD patients all across Zambia.

2017

Doctors at UTH separate Siamese twins

Zambia was set for a medical breakthrough when local surgeons would for the first-time separate Siamese twins who were born in Kawambwa, Luapula Province³. Dr Chisembele, Women and Newborn Hospital senior medical superintendent said in an interview that a team of surgeons being led by Zambia’s paediatric surgeon Dr Bruce Bvulani had advised that the surgery would take place when the twins were to be between six and nine months old.

On Friday, 2nd February 2018, a successful seven-hour operation that separated the Siamese twins – Bupe and Mapalo – who

were joined on the abdomen, was done. It was unbelievable, yet true that the conjoined twins had been successfully separated by the local medical team and have recovered fully and back in their hometown.

2016

Government takes healthcare services closer to people

PRESIDENT Lungu said the country had made good progress in increasing access to healthcare with 75 percent of households across the country being within a five-kilometer proximity to a health facility⁴.

Speaking during the official opening of the First Session of the 12th National Assembly, President Lungu said health referral systems have also improved across the country with a total of 315 health posts out of the 650 that Government had started constructing being operational.

President Lungu said a total of nine district hospitals have been commissioned and opened since 2015.

2015

Dr Victor Mukonka wins best health presentation

FORMER Ministry of Health director of public health and research Victor Mukonka won the Best Overall Oral Presentation at the 3rd Irish



Congress of Obstetrics, Gynaecology and Perinatal Medicine (ICOGPM) in Ireland⁵.

Dr Mukonka, won an abstract titled “Increasing institution deliveries by skilled birth attendants through addressing hidden costs in rural Zambia”.

The abstract won for its research work on reducing maternal and mortality rate in rural parts of Zambia and was the best out of over

130 entries, beating the locals, and the panel of judges believes his achievement is well deserved.

In an interview, Dr Mukonka said he is proud to carry the Zambian flag high in a foreign land. My award is testimony of the best brains that Zambia has which is seen across the world. This brings a lot of pride for the country and puts Zambia high on the map.

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TOP-TEN-WITH-MENTORS (YES ZAMBIA)



Dr. Bastian Jager

Dr. Bastian Jager is a Consultant OBGYN (MsC), Medical Teacher & Trainer in Emergency Obstetric Skills (MOET, ALSG) and Specialized doctor in International Health & Tropical Medicine. He is married and has two children aged 12 and 9.

After completing his MsC with a research thesis on health care seeking behaviour and traditional medicine in Kalabo, Zambia, he specialized in tropical medicine. On completion he worked for 3 years in rural Tanzania where he gained vast experience in obstetrics, but also in general surgery and paediatrics. During that time his affection for clinical teaching and training matured. He also set-up several research projects to monitor the impact of his clinical training.

The unequal position of women in less resourced locations led him to specialize as a gynaecologist with a subspecialty in medical teaching and emergency obstetrics in the Netherlands. He was a University lecturer at one of the biggest medical teaching hospitals in the Netherlands. After graduating he went

back to Zambia to work in a small non-profit hospital in Ndola and set-up the OBGYN department in terms of clinical care, quality improvement and teaching. In 2017 he moved to Lusaka where he now works as a consultant OBGYN at Medland Hospital in Lusaka. As an emergency obstetric trainer, he continues to train other specialist doctors in improving their emergency obstetric lifesaving skills to this date.

Being a mentor in the YES program allows him also to assist young emerging professionals to develop their research skills. The basis of having a good set of research skills is that it allows every health professional to be a critical thinker, assess protocols and guidelines according to evidence-based principles and teach according to the latest guidelines. This will in turn continuously improve one's skills and knowledge and the quality of provided care. That foundation of evidence-based medicine that was laid in Kalabo has brought to where I am now 20 years later.

Q1. What does research mean to you?

Research plays a very important role in my daily work. Without research there is no knowledge, no quality improvement nor treatment guidelines. I am trained in The Netherlands where all specialist doctors are trained based on the CanMeds framework (<http://www.royalcollege.ca/rcsite/canmeds/canmeds-framework-e>). This framework states that a doctor should have multiple skills besides being a Medical Expert. The research role is one of the most important ones. This role has more modalities and states that not every doctor should actually be a hardcore scientist; a producer of research papers. Being a researcher also means that one is able to develop and read guidelines, one is able to value the impact and quality of research papers AND last but not least; being able to teach the younger generation. I consider myself part of the latter group of doctors.



Q2. What do you think of research mentorship for students and young scientists?

This directly related to my answer on Q1. Though we are catching-up in Zambia, research skills are still poorly developed in all fields but obviously also in the medical sector compared to high resourced settings. In this disadvantage lies a big opportunity at the same time; there is so much to study and there are so many bright young doctors who cannot wait to start playing a role in this endeavour. I am very honoured that I can play a modest contribution to the creation of high quality research in Zambia.



Q3. What kind of research would you like to do if you had all the resources and why?

I would love to study the outcomes of a nation-wide implementation and training program of an advanced fetal monitoring system during labour (called CTG). In Zambia the neonatal morbidity and mortality is still unacceptably high, and this is mostly because babies will go into distress during the last stages of labour without it being noticed. We can improve this with very simple interventions, but it requires a new way of thinking for many birth attendants.



Q4. What has been your major challenge(s) in carrying out research work?

Time: the daily practice of a gynaecologist leaves ample time for extra's. The solution is cooperation or supervision of younger colleagues. In that way we the expertise and experience of older colleagues can be combined with the enthusiasm of the younger generation.



Q5. Why have you been consistent in doing research?

Because it plays such a major role in my daily practice. My motto has always been to provide my patients with treatment that is based on the latest research and guidelines. Being a medical professional never excludes a person from the responsibility to keep oneself updated with the latest knowledge.



Q6. How have you managed to balance research and clinical work, do you even draw a line?

It is all about focus and priority. I have done so by making a choice between being a medical professional that produces research and a doctor that implements the latest knowledge in my daily work and to pass on that knowledge; by writing books or teaching and training. If we all team up, then the combined product will be high quality health care in Zambia.



Q7. What has been your greatest lesson over the years?

Work is important, but family is more important. No matter how busy one is, spend some time with family!



Q8. Which of your publications would you like to share in summary (what were the pertinent findings)?

That is a difficult task as most of my products are chapters in gynaecological books, modified OBGYN guidelines for the Zambian and Dutch setting, quality improvement reports and articles in Dutch about teaching techniques and the importance of improving ones teaching skills.

Maybe I should refer to the first article that I ever produced which is more socio-medical. I conducted it in 2000 in Kalabo as a medical student and explored the health care seeking behaviour of inhabitants of Kalabo District; the biggest surprise to me was that almost 90% of the interviewees pointed out to consult a traditional healer/ witch doctor for a specific condition regardless of age, education or socio-economic back-ground. One of my latest contributions is an overview article exploring the benefits of continuous fetal monitoring and how this could be feasible in a Zambian setting.



Q9. Where do you see your research path 10 years from now?

I would love to play a bigger role in teaching young doctors and researchers in Zambia.



Q10. What's your advice to YES mentees and any early career researcher?

Keep things simple and never lose sight of the big picture. Secondly, research is important but make sure it is relevant as well; nobody is interested in research projects that already have been conducted or will not make any difference to treatment outcome.



Congratulations - New cohort

As we celebrate our first-year anniversary, we are happy to introduce the new cohort of young vibrant mentees who are ready to do exploits in the area of research. Based on some of the lessons learnt thus far, we are excited to announce that the YES Zambia mentorship program now includes medical students that are in their first year of clinical placements or final pre-clinical

year. This would ensure a good contact time to nurture and grow the mentor-mentee relation. Congratulations to the second cohort of mentees and we wish you the best. To read the full biographies of the new cohort, follow the link <http://www.yeszambia.com/mentees.php> and click on the headshot.



Hazel Priscilla Kasonkomona



Mosho Mwelwa



Pharidah Rajan Ibrahim
Omar Sundi



Choolwe Matongo

Congratulations - New cohort



Caleb Chilufya



Bilal Patel



Kasakula Natalie Kaunda



Christabel Chisala Musonda

Youth day by Atotwe Mpetamoya



The youth are the next generation of leaders. The world of tomorrow lies in the hands of the youth of today. The truth echoed by these sentences is acknowledged all around the world. Every year, on the 12th of March, Zambia joins the world in acknowledging the importance of the youth through various activities where the roles of youth in our society are emphasised. However, despite these commemorations one would wonder if we the youth understand our relevance. Do we understand our roles in society? And most importantly do we understand the potential we have to do great things?

One of the world's greatest scientists Isaac Newton was only 24 years old when he wrote the Mathematical Principles of Natural Philosophy forming the foundation for classical physics. Bill Gates was only 20 years old when he started Microsoft – one of the biggest software companies in the world - with his partner Paul Allen, who was 22 years old at the time. These stories are some of various examples of how youth have managed to change the fate of the world in ways that will forever be remembered. Showing us just how much the youth can do today.

We all know that the world has not come to its fullest potential. For instance, looking at the Sustainable Development Goals (SDGs), there is a broad spectrum of areas in which the youth can make substantial contributions to the wellbeing of humanity. As young people, we can view the world with a fresh outlook of the problems that are currently being faced and come up with multiple innovative ideas. Whether it is by developing a new, faster and safer way to suture hysterectomy incisions in women like 14-year-old Tony Hansberry or starting a business that helps improve the lives of small scale farmers like our very own Chaka N'gambi, the youth can definitely change the face of the world.

Unfortunately, due to various factors (such as lack of learning facilities and materials and high rates of unemployment), the potential of the youth is not fully acknowledged and seen. Currently in Zambia, more than 50% of our population is made by the youth. However, due to the high unemployment rate (currently at 15.94%) in Zambia, the youth who have special skills or have been trained to do specific jobs by formal institutions are generally placed to work in areas that are completely different from what they know and are good at. This on its own highly depreciates the values of products and services that are produced. Additionally, the intense level of unemployment has placed large numbers of youth in positions of dependency that allow them to sit at home and partake in daily unproductive routines.

As a result, in a world that still bares the deep wounds of hunger, displacement, conflict, inequalities and unemployment, we desperately need to step up and find lasting solutions for our next generation of leaders and citizens of our country. We need to create a platform on which the youth of today are allowed to freely express their views and opinions on current economic and social problems that are being faced. We need to

provide an environment where large numbers of youth can come together to spare their dreams and aspirations to the future of their individual lives, the nation and the world as a whole. We need to develop programs where the youth can be inspired, guided and mentored in ways that will set them on a path to success. Most importantly, we need to supply the youth with a place where they can be who they truly are, youth, because it is in a state of authenticity that they really thrive.

Hence, as we commemorate the 2020 youth day, let us celebrate our youth knowing the fullness of their potential. Let us say, “The youth are the next generation of leaders. The world of tomorrow lies in the hands of the youth of today,” and mean it. Let us come together as a nation in our words and actions, ultimately bringing up the youth as the future leaders we know they can become. Let our youth become leaders who understand their roles in society, their relevance, and their potential to do great things.

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