

LILIAN N. CHUMBA MBChB, MScGH

8170 33rd Ave South, Bloomington, MN 55425, Mail stop 21112R

Work Phone: 952-967-5279

Work Email: lilian.n.chumba@healthpartners.com

EDUCATION

Master of Science in Global Health

Duke University- Durham, NC 2016-2018

Certificate in International Development Policy

Duke University- Durham, NC 2016-2018

Bachelor of Medicine and Bachelor of Surgery

Moi University, School of Medicine- Eldoret, Kenya 2005-2010

PROFESSIONAL EXPERIENCE

Research Scientist- HealthPartners Institute, Bloomington, MN (2021-Present)

- Lead the implementation of own research projects that have been funded, including securing the needed regulatory approvals, implementing research activities and in disseminating research findings through publications and presentations.
- Collaborating with other research investigators in writing grants, implementing research projects and in disseminating research findings through publications and presentations
- Writing and submission of grant applications for research projects with a focus on health service research, implementation science, chronic disease care and addressing healthcare disparities
- Participation in the internal research review committee and in external scientific peer-review processes.
- Leads project team and committee meetings, task management for several team members and communication with the team as well as other stakeholders.

Research Project Manager- HealthPartners Institute, Bloomington, MN (2018-2021)

- Facilitated group and committee meetings, task management for several team members and communication with the team as well as other stakeholders.
- Prepared and submitted IRB applications and managed continuing reviews to ensuring compliance.
- Developed detailed project plans, timetables and different trackers to meet deadlines using forethought and understanding of the scientific nature of the project.
- Allocated and coordinated resources, including maintaining budgets of studies.
- Collaborated with internal and external teams to design documentation systems, data collection tools like questionnaires and surveys and processes to ensure data accuracy and completeness.
- Collaborated with team members to create reports and perform basic statistical analysis of results, write journal articles and perform project presentations.

Research Assistant- Duke Global Health Institute, Durham, NC (2016-2018)

- Developed a proposal for a project guided by implementation science frameworks and submitted IRB materials that led to successful approval of the project
- Participated in grant applications, consent forms writing and translation to Swahili, and drafting standard operating procedures
- Developed data collection tools including observation and interview guides, surveys and medical record data abstraction form
- Collected quantitative and qualitative data during fieldwork in Moshi, Tanzania

- Collaborated with the study team to analyze data using ground theory approach, NVivo software and STATA software
- Participated in manuscript writing with two published
- Presented a poster at the TGHC conference in Raleigh, NC and the Dissemination and implementation conference in Arlington, VA

Graduate Teaching Assistant- Duke University, Durham, NC (2017-Present)

- Assisted the subject professor (Dr. Melissa Watt of Gender and global health currently, Dr. Sarah LeGrand of Fundamentals of global health in fall 2017) with managing course materials and class attendance
- Graded assignments, led group discussions and course review sessions, taught and assisted students through office hours and one on one meetings

Intern Medical Officer - Moi Teaching and Referral Hospital, Eldoret, Kenya (2014-2015)

- Performed clinical care under supervision that involved patient history taking and physical examination, diagnostic sample collection, patient management and supervised surgeries.
- Volunteered as a research assistant for residents and other principle investigators to support their research through translation of study materials, participant recruitment and consenting, and data collection.

Field Interviewer- NORC at the University of Chicago (National Children's Study) (2013-2014)

- Recruitment, retention and follow up of study participants
- Data collection through surveys and physical measurements and data entry into the Computer Research Information System (CRIS) data management system
- Management of study materials and participant incentives

Assistant Program Supervisor- Homeward Bound Inc. MN (2011-2013)

- Employee training and supervision, planning of client appointments and community activities and offering quality direct care to clients.

Student Research Assistant- Moi University School of Medicine, Eldoret, Kenya (2006-2007)

- Through the AMPATH Kenya work-study program offered at Moi university School of Medicine, I worked as a student research assistant under the supervision of Prof. Ayuo to support his research through literature reviews and general office management.

ADDITIONAL EXPERIENCES

- Finance Director: Duke African Graduate and Professional Student Association (2017-2018)
- Observership- Duke Hospital Medical ICU in Durham, NC under Prof. Peter Kussin (2014)
- Observership: Hennepin County Medical Center Pediatric ICU under Dr. Andrew Kiragu [2013]
- Volunteer: North Memorial Medical Center Emergency Department (2011-2012)
- Vice president: Moi University College of Health Sciences Students Organization (2006-2007)
- Secretary: HIV/AIDS Peer Educators Club in Kitale, Kenya (2003-2004)
- Math and Science Tutor: St. Monica High School in Kitale, Kenya (2002-2003)

AWARDS AND SCHOLARSHIPS

- **National Institute of Diabetes and Digestive and Kidney Disease Diversity Supplement Grant** to the parent grant 'Reducing Clinical Inertia in Obesity Management of Diabetes in Primary Care: Cluster-Randomized Trial' (PI: Patrick J. O'Connor) 3R01DK128281-02S1 (2022-2024)

- **Duke Global Health Institute Merit Scholarship** for the MSc Global Health Graduate studies (2016-2018)
- **Duke Global Health Institute Field Research Grant** for conducting field research in Moshi, Tanzania from May to August 2017
- **AMPATH Kenya work-study Scholarship** offered at Moi university School of Medicine, Eldoret, Kenya for medical education (2006-2007)
- **Dr. Joe Wanjui Educational Trust Fund Merit Scholarship** towards medical education at Moi University School of Medicine, Eldoret, Kenya (2005-2006)

RESEARCH MANUSCRIPTS PUBLISHED

- JoAnn M. Sperl-Hillen, A. Lauren Crain, **Lilian Chumba**, Heidi L. Ekstrom, Deepika Appana, Kristen M. Kopski, James B. Wetmore, James Wheeler, Areef Ishani, Patrick J. O'Connor. Pragmatic clinic randomized trial to improve chronic kidney disease care: Design and adaptation due to COVID disruptions. *Contemporary Clinical Trials*, Volume 109, 2021, 106501, ISSN 1551-7144.
- Knettel BA, Cichowitz C, Ngocho JS, Knippler ET, **Chumba LN**, Mmbaga BT, Watt MH. (2018). Retention in HIV Care During Pregnancy and the Postpartum Period in the Option B+ Era: Systematic Review and Meta-Analysis of Studies in Africa. *J Acquir Immune Defic Syndr*. 2018 Apr 15;77(5):427-438. doi: 10.1097/QAI.0000000000001616
- Knettel, B.A., Minja, L., **Chumba, L.N.**, Oshosen, M., Cichowitz, Cody, Mmbaga BT & Watt MH (2018). Serostatus disclosure among a cohort of HIV-positive pregnant women enrolled in HIV care under Option B+ in Moshi, Tanzania: A mixed-methods study. *SSM - Population Health* VL - 7 10.1016/j.ssmph.2018.11.007

RESEARCH THESIS PUBLISHED

- **Chumba, Lilian Nafwa** (2018). *Facility-Level Factors Affecting Implementation of the Option B+ Protocol for Prevention of Mother-to-Child Transmission of HIV (PMTCT) in Kilimanjaro, Tanzania*. Master's thesis, Duke University. Retrieved from <https://hdl.handle.net/10161/17002>.

SELECTED PRESENTATIONS AND POSTERS AT ACADEMIC CONFERENCES

- **Lilian Chumba**, MBChB, MScGH, Jacob Haapala, MPH, JoAnn Sperl-Hillen, MD, Heidi Ekstrom, MA, Jeffrey Anderson, ScD, MPH, MA, Mary Becker, BA, Steven Dehmer, PhD, Pamala Pawloski, PharmD, Caitlin Frail, PharmD, MS, BCACP, Anjali Truitt, PhD, MPH and Patrick O'Connor, MD, MA, MPH. Is There Bias in Deployment of Clinical Decision Support Tools in Primary Care Clinics Based on Patient Characteristics? Poster presented at the 2022 Academy Health Annual Research Meeting in Washington, DC on June 6th, 2022.
- Pamala A. Pawloski, Pharm.D, BCOP, FCCP, Jeffrey P. Anderson, ScD, MPH, Mary T. Becker, BA, **Lilian N. Chumba**, MBChB, MScGH, Jeanette Y. Ziegenfuss, PhD, Patrick J. O'Connor, MD, MPH, Steven P. Dehmer, PhD, Heidi L. Ekstrom, MA, Caitlin K. Frail, Pharm.D, MS, BCACP, Jacob L. Haapala, MPH, Melissa A. Pankonin, Pharm.D, Daniel J. Rehauer, Pharm.D, Anjali R. Truitt, PhD, MPH, JoAnn M. Sperl-Hillen, MD. The Relationship Between ASK12 Patient-Reported Medication Adherence Scores and Objective Measures of Adherence Among Patients with Type 2 Diabetes. *Diabetes* 1 June 2022; 71 (Supplement_1): 913–P. <https://doi.org/10.2337/db22-913-P>.
- **Lilian Chumba**, Jacob Haapala, JoAnn Sperl-Hillen, Heidi Ekstrom, Patrick O'Connor. Do Patient Characteristics Influence Use of a Clinical Decision Support Tool? Poster presentation accepted for the 2022 Health Care Systems Research Network Conference to be held at the Pasadena Convention Center on April 12-14, 2022.

- Pamala Pawloski, Jeffery Anderson, Mary Becker, **Lilian Chumba**, Jeanette Ziegenfuss, Patrick O'Connor, Steven Dehmer, Heidi Ekstrom, Caitlin Frail, Jacob Haapala, Melissa Pankonin, Daniel Rehrauer, Anjali Truitt, JoAnn Sperl-Hillen. Correlation of ASK-12 and PDC Measures Among Patients with Poor Control of Chronic Disease and Low PDC. Poster presentation accepted for the 2022 Health Care Systems Research Network Conference to be held at the Pasadena Convention Center on April 12-14, 2022.
- JoAnn Sperl-Hillen, Jeffrey Anderson, Jacob Haapala, **Lilian Chumba**, Heidi Ekstrom, Deepa Appana, Malini DeSilva and Patrick O'Connor. The Prevalence of Medication Adherence Issues in Patients Not Achieving Recommended Care Goals. Poster presentation accepted for the 2020 Health Care Systems Research Network Conference to be held at the Loews Philadelphia Hotel on April 8 – 10, 2020, but was canceled due to COVID-19.
- JoAnn Sperl-Hillen, Shannon McKearnan, Patrick O'Connor, Jay Desai, **Lilian Chumba**, Karen Margolis, Stephanie Hooker, Rebecca Rossom, Gabriela Vazquez-Benitez and Malini DeSilva. Predictors of Glycemic Relapse in Adults with Type 2 Diabetes. Poster presentation accepted for the 2020 Health Care Systems Research Network Conference to be held at the Loews Philadelphia Hotel on April 8 – 10, 2020, but was canceled due to COVID-19.
- Pritika Kumar, Stephanie Freund, Deepika Appana, **Lilian Chumba**, Patrick O'Connor and JoAnn Sperl-Hillen. User-Centered Decision Support: Formative Provider-Usability Evaluation of Integrated Clinical Decision Support for Chronic Kidney Disease Care and Management in Primary Care. Poster presentation accepted for the 2020 Health Care Systems Research Network Conference to be held at the Loews Philadelphia Hotel on April 8 – 10, 2020, but was canceled due to COVID-19.
- **L Chumba**, MH Watt, BA Knettel, C Cichowitz, G Kisigo, J Ngocho, B Mmbaga. (2017) Examining healthcare facility-level factors affecting the fidelity of implementation of PMTCT option B+ Guidelines in Kilimanjaro, Tanzania. Poster presentation at 10th Annual Conference on the Science of Dissemination and Implementation in Health. Arlington, Virginia.
- C Cichowitz, G Kisigo, L Minja, J Ngocho, **L Chumba**, BT Mmbaga, B Knettel, MH Watt. (2017) HIV-related shame, HIV acceptance, and attitudes about long-term ART: Results from a cohort of women receiving PMTCT care in northern Tanzania. Oral presentation at AIDS Impact Conference. Cape Town, South Africa.