Message from the Principal Investigator, HEPI Project

Greetings from the HEPI-HESSU Project. We are delighted to present to you the Sixth Edition of the HEPI Newsletter.

Time has run very fast: we are at the end of the 4th Year of the HEPI Project and left with just one year of implementation!! It has not been easy, but we have managed to implement a number of activities under all the aims of the project. As we get close to the end, let me take this opportunity to remind you about this project.

The “Health Professions Education Partnership Initiative-Health Professions Education and Training for Strengthening the Health System and Services in Uganda (HEPI-HESSU)” Project commenced in October 2019 after Makerere University College of Health Sciences (MakCHS) and partner institutions won the highly competitive grant from NIH in September 2018. The local partners working with MakCHS in this grant include: Busitema University Faculty of Health Sciences, Kabale University School of Medicine, Clarke International University, ACHEST, and Mulago School of Nursing and Midwifery. We also have two international partners: Yale University and Johns Hopkins University, USA. This project builds upon the previous successes of the MEPI Project.

The goal of the HEPI-HESSU Project is to “improve service delivery of the Ugandan health system through strengthened interdisciplinary health professional education and research training to produce graduates with competencies to address the priority health needs of the population”.

The specific aims of the project:

1. To enhance Health Professions’ Education (HPE) and training to produce health professionals who are competent to address the priority health needs of Uganda.
2. To strengthen the capacity of graduating health professional students to remain and practice in Uganda, serve as faculty and/or conduct research related to HIV/AIDS and other health priorities.
3. To enhance institutional systems to sustain transformative health professions education in Uganda.

The articles in this Newsletter are a great testimony of what we have achieved in the past few years through the voices of the both undergraduate and graduate students as well as faculty, which reflect excitement and success. The newsletter outlines the number of people that have benefited from fellowships and gives a highlight of the as well the other successful HPE conference we held last year. It ends with the publications that came out of the work funded by the project.

I wish you great reading and encourage a you to share your work in the next edition.
Dementia is an umbrella term for several diseases that are mostly progressive, affecting memory, other cognitive abilities and behavior that interfere significantly with a person’s ability to maintain the activities of daily living. Alzheimer disease is the most common form of dementia and may contribute to 60–70% of cases. Dementia is under-diagnosed worldwide, with typical diagnoses made at a relatively late stage in the disease process. One in five people in Uganda aged 60 and above, has Alzheimer’s disease or related forms of dementia. Prevalence studies show, supporting World Health Organization’s latest data, that two-thirds of people with dementia worldwide live in low and middle-income countries. Currently, the gap is wide between the need for prevention, treatment and care for dementia and the actual provision of these services. Long-term care pathways (from diagnosis until the end of life) for people with dementia are frequently fragmented if not entirely lacking. Lack of awareness and understanding of dementia are often to blame, resulting in stigmatization and barriers to diagnosis and care. People with dementia are frequently denied their human rights in both the community and care homes. In addition, people with dementia are not always involved in decision-making processes and their wishes and preferences for care are often not respected.

In 2020, I was fortunate to be enrolled as a post-doctoral Fellow under the HEPI Training program. The program engaged me as a scholar in a defined period of mentored advanced training to enhance my research skills towards pursuit of an independent research career path. Under this framework, I received quality supervision, career mentoring lessons, skills on establishing collaborative networking and ways of nurturing research environment(s). Lack of awareness and limited available research on dementia has resulted in under-estimation of the disease burden. Therefore, our study was aimed at determining prevalence of cognitive impairment and associated factors in Uganda’s general population. We had a sample survey of 192 individuals and prevalence of CIND was 55.2%. More of these study findings are under review.

As a researcher, this whole process has been a learning and mentorship opportunity for me. Key lessons learned include:

1) Project networking, mentorship and psychological support has increased research productivity leading to more successful research implementation.

2) It has increased mentee’s 

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exposure to peer professional networks by introducing them to potential research collaborators within the college.

3) Regarding clinical work and dementia as a NCD, this research has shown that interventions such as memory clinics, geriatric services, social work, and caregiver support programs assist in the diagnosis and management for PWD. In addition, early and timely diagnosis is paramount to providing individuals with access to appropriate medical care and support services.

4) Finally, the mentorship that I have received has influenced my inclination and ability to mentor others. I sincerely thank the HEPI team for supporting this work.

THANKING HEPI FOR THE SCHOLARSHIP OPPORTUNITY

Kenneth Mubiru, Master of science (MSc) in Immunology and Clinical Microbiology (MICM). Makerere University College of Health Sciences

The sight of HEPI-SHSSU scholarship opportunity advert stimulated my interest as it came at the right time in my academic career. My name is Kenneth Mubiru. I am a male Ugandan, and I hold a Bachelor’s degree in Biomedical Laboratory Technology of Makerere University. I am currently pursuing a Master of Science (MSc) in Immunology and Clinical Microbiology (MICM) at the same institution and after this MSc, I hope to become a microbiologist who specializes in HIV and TB.

My dream of becoming a microbiologist started when I joined Mycobacteriology (BSI-3) TB Laboratory in 2018 which drove and motivated me each day of my life and has shaped my research interests. In addition to that, I later started working with Infectious Diseases Research Collaboration (IDRC) under a project called TB Screening Improves Preventive Therapy Uptake Trial (TBSCRIPT) whose objective is to target HIV and TB patients which suits my interests. My research project, supported by HEPI, will focus on evaluating biomarkers for early detection of M. tuberculosis in sputum samples. I will study a cohort of TB patients who will have “TRACE” call results, the lowest detection level of the routine used Gene Xpert Ultra as well as those who are Gene Xpert negative to test the diagnostic accuracy of the identified diagnostic biomarkers for early TB detection. The research will contribute to diagnostic development of a test which will offer TRUE early TB diagnosis, i.e. diagnosis of TB at a non-transmissible level, most of the available diagnostics continued on page 03
detect infectious forms of TB and unless we target early diagnosis and treatment initiation to block transmission at an earliest stage, TB control will remain a challenge. My research project is timely as we work towards TB control by 2035.

The HEPI-SHSSU scholarship opportunity will therefore help me advance towards my research career goals and contribute to Tuberculosis research at Makerere University. It will also help me complete my MSC studies as it came in my final year. After my MSC completion, I can be able to further develop my microbiology skills through enrolling into a PhD program which is my next target.

A SNAPSHOT OF HEPI IMPACT IN NUMBERS OVER THE YEARS

Evelyn Bakengesa, HEPI-SHSSU Program Coordinator

This provides a perspective on all HEPI-SHSSU training efforts from 2018 to date at Makerere College of Health Sciences (MakCHS), Clarke International University, Kabale University and Busitema University Faculty of Health Sciences.

FACULTY

Faculty supported (up to today) at institutions - 64 Faculty in total

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Faculty supported by gender

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STUDENTS

Students supported (up to today) - 165 in total
[62 undergraduates and 103 graduates]

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HEPI HAS BUILT MY RESEARCH CAPACITY AS A YOUNGER RESEARCHER

Byamukama Tapher, Lecturer-School of Medicine, Kabale University

Ever since I received training from HEPI experts from Makerere University College of Health Sciences (MakCHS) on research and proposal development in Jan-Feb, 2021, I have never been the same again. I acquired enough skills that enabled me to develop a proposal that won funding from HEPI-SHSSU project and am still working on my project of which I hope to publish the results in a peer reviewed journal at the end of my project.

HEPI has built my confidence in research skills, and I have been able to develop several research funding proposals to other donors with the hope to attract funding opportunities. With the skills gained from HEPI, I do mentor my fellow colleagues at workplace to build research capacity at the department level that is capable of winning big research grants. Thank you HEPI for strengthening my research capabilities.

PROGRESS THROUGH LABOUR

Nashuga Gerald, Master’s in Public Health Public Health Monitoring & Evaluation, MekSPH

It was deeply humbling when I learnt the HEPI-SHSSU had awarded me a study grant to complete my Master’s training having successfully applied for the Master’s in Public Health Monitoring &Evaluation, Makerere University. I gladly ventured into the program with tuition fees and research support from HEPI-SHSSU Scholarship. I am currently working on my master’s research project titled: “Assessing the tuberculosis monitoring and Evaluation system: A case study at National TB & LEPROSY PROGRAM Uganda”

My study might feed relevant information in M&E systems in TB to build a critical mass of professionals with skills and competencies in public health monitoring and evaluation within Uganda and the Sub Saharan African region. The study will also enhance capacity for economic, impact and policy evaluations in order to improve effectiveness and efficiency of public health interventions in TB. This is in addition to strengthened strategic management and leadership

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skills, fundamental to institutional success and enhanced use of data for improved evidence informed decision making at all levels of the health system and institutions. The findings will also promote linkages between government ministries and other development institutions that seek to strengthen monitoring and evaluation systems of TB locally, regionally and internationally.

Through the HEPI fellowship program, I took courses in data collection, data analysis, grant and manuscript writing, leadership and mentorship which enabled to apply what I learned. Importantly, the fellowship will provide me with time as well as funds to conduct my research and I have mentors and supervisors which will open my eyes to the unique health challenge in each setting. Implementation strategies set by this HEPI project will address strengthening M&E System to improve service delivery and answer public health problem.

AN OPPORTUNITY WORTH GRABBING
Amelia Margaret Namire, MBCB Ill, Makerere University, College of Health Sciences

“How best can one feed a curious and wandering youthful mind?” This question was stuck in my mind for quite a while as I sat down idle in the lockdown period. The COVID-19 pandemic came in so unexpectedly and lasted quite a while. Being at home for a long time got me thinking how best I could spend my time productively other than just studying all the medical books. I was seeking for something more interesting, something that could improve my skills and benefit my academics as well; all in all, I wanted to do something productive along my career path. I have always been passionate about research, I read a couple of books here and there but the idea of doing research remained obscure. It is uncommon that opportunity knocks at your door but there it was right before my eyes, HEPI was calling for applications from undergraduate students that wished to attain research skills. With zeal, we applied as a team of 10 students and we got accepted. HEPI mentored us through the entire process of writing a research proposal, conducting research, writing manuscripts, journals and publishing. All these skills being attained at undergraduate level is something I would compare to finding a gem. Research gives us a voice even as undergraduates, it is quite exciting to have a view in the health setting as early as this. Through the guidance and skills provided by HEPI, we got to practice all that we were taught and all that we read about in different books. We were challenged to think out
of the box. A sword was handed to us, a way to fight against the “health enemy”, disease. Our mentors from HEPI enabled us to learn by doing, molding us into good researchers and writers. Through research, we get to build knowledge based on truthful evidence. Knowledge is one of the strongest weapons under the sun, a weapon against disease and other health shortcomings. With knowledge, we not only save lives but also uplift our nation, this is the magnitude of the opportunity HEPI presented us with. What better way could I have spent the lockdown months? Well, there is no better way. This opportunity was worth grabbing, a step that I will always be proud of having taken. Thank you HEPI!

THANK YOU FOR A LEARNING OPPORTUNITY

Elizabeth Atim, BNS Year IV Student at Clarke International University

I applied for the HEPI research fellowship out of my passion for nursing research. My intention was to learn as much as I possibly could and fortunately enough, HEPI did not disappoint. This fellowship offered us training sessions that ranged from proposal writing, to methodology, budgeting and accountability among others. These were extremely beneficial bearing in mind the fact that I was keen to learn something new – something that my research lecturers had not taught me in the classroom, specifically: The ‘nitty-gritty’ of Qualitative research! Qualitative research was an area I wanted to venture into, and the best way to learn, I believe, is by doing. The HEPI training on the various qualitative research aspects like qualitative study designs, sample size for qualitative research, qualitative data collection, and data analysis, among others gave me an amazing head start. With guidance from my mentor, I was able to write a qualitative research proposal titled “Perceived spiritual causes and management of psychosis in Central Uganda” that is being funded by HEPI. I am so excited about this study and I cannot wait to share my findings. The research, documentation, and communication skills that HEPI has taught me have made me a better healthcare professional who is able to not only share what I have learnt with others, but also make a contribution to the body of knowledge. My experience has been nothing short of wonderful and for this, I am immensely grateful to HEPI for the opportunity to not only learn, but also have a team of exceptional mentors to turn to for guidance.

Thank you HEPI.
Looking back, if I could change only one thing about my past education, it is to focus and perfect my research skills. Throughout my time as a Masters student, I have come to understand that research may be intellectually challenging but satisfying to complete. My interest in research was first stimulated during my undergraduate program where my research study gave me an opportunity to pursue some of my interests and learn something new. I was able to acquire problem-solving skills and to challenge myself in new ways.

The study helped me to gain academic credentials that have created a well-rounded resume and also built upon my interest in research at Masters level. Following my ongoing Masters in public health, I first heard about the HEPI-SHSSU Masters Fellowship support from our head of department who encouraged all the students to apply. I was very excited about this opportunity and applied for the program and luckily I was selected among the awardees. Having had a wish to focus on conducting research in the area of PrEP uptake among the female sex workers, I believed that this master fellowship support program would give me an excellent opportunity and experience to further elucidate this study. I also believed that it would not only introduce me to new ideas and areas in research but also broaden my knowledge and understanding of the research especially in the field HIV/AIDS prevention.

With this perfect opportunity for the program, I have been able to put my skills to good use in this research program because I have a keen interest in learning and conducting research. The program has given me the chance to understand how to complete my study and I can confirm that my final stage of the research proposal writing is quite a smooth road because of the knowledge gained during the HEPI research trainings. As a hardworking student with ability to produce work to a high standard, this experience is helping me to develop relevant skills that will help me to conduct research, construct questionnaires, manage my time and write succinctly.

I have always been inspired to involve myself in research opportunities because they seem a rich field with limitless boundaries for innovation, problem solving and knowledge gain and this program is going to take me there. I am confident that this opportunity is improving my ability to develop towards my career goal and prepare me tremendously to become a good researcher.

Emily (Standing) during a health talk on condom use
At the beginning of my public health career about 16 years ago, I was immersed in a rich research environment in Eldoret, Kenya. However, as life would have it, I made some choices including moving to Uganda that drew me away from that environment to public health projects management and eventually to academia. In my early years at Clarke International University (then IHSU), I had a preference for teaching and instruction and was reluctant to take on research students. I quickly realized that for one to be an excellent lecturer, one must be an excellent researcher. I also realized that I had been out of that field for quite a long time and needed to refresh and update my knowledge, skills, and connections with other researchers. Just before the outbreak of COVID 19 in Uganda, I was enrolled for a research method training at NIMR in Mwanza, Tanzania. I had enrolled for this training to kick start my journey back to the heart of research. During our time at Mwanza, I had the opportunity of engaging with researchers from NIMR and LSHTM; in one of these engagements, I came to the realization that if I was to advance in my own career, I would have to engage deeply in research and uplift my students in their own research projects. The diagram below gives an image of this symbiotic relationship between faculty and students’ success.

At just the right time, the HEPI call for Faculty Research Training came out; it seemed like it was written just for me. One line in the call jumped out at me “female candidates are especially...
encouraged to apply”. This call came at a time when I was wondering how a junior faculty member such as myself with very few publications and limited research experience would ever have a chance to engage/lead a significant research project. Better yet the opportunity came with an offer of training and mentorship. I burned the midnight oil and gave it my best shot.

You can only imagine how delighted I was to learn that I had won the HEPI grant. However, along with my delight came a heavy sense of responsibility to complete the project successfully. I was blessed to have a great mentor (Prof. Rose Nanyonga Clarke) and an extremely supportive team of research colleagues on this project. I have learned so much from the training facilitators. One important lesson that I came away from the training with was that; in research there are many unwritten rules/

standards that experienced researchers acquire the intuition for through avid reading and engagement in the research process as well as interaction with fellow researchers. Reflecting upon the entire process of developing and drafting the concept for the research, carrying out my literature review, completing the proposal and taking it through the ethical review process; I had the opportunity of walking a mile in my student’s shoes.

This has given me a greater sense of empathy and confidence as I walk with my students through their own research and dissertation journeys. As a result, I have now taken on several more research students than I dared to in past years. The HEPI grant and training was just the boost I needed to plug back into the world of research more importantly for my student’s sake. My future and my student’s futures are brighter for it.

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**PAVE TO THE WAY**

Kamoga Livingstone, BScN, Makerere University College of Health Sciences

It all came to existence when I was invited by friends to be part of their HEPI-SHSSU funded projects, things seemed intricate like solving a riddle in an enigma and with this I met several peers who had started their journey in research to further guide us on those projects. On these projects, I went through series of trainings right away from the genesis of idea conception to the point of manuscript writing and their submission to the journals.

When the opportunity for call of application for funding came up, I had the curiosity to submit my final year project for funding to HEPI-SHSSU, with the support from my research supervisor Dr. Scovia Nalugo-Mbalinda. I made it a success to apply, this was the focal point continued on page 10
of my journey to do most of the things as the principal investigator on a research project.

I went on to acquire skills of developing online data collection tools, data analysis and manuscript submission to a suitable journal as the primary author. Several of my publications and conference presentations have been made possible by HEPI surely making me stand on the shoulders of the giants, because it has given me a visibility platform for centennial periods as I am not going to perish since I have published and still publishing. With this, my research career has been given several of the building blocks where I can write for myself and at the same time mentor and supervise others. Upon this ground, I am really indebted to HEPI-SHSSU for funding my project enabling me to secure a seat in the research world and complete my undergraduate degree. Another round of applause goes to my supervisor, Makerere University department of nursing, my team and all the students who were involved in my study as participants. Shalom to everyone.

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**MY JOURNEY IN PEDIATRICS**

*Dr. Oker Ronald, Pediatrics resident, Busitema University Faculty of Health Sciences*

I am a Ugandan by birth working as a medical officer with Nwoya district Local government under challenging hard to reach conditions with limited opportunity of patients to access specialized medical services. This informed my decision to join a masters’ programme of pediatrics and child health at Busitema University in 2019. As a married man, studying came with a lot of financial challenges ranging from tuition, functional fees, and the daily increasing cost of living.

The COVID-19 pandemic did not spare me as well; academic progress came to a stand still for almost a full semester due to the COVID restrictions. Upon resumption, things were not normal, we had to meet costs for internet bundles as lectures/tutorials were done virtually, buy personal protective equipment like face masks, gloves, and hand based sanitizers all of which came with added costs.

There came an opportunity for HEPI-SHHU masters’ scholarship which I consider myself lucky to have got. This will take care of my tuition and research fees, thus completion of my studies will be a smooth one. I sincerely send my appreciation to the coordinators of the HEPI programme for this scholarship offered to me.

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ACHIEVING MY ULTIMATE DREAM: MERCI HEPI

Owmuhangi Itcheal, Year 2 Pediatrics and Child Health, Makerere College of Health Sciences

After losing my mother at a tender age, it was without question that I had to be in charge of my four younger siblings. Over time while nurturing them, my passion to tend to young ones grew and became more evident during my journey to become a medical practitioner since medicine in itself involves caring for others. Basing on my budding interest in children, I decided to enroll for a Master’s degree in Pediatrics and child health. Thank fully on the August 28th 2019, I was enrolled for my post graduate training in pediatrics at Makerere University. There was a lot of excitement in the atmosphere, not from just me but my entire family.
Finally, a chance to achieve the dream I have held so dear for a longtime. But with the excitement came uncertainty about the finances needed to cover the tuition. However, this did not deter me.

I quickly enrolled for this amazing journey. Amidst these challenges, I was determined to accomplish this dream, with God by my side. It was not long into our second semester of the first year of this program, when I learnt about the HEPI- scholarship.

I quickly jumped onto this opportunity. I applied for the scholarship and am happy to say my financial challenges to support my academics are now history. Thank you HEPI for your generous contribution. I have been able to receive an outstanding education, continued expanding and professionalizing my knowledge in pediatrics to reach a professional level where I can discern and offer ground breaking insights. Thank you for helping me achieve my dream.

ROP SCREENING: A MATCHLESS THRILLING ODYSSEY

Dr. Niyawawa Idii, Masters of Medicine in Ophthalmology, Year 3, Makerere University College of Health Sciences

Imagine a young couple that has just wedded the previous year. You attended their wedding because the husband was your classmate in high school. In university, you even shared the same hall of residence and the same room with him despite that you studied medicine and he pursued law. You are like siblings for that matter. Just that you have not yet got children but his wife has just had a baby recently. What turned the tables and made this a sad experience for this young couple is the fact that their very first child is blind!

That is so sad in deed! As a medic, you try to probe for the cause of blindness in this first child of a young couple that you are so close to. You find out that the child was born as a preterm and never had ROP screening done on him. At 4 months of age, the mother is deeply concerned to find white pupils (leukocoria) in their first and only child on whom they had spent lots of money whilst in the neonatal intensive care unit (NICU). The husband had to sell one of his plots of land to pay for all these strenuous bills of bringing up this precious first child of his only to find he will be caring for a blind child for the rest of his life. How do you feel when you find out this? How does this family feel? Given the African society that to some extent ostracizes the disabled and families with disabled individuals, you hear shortly after two years that this family has divorced and the lady moves on as a single mother to
take care of this child single handedly and your longtime friend has gone to marry another wife! The husband’s family had laid all the blame of the blind child to the woman! That she was ill-fated! Sounds fictitious! You know what challenges the woman is going through to bring up that child? Think about the psychological impact she is having from this experience and yet more that she will have to pass through. She will have to take the child to special needs schools which are quite expensive. It means this child cannot become a doctor/medic like you. Does this still seem fictitious? If you now realize how heartbreaking this can be, then come and glimpse at the reality of this conundrum.

Retinopathy of prematurity (ROP) is a condition that literally means an abnormal growth of retinal vessels on the retina of preterm babies. Some of its most frequently mentioned associated factors are prematurity, long duration of oxygen therapy in preterms, multiple pregnancy and very low birth weight. Other factors worthy of mention are sepsis, blood transfusion, respiratory depression and even lack of breastfeeding amongst others. ROP is one of the leading causes of blindness in childhood worldwide. The challenge is that we do not know its prevalence in Uganda, yet Uganda ranks as number 28 worldwide in terms of having a high rate of preterm births.

Furthermore, we do not yet have any guidelines regarding ROP screening in this country. What we need first is some studies to be done on the prevalence of ROP in the country, then we can design appropriate guidelines for ROP screening suitable for our country. At this juncture, I took up the research topic titled ‘Prevalence, Pattern and Associated factors of Retinopathy of Pre-maturity among the preterms managed at special care units of Mulago Specialised Women and Neonatal Hospital and Kawempe Hospital.’

With the findings from this research, we shall suitably develop a data base from which to draw future guidelines regarding ROP screening and management in the country. I would like to thank HEPI-SSHU for selecting me for their research mentorship program in which I have benefited immensely regarding my research skills that will be employed in this research project.

The journey to reach this research topic stretches all the way back to the very first semester of my first year of residency in October 2019 when we had a visitor from University of Melbourne, Australia, who came to pay a scholarly visit to Mulago Hospital and among the Departments he visited was the Eye Department. His name is Prof. Graham Hamish, a Paediatrician at Univeristy of Melbourne. His question of interest that made him journey to Africa all the way from the continent of Australia was a quest for the prevalence of Retinopathy of Pre-maturity in some African countries that didn’t have any published data on ROP prevalence, of which Uganda was inclusive. We really had no single statistic to this regard. This was a void that had to be addressed. Dr. Salis Grace, the Paedritic Ophthalmologist of Mulago Hospital and Dr. Lusoba Rebecca Claire, the Directorate of Research in the Department of Ophthalmology (MAKCHS) identified me to address this
pressing issue and to take it up as my research topic. In September the same year, I had represented the Department of Ophthalmology in the Launch of the Neonatology Fellowship Program at Mulago Specialised Women and Neonatal Hospital and I had been asked by Dr. Namiro Flavia, a neonatologist at Mulago Specialised Women and Neonatal Hospital, to address this same issue.

A month later, Dr. Graham Hamish travels from Australia to preclude to the same need. Why not take up such a critically needed topic as my research topic? I took it up and developed my research proposal in the very first COVID-19 lockdown. I shared this proposal with several specialists who were interested in it. In this same lockdown, I frequented Mengo Hospital Eye Department to learn the technique of ROP screening using the indirect ophthalmoscope under the apprenticeship of Dr. Dan Bwonya, a Vitreoretinal Surgeon at the facility. I thank all these specialists for the mentorship they have been offering to me along the way.

On resuming school after the first lockdown of COVID-19, with the patronage of Dr. Ssali Grace, we started up an ROP screening clinic in the Mulago Eye Department Clinic which operates every Monday. This started in January 2021 and continues to date. In this clinic we easily identify earlier stages of ROP and refer them for appropriate timely Vitreoretinal review so as to save the sight of these preterm babies who might need intravitreal injection of avastin (bevacizumab). The ideal modes of taking images for the retinal findings during the ROP screening would have been the RetCam or the 3nethra Neo, but none of these are available in our country. Out of the need for improvisation to have a photographic record of the images of the fundus of these babies screened for ROP, I went on to explore some potentialities in the arena of Smart Phone Based Fundus Imaging (SBFI). I found the DiYRetCam as the cheapest as it can be arranged with locally available materials. But it’s challenge is the narrow field of view which is 20 degrees. The MII RetCam is better than the DiYRetCam but it’s more expensive since it needs a more complex handle to hold the phone and the lens.

Then Dr. Ampaire Anne, Directorate of Student Affairs in the Department of Ophthalmology lent me her Volk Inview Fundus Camera tool which I tried out and found it to have a wider field of view than the DiYRetCam I had set up. The Volk Inview Fundus Camera has a field of view of 50 degrees. The challenge of using it whilst screening is that it was designed to be used for taking standstill photos whilst using an iPhone on which the Volk Inview Application is installed.

The limitation with this standstill photo is that if one has not yet obtained a clear view of the fundus, the images aren’t clear. So I opted to use it as my improvised DiYRetCam whilst taking a 1 minute video during the fundus examination and then take screenshots of the best videoed areas of the fundus. Nevertheless, the indirect ophthalmoscope with the +20D lens remains the gold standard of ROP screening by consensus worldwide. These other devices developed are just an attempt at telemedicine in ophthalmology.

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Imagine if the imaginary couple we begun with in the analogy at the preamble to this article had presented their preterm baby for regular reviews in the ROP screening clinic we have established! Perhaps we would have detected the ROP at its earliest stage and done the appropriate intervention aptly and timely to save the child’s sight.

A note of gratitude!

I really express my utmost gratitude to these specialists for the mentorship they have been offering to me along the way: Foremost, I express my deepest heartfelt gratitude to Dr. Otiti Juliet (the Head of Department of Ophthalmology, MAKCHS) for all the help she has offered to me in this journey. I also thank my supervisors Dr. Lusobya Rebecca, Dr. Ssali Grace and Dr. Namiro Flavia for all the guidance they have offered to me throughout the entire process of the research proposal development. I also thank Dr. Kasadhakawo Moses, Dr. Ampaire Anne, Dr. Atukunda Immaculate, Dr. Ntende Jacob, Dr. Kalinaki Abu Bakar, Dr. Faith Nakubulwa, Dr. Carol Nalukenge, the entire Ophthalmology Department
MAKCHS, my fellow residents, my classmates and the entire staff of Mulago Eye Clinic for the continuous guidance they have been offering me in this quest to understand ROP. From the depth of my soul, I really thank Dr. Rami Subhi, Dr. Susan Carden (both Paediatricians at University of Melbourne, Australia), Dr. Geoffrey Wabulembo (Paediatric Ophthalmologist of Light for the World) and Dr. Dan Bwonya (Vitreoretinal Surgeon of Mengo Hospital) for the continuous guidance they have been offering to me in this relentless pursuit of understanding ROP through the time they have sacrificed in the various Zoom meetings they have scheduled with me in this regard. I seek to be pardoned for the names of some specialists and personnel not mentioned in this brief article.

I conclude by again thanking HEPI-SSHU team led by Prof. Sarah Kiguli with an especial kind of thanks for all the mentorship and support it has offered to me and is still offering to me in this thrilling journey of my research project on ROP which will contribute to the management of eye challenges in out infants in the country.

**MANAGEMENT OF AN ACINETOBACTER OUTBREAK ON SURGICAL WARD AT KABALE REGIONAL REFERRAL HOSPITAL (KRRH)**

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Acinetobacter is a pervasive pathogen that can survive in dry conditions and is responsible for many healthcare-associated infections (HAI). They colonize and infect multiple sites and are often multi-drug resistant (MDR). MDR Acinetobacter infections result in prolonged hospitalization, with a 33-60% mortality rate reported in Africa and 45% in Kenya. At Kabale regional referral hospital, Acinetobacter accounted for 3.7% of the isolates on surgical ward between July 2019–September 2021. Three nosocomial Acinetobacter spp were isolated from patients on the surgical ward in a week. Work improvement teams (WIT) were brought together to manage the outbreak.

On top of culture and sensitivity procedures, a Kaizen model of improvement was used with this being selected from four other themes; contributing factors identified, a root cause analysis with a tree diagram done, countermeasures identified and implemented.

The WIT on the ward, Hospital Infection prevention and control (IPC), and antimicrobial stewardship subcommittee response to the outbreak included: culture and sensitivity of environmental swabs, urine and wound swabs of all patients that were admitted on the ward, AMR-related meetings, and Continuing medical education (CMEs)
were organized, patient isolation, developed a draft of disinfection protocols, general ward disinfection, replacement of all torn Mackintosh on patient beds, installation of hand washing facilities and implementation of bed spacing. 80% of samples from initial environmental swabbing had Acinetobacter with varying antibiotics resistance patterns, including resistance to all antibiotics set except Imipenem. Results from environmental swabbing, one month later, showed a reduction to 41.7% of Acinetobacter and no Acinetobacter after 2 months. No death from Acinetobacter was recorded. Multi-sector and concentrated efforts towards management of outbreaks of antimicrobial resistant bugs and nosocomial infections are effective in reducing antimicrobial resistance incidence.

**Recommendation:** There is a need for frequent surveillance of hospital-acquired infections and to continue creating awareness of antimicrobial resistance as a growing public health concern. Repeat environmental swabbing is still being planned and there is a need for Standard Operating Procedure (SOPs) and protocols to guide future response to such hospital-acquired outbreaks of MDR pathogens.
THE GOLDEN OPPORTUNITY TO IMPROVE RESEARCH SKILLS - THANK YOU HEPI

Twonamuhwezi Elisa, Bachelor of Science in Medical Radiography (BsMR), Makerere University, College of Health Sciences

It was during our study in year four that we saw the call by HEPI to train students in research. Due to the love for research and writing, we managed to form a team of four members (Nabawooya Hasifah, Nakawuki Rehemah, Nabukenya Hellen and I). Learning to write good resumes, personal statements and preparing a nice presentation is an unforgettable experience. Having clinical exposure in the radiology field as practicing students, we generated a title of the research study as “Status of Utilization of Radiology Information System in selected hospitals in Kampala.” This was not as easy because it took us a period of around 2 months as we always had a “working title” not the final title for the research study. We presented the research project to the HEPI team and received guidance on how to make the research proposal better. As a team, we were not as certain that we would be selected as part of the successful teams to undergo the research training and mentorship by HEPI.

It was a few weeks later that we were notified about the research lecture schedules by HEPI after being selected as one of the successful teams to be funded by HEPI. We later started on developing the research proposal after the lectures using the skills and knowledge acquired during the training sessions. It took us about 3 weeks to complete the process of research proposal development. The next step was seeking approval from the Mulago Hospital Research and Ethics Committee which we successfully got and this brought joy to our hearts as it was a go ahead for us to continue with the project.

Research Team from left to right: Nabawooya Hasifah, Nabukenya Hellen, Nakawuki Rehemah, BsMR, Makerere University, College of Health Sciences

The research process was a successful one. This research also led us to be invited for the TUFH Regional Virtual Conference as our team presented an abstract that was accepted for presentation by the TUFH Secretariat. Thank you HEPI Team for the mentorship, funding and bridging opportunities for the young generation. “Asante Sana.”
Joining University with little hope for source of tuition is a big risk which I undertook simply to fulfil my passion. My interest has always been in health sciences and not even the thought of no tuition could deter me from applying for the programme.

Reality hit me when examination time approached and I did not have plans for tuition. Luckily, HEPI-SHSSU advertised and my hopes to finish the programme on time rose even higher. This moment drew me closer to God. I gave it all I had to write an application which I believe got me shortlisted for the interview. The award was enticing because, HEPI was not only providing tuition and research fees but also mentorship.

To me this was highly welcome because mentoring shapes one into the best researcher or the person they want to become. My research project is: Immune and vaccine responses of babies born to active TBmothers. I am confident that this research shall go on smoothly and I am very grateful to HEPI-SHSSU.
PUBLICATIONS FROM THE HEPI SUPPORTED RESEARCH FROM JUNE 2021 - MAY 2022


