

DR GEOFFREY MANDA

Global Health Institute, University of Antwerp (Campus Drie Eiken), Doornstraat 331, 2610 Wilrijk, Belgium, Email: Geoffrey.Manda@uantwerpen.be

RESEARCH INTERESTS

Maternal and Child Health issues.
Vaccine preventable diseases.
Mathematical Modelling of infectious disease dynamics (deterministic and stochastic modelling).
Artificial Intelligence and Machine Learning in health.
Health Economics and decision sciences.
Epidemiological research design and analysis.
Computational statistics (traditional and spatial statistics).

EDUCATION

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| PhD | University of Antwerp, Belgium, Mathematical Modelling and Health Economics | Present |
| | <i>Dissertation:</i> Intermittent preventive treatment of malaria in school children: From research into policy. | |
| | <i>Committee:</i> Prof. Dr. Jean-Pierre Van Geertruyden (Promotor), Prof. Dr. Erika Vlieghe (Member) and Prof. Dr. Over Philippe Beutels (Chair) | |
| MSc | London School of Hygiene and Tropical Medicine, UK, Public Health | Sept 2021 |
| | <i>Dissertation:</i> Determinants of neonatal mortality in Malawi, 2019-2020: A spatial analysis of the newborn essential solutions and technologies (NEST)360° project data. | |
| | <i>Advisor:</i> Professor Eric Ohuma and Ms. Rebecca Penzias. | |
| BSc | University of Malawi, College of Medicine, Malawi, MBBS | July 2015 |
| | <i>Dissertation:</i> Cancer Survival in Malawi: A retrospective cohort study. | |
| | <i>Advisor:</i> Dr Kelias Msyamboza. | |

RESEARCH EXPERIENCE

Doctoral Fellow

Global Health Institute, University of Antwerp, Belgium 2022 – Present

Intermittent preventive treatment of malaria in school children: from research into policy.

Supervisor name: Professor Dr. Jean-Pierre Van Geertruyden

- Perform project literature reviews.
- Perform statistical data analysis using R (scripting, R-Markdown).
- Build and evaluate integrated infectious disease mathematical models.
- Support the training of masters students.
- Participate in the PhD peer review committee.
- Perform field visits at clinical trial sites in Africa.
- Writing manuscripts for publications.

Graduate Research Assistant

London School of Hygiene and tropical Medicine, United Kingdom 2021 – 2022
Health facility Assessment of the NEST360° data

Supervisor Name: Professor Eric Ohuma and Ms. Rebecca Penzias.

- Performed data management activities in RedCap.
- statistical analyses of health facility audit data using STATA and R.
- Wrote health facility audit reports for 64 health facilities in Africa.

Graduate student

London School of Hygiene and tropical Medicine, UK 2020 – 2021
Determinants of neonatal mortality in Malawi, 2019-2020: A spatial analysis of the newborn essential solutions and technologies (NEST)360° project data.

Supervisor Name: Professor Eric Ohuma and Ms. Rebecca Penzias.

- Performed project literature reviews.
- Performed statistical data analysis using R (scripting, R-Markdown, Automation).
- Built and evaluated traditional and spatial statistical models.
- Performed cartographic activities (Map making)
- Prepared and drafted the final project

Research Medical doctor.

Baylor College of Medicine Children's Foundation, Malawi 2017 – 2020

Supervisor Name: Dr Nmazzuo Ozuah.

- Coordinated multiple clinical research projects.
- Performed research project literature reviews.
- Performed statistical data analysis using R (scripting, R-Markdown, Automation).
- Built and evaluated traditional statistical models.
- Prepared manuscripts for publications.

Research Fellow

Kamuzu University of Health Sciences, Malawi 2018 – 2020

Supervisor Name: Prof. John Phuka

- Conducted project literature reviews.
- Prepared reports for local and international audiences.
- Developed electronic data collection tools using open data kit (ODK).
- Developed project's work plans and budgets for various projects
- Supported the recruitment and training of research assistants in data collection.
- Performed statistical data analysis using Stata® and SPSS.

Research Intern

Mala Malaria Alert Centre, Communicable Disease Action Centre. 2017 - 2017

Supervisor Name: Dr Atupele Kapito-Tembo

- Analyzed the Malawi demographic health survey malariologic data using Stata®.
- Participated in the National technical working group on the extended programme of immunization.
- Presented at journal clubs and other local academic meetings.

- Supported development of content for the institution's website.

Research Intern

The AIR Study - Malawi Liverpool Wellcome Trust.

2015 – 2016

Supervisor Name: Dr. Hannah Jary

- Conducted literature reviews and meta-analyses for a systematic review.
- Supported the review and editing of the final manuscript for publication.
- Conducted data entry using an electronic data, entry system called TeleForm.
- Performed statistical data analysis using Stata® and SPSS.
- Presented at journal clubs and other local academic meetings.

Research Assistant

Kamuzu University of Health Sciences, Malawi

2015 – 2015

Supervisor Name: Prof. Dr. Victor Mwapasa

- Prepared a list of study participants who completed follow-ups for a Cluster Randomized Trial.
- Monitored study sites to verify the presence of follow-up data from source documents.
- Ensured that all follow-up data was captured on case record files and the study database.

CONSULTANCIES

Nutrition evidence synthesis consultant – Systematic reviews.

2021 – 2022

World Health Organisation

Baseline assessment of mhealth education platform in Malawi.

2020 – 2020

AMREF Health Africa, Malawi

Mid-term assessment of a TB health system strengthening project.

2019 – 2019

World Bank Group, Malawi

Assessment of the Iron and folate supplementation in school's project.

2018 – 2018

UNICEF, Malawi

HONOURS AND AWARDS

PhD Scholarchip

2022 – 2025

University of Antwerp, Belgium

Commonwealth Masters Scholarship

2020 – 2021

Foreign Commonwealth and Development Office, UK.

European School of Oncology travel award

2018 – 2018

European School of Oncology, Germany.

Undergraduate Research Grant.

2014 – 2015

Malawi National Commission of Science and Technology, Malawi.

Undergraduate medical summer school scholarship.

2014 – 2014

University of Warwick, Warwick medical school, UK.

Undergraduate MBBS Scholarship.

2012 – 2015

Nchima Trust, Malawi.

TEACHING EXPERIENCE

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| University of Antwerp, Belgium | Present |
| <ul style="list-style-type: none">• Teaching Master students' practical courses on biostatistics. | |
| Kamuzu Central Hospital /Kamuzu University of Health Sciences, Malawi | 2017 – 2020 |
| <ul style="list-style-type: none">• Teaching medical students (Bed side teaching, Problem Based Learning, and paediatrics oncology) | |

PROFESSIONAL SERVICE

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| University of Antwerp, Antwerp Doctoral School. | |
| <ul style="list-style-type: none">• Peer-Reviewer, Peer Review Commission | Present |

CLINICAL EXPERIENCE

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| Kamuzu Central Hospital/ Baylor College of Medicine - Malawi | 2017 – 2020 |
| <ul style="list-style-type: none">• Medical officer, Department of Paediatrics – General and Hematology and Oncology. | |
| Queen Elizabeth Central Hospital, Malawi | 2015 – 2017 |
| <ul style="list-style-type: none">• Medical officer, Department of Medicine, Paediatrics, Surgery, Obstetrics and Gynecology. | |

PUBLICATIONS

Journal Publications

1. Palliative Care Services within a Pediatric Hematology-Oncology Program in a Low-Resource Setting. J Pain Symptom Manage. 2022 Jan 12:S0885-3924(22)00006-9. doi: 10.1016/j.jpainsymman.2022.01.006.
2. Complications and Glycaemic Control of Type 1 Diabetes Mellitus amongst Children Aged 5 to 19 Years Attending Diabetic Clinic at Kamuzu Central Hospital in Malawi. Int J Diabetes Clin Res 7:117. doi.org/10.23937/2377-3634/1410117
3. Bacteriology and antibiotic prescription patterns at a Malawian tertiary hospital burn unit. East Cent Afr J Surg [Internet]. 2019 Dec 31 [cited 2020 Oct 9];24(3). <http://journal.cosecsa.org/index.php/ECAJS/article/view/20190003>
4. Risk Factors of Mortality of Hospitalized Adult Burn Patients a Malawian Tertiary Hospital Burns Unit. East and Central African Journal of Surgery.24(2): No 2 124-132.2019. <https://journal.cosecsa.org/index.php/ECAJS/article/view/20190010>
5. Household air pollution and acute lower respiratory infections in adults: a systematic review. PLoS ONE 11(12): e0167656. DOI:10.1371/ journal. pone.0167656.
6. Cancer survival in Malawi: a retrospective cohort study. The Pan-African medical journal.19:234.2014. DOI:10.11604/pamj.2014.19.234.4675.

Case Reports

1. Successful open surgical repair of an infrarenal, abdominal aortic aneurysm in a young Malawian female: a case report. Malawi Medical Journal.30 (3):215-217.2018. DOI: 10.4314/mmj.v30i3.15.
2. Pyoderma gangrenosum associated with Crohn's disease in a Malawian teenage male: case report and review of literature. Tropical Doctor. Sage UK: London, England. 2017. DOI:10.1177/0049475517724972.

PRESENTATIONS AND INVITED LECTURES

Conference Presentations

1. Treating Wilms tumour in central Malawi: lessons learned. Oral Presentation at the 1st Kamuzu Central Hospital Research Symposium, Lilongwe, Malawi. 11-12 Sept 2019.
2. Synchronous bilateral Wilms tumour: Cases from Lilongwe, Malawi. Oral Presentation at the 7th ESO-SIOP Europe Masterclass In Paediatric Oncology, Berlin, Germany. 16- 21 June 2018.
3. Bacteriology and antibiotic prescription patterns in a Malawian tertiary hospital burn unit. Oral Presentation at the 1st National Quality Management Conference, Lilongwe, Malawi. 22- 24 October 2018.
4. Risk factors of mortality of hospitalized adult burn patients a Malawian tertiary hospital burns unit. Oral Presentation at the 1st National Quality Management Conference, Lilongwe, Malawi. 22- 24 October 2018.

Webinar Presentations

1. Wilms Tumour treatment outcomes using the SIOP approach in Lilongwe. Zoom Presentation. The first Global HOPE Multi-country protocol meeting 19th May 2020.

PROFESSIONAL DEVELOPMENT TRAINING

Workshop

1. Missing data - Using R packages to manage missing data, Antwerp, Belgium,. March 12 - 14, 2022.
2. ESO-SIOP Europe Masterclass in Paediatric Oncology, Berlin, Germany. 16- 21 June 2018.
3. Good clinical practice, London School of Hygiene and Tropical Medicine, UK. 16- 21 June 2021.
4. Protecting Human Research Participants, National Institute for Health, 22 – 25 September 2017.
5. Writing and publishing a study protocol, British Medical Journal, Online 14 -16 July 2016.
6. Data analysis using Stata®, The University of Malawi, College of Medicine 22 – 25 Sept 2016.
7. Basics of Health Economics, World Bank Group Open Learning Campus, Aug to Oct 2015.

Seminars/Webinars

UNICEF/LSHTM Newborn Webinar Series- Meeting the SGD for newborn health by 2030. November 17, 2021

PROFESSIONAL AFFILIATIONS

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| Member, New England Statistical Symposium | 2022 – Present |
| Member, International Statistical Institute | 2021 – Present |
| Member, Public Health Society | 2021 – Present |
| Member, Medical Association of Malawi, Scientific committee | 2020 – Present |
| Member, Society of Medical doctors | 2017 – Present |
| Member, Medical Council of Malawi | 2015 – Present |

COMMUNITY SERVICE AND VOLUNTARY WORK

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| Blood donor, Malawi Blood Transfusion Service, Malawi | 2017 – Present |
| Member, Loins Club International, Malawi | 2018 – Present |
| Undergraduate career / professional mentorship and coaching | 2018 – Present |
| Co-Founder: Frontier Innovators Global, Malawi | 2021 – Present |

LANGUAGES

English: Native Language, Distinguished levels in Listening, Speaking, Reading, and Writing.

Dutch: Intermediate levels in in Listening, Speaking, Reading, and Writing.

German, French, portuguese and Spanish: Basic levels in in Listening, Speaking, Reading, and Writing.

OTHER SKILLS AND COMPETENCES

Computational Statistics: Python, R programming languages and STATA.

Data management and Mobile data collection: Open data kit, RedCap, Microsoft Excel and Access

Mathematical Modelling: Berkley Madonna and EMOD.

`geoffreymanda.github.io`