



PHYSICIANS CONFERENCE 2025 & AGM

THEME:

A Holistic Approach to Curb the Rise of
Non-Communicable Diseases in Tanzania

23rd & 24th May 2025

Aura Suites Hotel, Dar es salaam

PROGRAM BOOK

Welcome remarks for APHYTA president



Dear Esteemed Colleagues and Distinguished Guests,

It is with great honor and heartfelt pleasure that I welcome you to **PHYSICON 2025**.

This important gathering remains a cornerstone for professional collaboration, knowledge exchange, and innovation—both within the Association of Physicians of Tanzania (APHYTA) and the broader medical community. With your continued support and dedication, APHYTA continues to grow in strength and relevance each passing day.

Our Association remains steadfast in its mission: to support physician training, foster continuous professional development, and uphold the highest standards of ethical practice. These are the core pillars that drive us toward our shared vision.

This year's theme, **“Holistic Approach to Curb the Rise of Non-Communicable Diseases,”** highlights an urgent and evolving challenge. Tackling NCDs demands more than clinical excellence alone—it calls for an integrated approach that encompasses prevention, health policy, legislation, public education, community empowerment, and system-wide coordination.

As we convene over the coming days, I encourage each of us to actively engage, exchange insights, and explore innovative, evidence-based strategies that can transform our healthcare landscape. The conversations we have here and the collaborations we build will contribute meaningfully to improving health outcomes and advancing quality care for all Tanzanians.

Thank you for your presence, your contributions, and your unwavering commitment to better health for our nation. I look forward to enriching discussions and a successful conference ahead.

Warm regards,

Dr. Mwanaada Kilima

President, Association of Physicians of Tanzania (APHYTA)

Welcome remarks from the Organizing Committee



Dear Participants, Guests, and Partners,

On behalf of the Organizing Committee, it is our sincere pleasure to welcome you to **PHYSICON 2025**.

We are deeply honored to convene this year's conference under the theme **"Holistic Approach to Curb the Rise of Non-Communicable Diseases."** As the burden of NCDs continues to rise across Tanzania and beyond, this conference provides a timely platform for reflection, dialogue, and coordinated action across disciplines.

Our program this year has been meticulously arranged to bring together experts from across the country and beyond—clinicians, researchers, policymakers, and educators—who share a common goal: to advance equitable, patient-centered, and integrated care for all. From plenary lectures to breakout sessions and workshops, we hope the diversity of content will inspire meaningful conversations and actionable ideas.

We also extend our deepest gratitude to all our partners, speakers, and sponsors whose contributions have made this event possible. Special thanks to each of you attending—whether this is your first PHYSICON or you are a returning participant—your engagement and passion are what give this conference its true value.

We encourage you to fully immerse yourselves in the sessions, share your experiences, and forge new collaborations. Together, we can drive sustainable change and improve health outcomes across our communities.

Welcome to PHYSICON 2025—let the discussions begin!

Warm regards,

Dr. Joan Rugemalila on behalf of the Organizing Committee
PHYSICON 2025

Day 1: 23rd May 2025 CONFERENCE SCHEDULE

Time	Session	Responsible Person
07:30 – 09:00	Registration	ALL
09:00 – 09:30	Introductions	Master of Ceremony(Dr. Elisha)
09:30 – 11:00	Session I: Opening ceremony	
5min	Welcoming remarks	Dr.Joan Rugemalila
10min	Address from APHYTA President	APHYTA President
20min	Keynote address	Dr. James Kengia
20min	Address from the Guest of Honour	Hon. Deputy Minister
5min	Vote of thanks	ALL
5min	Group Photo	
11:00 – 11:45	Tea Break/Poster presentations/Networking	
11:45 – 13:35		
20min	Scaling-up NCD Care to Primary Health Facilities - Experience from PEN plus Project	Dr.Mary Mayige
20min	Hypertension Epidemiology in Tanzania and Community-Based Interventions	Dr.Fredrick Kalokola
40min	Updates on Management of Common NCDs <ul style="list-style-type: none"> • Cardiometabolic-renal Syndrome • Advances in Kidney transplantation 	Dr.Samuel Rweyemamu Dr.Sanjay Pandey
20min	Oral abstracts 1."Earlyinsightsfrom a National StrokeSurveillanceInitiativein Tanzania " 2." DermatologicalDisordersamongtheElderlyinUrbanAr easof Dar es salaam, Tanzania: Prevalence, AssociatedFactorsandImpactonQualityofLife "	Dr.ElishaOsati Dr.Joshua Patrick Ngimbwa Dr.Uwesu Rajabu Muki
10min	ECSACOP	Dr.Joan Rugemalila
13:30 – 14:45	LUNCH AND POSTERS VIEWING	
14:45 – 16:30 (110min)		
20min	Addressing Modifiable risk factors – the role of Policy and individual behavioural factors – a focus on tobacco	Mrs.LutgardKagaruki
45min	Prevention of NCDs at workplaces <ul style="list-style-type: none"> • General Principles • Role of Screening at workplace • Policy perspectives 	Dr.Hussein Mwanga Ms.BadlwinaOrlik Dr.OmaryUbuguyu
15min	Living with NCD: Advocating for people with chronic NCDs	Mr. Joseph Peter Massawe

30min	Oral abstracts 3. "Prevalence, risk factors and severity of cardiac autonomic neuropathy (CAN) in patients with Type 2 Diabetes Mellitus at a tertiary hospital in Zanzibar" 4. "When time and resources are scarce Can Aspirin and Clopidogrel save the Heart? A case report" 5. "Diabetic Striatopathy (Hyperglycemic Hemichorea-Hemiballismus Syndrome) in a Young Patient with Type 1 Diabetes Mellitus in Dar es Salaam, Tanzania; A Case Report".	Dr.Faraja Chiwanga Hassan Thabit Haji Dr.Mark Paul Mayala Dr.Tom Pius
End of Day I		

Day 2: 24th May 2025

Time	Session	Responsible person
08:00 – 09:00	Registration	ALL
09:00 – 10:30 (90min)		
20min	Data-Driven Decisions in Managing Chronic NCDs	Prof.Samuel Kalluvya
60min	Management updates <ul style="list-style-type: none"> Updated Guidelines on the Management of Hypertension Recent advances in Oncology: Curing the Incurable Spectrum of Autoimmune Disorders in current clinical practice- Laboratory view. 	Prof.Pili Chillo Dr.Praveen Jain Dr.Rameez Patvegar
10min	APHYTA membership	Prof.Kajiru Kilonzo
10:30 – 11:15	Break and Poster viewing	
11:15 – 12:35 (80min)		
30min	Clean Cooking Energy: A National Agenda to Embrace <ul style="list-style-type: none"> Updates on the Management of Asthma The National Cooking Energy Strategy 	Dr.Sibtain Moledina Dr.Elisabeth Mshote
30min	Oral Abstracts 6. "Implementing Acute Stroke Services in Sub-Saharan Africa: Steps, Progress and Perspectives from the Tanzania Stroke Project. 7. "Home based palliative care in Kilimanjaro region. A cost analysis"	Dr.Khuzheima Khanbhai Dr.Sarah Shali Matuja Dr.Frank Richard Simbila
20min	Cilnidipine (Cilacar): Clinical Benefits Beyond BP Control	Prof. Paschal Ruggajo
12:35 – 13:30	CLOSING REMARKS	Vice President APHYTA
13:30 – 14:30	LUNCH and POSTERS	
1400 – 1600	ANNUAL GENERAL MEETING	Active APHYTA member

Meet the Minds Behind PHYSICON 2025

Executive Committee



Dr. Mwanaada Kilima

President, Association of Physicians of Tanzania (APHYTA)
Pulmonary and Critical Care Physician, Muhimbili National Hospital
Honorary Lecturer, Muhimbili University of Health and Allied Sciences (MUHAS)

Dr. Mwanaada Kilima is a graduate of the University of Algiers with specialized and super-specialized training in Internal Medicine, Clinical and Interventional Pulmonology, Critical Care, and Sleep-Related Breathing Disorders. She currently serves as a Pulmonary and Critical Care Physician at Muhimbili National Hospital and holds the position of Honorary Lecturer at the Muhimbili University of Health and Allied Sciences (MUHAS).

Dr. Kilima is the current President of the Association of Physicians of Tanzania (APHYTA) and serves as a Board Member of the Tanzania Non-Communicable Diseases Alliance (TANCD). She has played a pivotal role as the lead Master Trainer in the National NCD Training Programme, which has supported capacity building for healthcare providers across the country.



Prof. Kajiru Kilonzo, MD, MMed (Int. Med), MSc Nephrology

Vice President, Association of Physicians of Tanzania (APHYTA)
Consultant Physician & Nephrologist, Kilimanjaro Christian Medical Centre (KCMC)

Prof. Kajiru Kilonzo is a consultant physician and nephrologist based at Kilimanjaro Christian Medical Centre (KCMC) in northern Tanzania. As Vice President of the Association of Physicians of Tanzania (APHYTA), he is actively involved in promoting internal medicine practice through clinical education, mentorship, and implementation of research findings. His interests include quality improvement and research on non-communicable diseases, with a focus on advancing kidney care and general internal medicine across the region.



Dr. Joan Rugemalila, MD, MMed (Int. Med)

General Secretary, Association of Physicians of Tanzania (APHYTA)

Physician, Muhimbili National Hospital

Dr. Joan Rugemalila is an internal medicine physician at Muhimbili National Hospital and General Secretary of APHYTA. She has a strong interest in infectious diseases, with a focus on HIV medicine. Her research centers on advanced HIV disease, antiretroviral treatment failure, and HIV drug resistance. Dr. Rugemalila is dedicated to improving HIV care through evidence-based clinical practice and research.



Dr. Hery Mwandolela, MSc Cardiology

Treasurer-APHYTA

Dr. Hery Mwandolela is a practicing clinical cardiologist with over 15 years of experience in cardiovascular medicine. He holds a Master of Science in Cardiology from Muhimbili University, completed through a collaborative sandwich program with institutions in Norway and India.

His primary interests lie in non-invasive cardiology, with a particular focus on cardiac imaging and echocardiography. Dr. Mwandolela is dedicated to advancing cardiac care through evidence-based practice and continuous professional development.



Dr. Faraja Chiwanga is an Internal Medicine Physician and Clinical Endocrinologist, currently serving as the Director of Medical Services at Muhimbili National Hospital in Tanzania. She holds a Master of Medicine in Internal Medicine, an MSc in Endocrinology and Diabetes, and an MSc in Public Health.

She is an Honorary Lecturer at Muhimbili University of Health and Allied Sciences (MUHAS), an Honorary Senior Researcher at the University of Oxford, and a Doctoral Researcher at Uppsala

University, where she is part of the CIRCLE research group (Complex Intervention Research in Health and Care). Her PhD focuses on the design and evaluation of complex interventions, with a particular emphasis on mobile health technologies for the management of non-communicable diseases.

Dr. Chiwanga's research interests include both clinical and epidemiological aspects of non-communicable diseases (NCDs), with particular focus on diabetes, hypertension, cancer, and thyroid disorders. She is also actively engaged in addressing the intersection of climate change and health, working with the LEAD Foundation to promote nature-based solutions for climate adaptation and mitigation. She currently leads a Wellcome Trust-funded project evaluating interventions aimed at reducing the health impacts of extreme heat among agricultural workers in Tanzania.

She has authored over 30 peer-reviewed publications and has an h-index of 15 (Scopus). Dr. Chiwanga also serves as a reviewer for several national and international journals and is a member of the UK Research and Innovation (UKRI) International Development Peer Review College.



Dr. Elisha Osati is a Medical Doctor (MD) and Internal Medicine specialist, trained at the Muhimbili University of Health and Allied Sciences (MUHAS), Dar es Salaam, Tanzania. He holds a Mastery Certificate in Infectious Diseases from Dartmouth Medical School, New Hampshire, USA, and a Mastery Certificate in Leadership from the European School of Management and Technology (ESMT), Berlin, Germany.

Dr. Osati is a Fellow of the Foundation for Advancement of International Medical Education and Research (FAIMER), affiliated with the University of Pennsylvania, USA, and Makerere University, Uganda.

He is currently a PhD Fellow at MUHAS, conducting research on cardio-pulmonary sequelae of the COVID-19 pandemic.

He serves as a Cardio-Respiratory Physician in the Department of Internal Medicine at Muhimbili National Hospital and is also an Honorary Lecturer at MUHAS.

Dr. Osati holds several key leadership positions, including Chair of the National Health Research Ethics Committee (NathREC), Chairman of the Tanzania Sickle Cell Disease Alliance (TSDA), Deputy Secretary of the Tanzania NCD Alliance, and Executive Committee Member of the Association of Physicians of Tanzania (APHYTA). He previously served as President of the Medical Association of Tanzania (MAT).

Key note speakers



Dr. Omary Ubuguyu, MD, MMED.

Assistant Director for Non-Communicable Diseases, Ministry of Health, Tanzania

Dr. Omary Ubuguyu is a psychiatrist and public health expert currently serving as the Assistant Director for Non-Communicable Diseases (NCDs) at the Ministry of Health in Tanzania. With over 14 years of professional experience—including more than five years in senior roles at the Ministry—he has led national efforts in NCD prevention, mental health, and behavioral health integration. He previously served as Director of Curative Services (2021–2022) and Program Manager for the National NCD Program (2019–2021).

Dr. Ubuguyu is a certified addiction counselor and Level II global trainer under the International Centre for Credentialing and Education for Addiction Professionals. He has practiced motivational interviewing techniques for over 12 years and has contributed as an addiction expert at leading Tanzanian hospitals. An honorary lecturer at MUHAS and the University of Dodoma, he actively engages in teaching, research, and academic mentorship. His training includes public health at Radboud University Medical Centre in the Netherlands and leadership certification from Uongozi Institute and Aalto University in Finland.

His contributions span policy development, health systems reform, and multisectoral strategies, including integration of NCDs and HIV care, perinatal mental health services, and PEN-Plus implementation.



MBBS & M.D (Pathology) - Rajiv Gandhi University of Health Sciences, Bangalore - India

Observer in Neuro - Pathology - National Institute of Mental Health and Neuro Sciences, Bangalore - India

Scientific & Technical Head - International Laboratories –Metropolis Healthcare

Dr. Rameez Patvegar is a clinical laboratory specialist with expertise in haematology, clinical chemistry, and immunoassays. He is a certified trainer in Quality Management Systems and Internal Audits for medical laboratories, and is also certified in Infection Prevention and Control. With extensive experience in gynaecologic and oncologic pathology, he is a recognized speaker on best practices in laboratory medicine. His work is strongly research-driven, with a techno-commercial orientation in the field of reproductive medicine.



Dr. Mary Mayige

Principal Research Officer and Director of Research Information and Regulatory Affairs, NIMR

Dr. Mary Mayige is a medical doctor and public health expert with extensive experience in research, clinical practice, and policy development. She currently serves as Principal Research Officer and Director of Research Information and Regulatory Affairs at the National Institute for Medical Research (NIMR). She holds an MBChB from Makerere University, an MPH from MUHAS, and a PhD in Clinical Epidemiology from Newcastle University, UK. She has also completed short-term trainings at institutions such as THL Finland, Cambridge University, and Morehouse College.

Dr. Mayige's work focuses on non-communicable diseases (NCDs), their intersection with infectious diseases such as HIV, and evidence-based health planning. She has led major research initiatives including Tanzania's STEPs Surveys (2012, 2023), the H3Africa diabetes project, PEN PLUS, and the NCDI Poverty Commission. She has contributed to key national policy documents including the NCD Strategic Plans, National Nutrition Action Plan II, and Health Sector Strategic Plan V.

She serves in multiple leadership roles: Co-Chair of the Tanzania NCDI Poverty Commission, member of the Medical Association of Tanzania National Council, board member of the Tanzania Human Genetics Organization, Co-Chair of the Tanzania Young Academy of Science, and Chair of the MUHAS Industrial Advisory Committee. She is also Secretary of the National Health Research Ethics Committee and serves on national technical and regulatory committees.

In academia, she is a visiting lecturer and postgraduate supervisor, with numerous peer-reviewed publications.



Elizabeth Fredrick Mshote (PhD),

Assistant Administrative Secretary (Economic and Productive Sector)

She is an expert in Agricultural Economics, with a focus on Rural-Urban Transformations and the integration of social and gender-related dimensions. Her professional experience includes active participation in various government-led initiatives addressing climate change, such as enhancing the adaptation and mitigation capacities of vulnerable communities in urban centres. She has been extensively involved in gender analysis and mainstreaming efforts, as well as the development and piloting of the *Nishati Safi Mashinani*—a Regional Clean Cooking Transition Model that takes into account the needs, interests, and capabilities of target populations to support sustainable clean cooking solutions.

She has also contributed to the collaborative research project *RUCROP* (Rural Urban Complementarities for Reduction of Poverty), jointly implemented by Sokoine University of Agriculture and Copenhagen University. Conducted in the Southern Highlands of Tanzania, this project aimed to promote equitable rural-urban linkages by identifying key economic drivers in Emerging Urban Centres (EUCs) and informing evidence-based policy development.

Currently, she is involved in the implementation of the *IMASA Model* (*Imarisha Uchumi na Samia*), supported by the President's Office and the National Economic Empowerment Council (NEEC). This interdisciplinary initiative focuses on uncovering economic opportunities for special needs groups, designing socio-economic support programs, and fostering networks among beneficiaries to enhance mutual benefits and long-term economic inclusion.



Prof. Pilly Chillo, MD, MMED, Cert. Cardiol. PhD

Associate Professor and Consultant Cardiologist at Muhimbili University of Health and Allied Sciences, Dar es Salaam, Tanzania

Prof. Pilly Chillo is a practicing cardiologist and academician whose work focuses on rheumatic heart disease, hypertension, cardiovascular epidemiology, and echocardiographic imaging in sub-Saharan Africa. At MUHAS she leads undergraduate and postgraduate teaching in clinical cardiology. She also spearheads short courses that equip clinicians with clinical cardiology skills across Tanzania and the region. Prof. Chillo has authored numerous peer-reviewed publications on hypertension and hypertensive heart disease, rheumatic heart disease, as well as in heart-failure risk factors. She collaborates internationally—most recently with Utrecht University—to build capacity in clinical cardiovascular research.

In her conference session, Prof. Chillo will discuss the latest global hypertension guidelines and practical strategies for their implementation in resource-limited settings, drawing on her clinical experience and ongoing research in Tanzania.



Dr. Sanjay Pandey is a Consultant Urologist, Andrologist, and Renal Transplant Surgeon at Kokilaben Dhirubhai Ambani Hospital, Mumbai, with over 25 years of experience. He trained at Christian Medical College, Vellore and JIPMER, Pondicherry, and previously served as Associate Professor of Urology at Sri Ramachandra Medical University.

Dr. Pandey has a special interest in reconstructive urology, andrology, and complex renal surgeries. He has performed numerous advanced procedures including urethroplasties, pyeloplasties, and kidney transplantation.

At the **APHYTA 2025 Annual Scientific Conference**, Dr. Pandey will present on **“Advances in Kidney Transplantation,”** offering insights into modern surgical approaches and innovations in renal transplant care.



Lutgard Kokulinda Kagaruki

Executive Director, Tanzania Tobacco Control Forum (TTCF)

Lutgard Kagaruki is the Executive Director of the Tanzania Tobacco Control Forum (TTCF), established in 2005 to promote strong tobacco control policies in Tanzania. She holds an MSc and a Postgraduate Diploma in Medical and Veterinary Parasitology from the London School of Hygiene and Tropical Medicine, University of London.

Before joining the tobacco control movement, she worked as a researcher for 35 years at the Central Veterinary Laboratory Authority (CVLA) under the Ministry of Livestock and Fisheries Development, specializing in ticks and tick-borne diseases, with over 20 publications and technical reports.

She played a key role in Tanzania’s ratification of the WHO Framework Convention on Tobacco Control (FCTC) in 2007 and continues to advocate for a comprehensive FCTC-compliant tobacco control law. Under her leadership, TTCF has also supported the development of national and international tobacco control policies and NCD training manuals for health professionals.

Lutgard has authored over 10 grants and numerous publications on tobacco control. She is a board member of INWAT, TANCDA, and LHRC, and a former board member of FCA, ATCRI, and Sokoine University of Agriculture (SUA). She received the WHO World No Tobacco Day Award in 2010 for her exceptional contributions.

Her current work focuses on reducing tobacco use—including shisha and new nicotine products among youth—and supporting alternative livelihoods for tobacco farmers.



Dr. Kalokola

Consultant Physician and Cardiovascular Researcher

Dr. Kalokola is a consultant physician with over a decade of experience in clinical care, academic teaching, and medical research. His professional focus lies in the management of cardiovascular diseases and in advancing evidence-based interventions to address the growing burden of non-communicable diseases in Tanzania and the wider African region.

Dr. Kalokola’s research portfolio includes innovative community-based strategies for hypertension control. Notably, his recent publications explore the integration of religious leaders into public health outreach—leveraging their influence and trust within communities to promote early detection and management of high blood pressure.

During this conference, Dr. Kalokola will speak on “**Hypertension Epidemiology in Tanzania and Community-Based Interventions,**” sharing insights from his research and field experience on scalable models for improving cardiovascular health outcomes at the population level.

Mr. Joseph Peter Massawe is the Founder and Executive Director of the *Without Non-Communicable Diseases Initiative (WNCDi)*, a youth-led organization dedicated to combating non-communicable diseases (NCDs) through education and community engagement.

He is a Medical Laboratory Scientist with a specialization in Clinical Chemistry from Muhimbili University of Health and Allied Sciences (MUHAS) and is currently undertaking his internship at Aga Khan Hospital, Dar es Salaam.

A passionate public health advocate, Mr. Massawe focuses on NCD prevention and awareness. He utilizes his leadership skills to guide youth-driven initiatives that raise community awareness about NCDs and their risk factors. Through WNCDi, he has also pioneered efforts to provide basic NCD education to children and adolescents in primary and secondary schools, aiming to cultivate early understanding and preventive habits in younger generations.



Baldwina TitaOlrk (BSc. Env Science, MscOcc Health, PhD (Cand))

Baldwina TitaOlrk is an Occupational Health and Safety expert and public health professional currently pursuing a PhD through a joint program between the University of Bergen (Norway) and MUHAS (Tanzania). She serves as an Occupational Health & Safety Specialist at Muhimbili National Hospital and is an Honorary Lecturer at MUHAS.

Her academic and research focus spans occupational health, non-communicable diseases, women's health, and environmental health. She brings expertise in epidemiological studies, public health research, and capacity building. Baldwina has collaborated with international institutions such as Colleges and Institutes Canada (CICan) and is active in global networks addressing toxic chemical exposure.

A strong advocate for evidence-based policy reform, she has contributed to improving worker health and safety across Tanzania's health and education sectors through policy reviews, training, and the promotion of integrated disease prevention strategies.



Dr. Hussein Mwanga (MD, MMed, FCPHM(SA) Occ. Med, PhD)

He is a Consultant Occupational Medicine Physician and Senior Lecturer at Muhimbili University of Health and Allied Sciences (MUHAS). He holds a PhD in Public Health and a Master of Medicine (MMed) in Occupational Medicine from the University of Cape Town. He is also a Fellow of the College of Public Health Medicine of South Africa in Occupational Medicine [FCPHM(SA) Occ. Med].

Dr. Mwanga has played a pivotal role in the development of national policies and guidelines related to occupational health and workers' compensation in Tanzania. He has extensive experience in conducting epidemiological studies in occupational settings, with a research focus on respiratory diseases, occupational allergies, and chemical exposure assessment in the workplace.



Dr. Samwel Jacob Rweyemamu

Clinical and Interventional Cardiologist | Researcher, JKCI | Honorary Lecturer, MUHAS

Dr. Samwel Rweyemamu completed his undergraduate medical training at the International Medical and Technological University (IMTU), followed by an MMed in Internal Medicine and an MSc in Cardiology from Muhimbili University of Health and Allied Sciences (MUHAS). He also holds a Postgraduate Diploma in Preventive Cardiovascular Medicine from the University of South Wales, UK.

He currently serves as a clinical and interventional cardiologist and researcher at the Jakaya Kikwete Cardiac Institute (JKCI), with over 10 publications in peer-reviewed journals. Dr. Rweyemamu is also an honorary lecturer in the Department of Internal Medicine at MUHAS. He plays a leading role in national NCD initiatives as Vice Chairperson of the Tanzania Non-Communicable Diseases Alliance (TANCDA) and serves as a Master Trainer for NCDs



Prof. Samuel E. Kalluvya, MD, MMed, FCP (ECSA)

Prof. Samuel Kalluvya is a senior physician specialized in Endocrinology and Diabetes Mellitus, with advanced training from Newcastle Upon Tyne, UK. He is also an HIV specialist with decades of experience in both clinical care and academic leadership.

He served as a Specialist Physician at Bugando Medical Centre (BMC) from 1984 to 2010 and has been instrumental in the development of the Catholic University of Health and Allied Sciences (CUHAS), where he held key positions including Director of Postgraduate Studies and Head of the Department of Internal Medicine. Though retired, he continues to serve on a contract basis as Associate Professor of Medicine at CUHAS.

Prof. Kalluvya currently heads the BMC Research and Consultancy Unit. Nationally, he chairs the HIV/AIDS Clinical Sub-Committee and the Central Third-Line ART Committee under the Ministry of Health. His research spans non-communicable diseases (NCDs), HIV/AIDS, and the intersection of the two, with over 80 peer-reviewed publications to his name.



Dr. Parveen Jain

**Senior Consultant & Head, Department of Medical Oncology
Aakash Healthcare Super Speciality Hospital, New Delhi, India**

Dr. Parveen Jain is a highly experienced Medical Oncologist with a strong foundation in Internal Medicine, holding a DNB in General Medicine alongside his advanced training in Oncology (DNB & ECMO – Medical Oncology). With over 7 years of dedicated practice, he specializes in the management of both hematological and solid malignancies, including breast, lung, gastrointestinal, gynecological cancers, and sarcomas.

He is a European Certified Medical Oncologist and has completed international preceptorships in prostate and lung cancer. Dr. Jain is actively involved in clinical research, having served as a co-investigator in multiple Phase II–IV trials, and has numerous publications to his name. He is a regular presenter at national and international oncology conferences and an active member of ESMO and the Indian Society of Oncology.

His clinical interests include targeted therapies, immunotherapy, oncologic emergencies, and palliative care — areas that bridge the continuum between oncology and internal medicine.



**Prof. Paschal Ruggajo, MD, MMED, PhD
Consultant Nephrologist | Associate Professor of Medicine
Aga Khan University, Tanzania**

Prof. Ruggajo is a renowned nephrologist and medical educator currently serving as Associate Dean at the Medical College, Aga Khan University–Tanzania. He is Vice President of the Nephrology Society of Tanzania (NESOT), Organizing Committee Chair for AFRAN 2027, and a Board of Trustees Member of AFRAN. His clinical and academic interests include chronic kidney disease, hypertension, and strengthening nephrology services across Africa.

Abstract Presenters



Dr. Pendo S. Mkenda

Dr. Pendo S. Mkenda is a medical doctor at Kilimanjaro Christian Medical Centre (KCMC) in the Department of Internal Medicine. She is also the Co-Founder and Executive Board Member of Remote Care Research Organisation, a registered NGO under Tanzania's Ministry of Health. Her work focuses on improving healthcare delivery in rural communities, particularly in the prevention and management of non-communicable diseases (NCDs). Through her NGO, she leads initiatives that provide preventive health education, free medical services, and community-based screenings. These efforts are supported through strategic partnerships with local healthcare workers and stakeholders.

Dr. Mkenda is deeply committed to advancing **community-based healthcare strategies** aimed at enhancing access, equity, and health outcomes for underserved populations. Her approach bridges clinical practice, public health, and grassroots engagement to create sustainable impact in Tanzania's healthcare landscape.



Dr. Joshua Patrick Ngimbwa

Dr. Joshua Ngimbwa is an Internal Medicine resident at Aga Khan University in Dar es Salaam, Tanzania. He holds a Doctor of Medicine degree from the Catholic University of Health and Allied Sciences–Weill Bugando and is a recent scholar of the *Training Africans to Lead and Execute Neurological Trials (TALENT)* program.

His clinical and research interests focus on Neurology and Cardiovascular Diseases. Dr. Ngimbwa is an active contributor to the *Lake Zone Stroke Registry Study*, Tanzania's first stroke registry with over 2,000 imaging-confirmed cases. This initiative, conducted in collaboration with the Ministry of Health, the World Stroke Organization, and the Tanzania Stroke Task Force under the Tanzania Stroke Project (TSP), has been instrumental in shaping national stroke care policy and the rollout of acute stroke services across referral hospitals.



Mr. Hassan Thabit Haji

Mr. Hassan Thabit Haji is a Lecturer in Medical Physiology at the State University of Zanzibar (SUZA) and a PhD candidate at Muhimbili University of Health and Allied Sciences (MUHAS). His research focuses on Diabetic Autonomic Neuropathy (DAN), with particular interest in cardiac autonomic dysfunction in Type 2 Diabetes Mellitus.

With a background spanning primary health, endocrinology, and neurophysiology, he is committed to advancing evidence-based approaches that improve health outcomes. Passionate about bridging theory and practice, Mr. Haji aims to become a leading researcher and consultant in diabetic and neurophysiology. He is recognized for his collaborative mindset, adaptability, and dedication to academic mentorship and community service



Dr. Mark Paul Mayala

Dr. Mark Paul Mayala is an Internal Medicine Physician and the Founder & Managing Director of ThriveCare Clinic in Dar es Salaam, a facility dedicated to chronic disease management, post-hospital recovery, and elderly care.

With clinical experience in both urban Tanzania and remote regions of Burundi, he is committed to bridging healthcare gaps in resource-limited settings through innovative, patient-centered care models. He holds certifications in Leadership and Project Management in Health and is actively engaged in research, community outreach, and the advancement of integrated healthcare services across East Africa.



Dr. Thom Pius

Internal Medicine Resident, Muhimbili University of Health and Allied Sciences (MUHAS)

Dr. Thom Pius is a dedicated medical doctor currently in his third year of residency in Internal Medicine at Muhimbili University of Health and Allied Sciences (MUHAS). He earned his Doctor of Medicine degree from MUHAS in 2018 and has since been committed to advancing his clinical expertise and contributing to the improvement of patient care in Tanzania. With a strong foundation in internal medicine, Dr. Pius is passionate about evidence-based practice and medical education. His professional interests lie in the integration of clinical research into practice and the development of sustainable healthcare systems in resource-limited settings.

Pre-Conference Workshop facilitators

Workshop on Hemodialysis vascular access, creation and care



Said Omary Kanenda MD, MMED, DTM&H, MSc. Neph.

Dr. Said Kanenda is a Physician and Nephrologist at Bugando Medical Centre and the Catholic University of Health and Allied Sciences (CUHAS) in Mwanza, Tanzania. He is a practicing general nephrologist and academician whose clinical and research interests include kidney disease, hypertension, diabetes mellitus, and glomerulonephritis.

Dr. Kanenda has developed a strong interest in interventional nephrology, particularly in vascular access care, including the placement and management of temporary and permanent dialysis catheters, as well as percutaneous nephrostomy procedures. As an internist, he is also inspired by the fields of neurology and rheumatology.

At CUHAS, he is actively involved in teaching and supervising both undergraduate and postgraduate students in clinical medicine and research. He has authored several publications, including case reports, contributing to the growing body of nephrology literature in the region.

In his upcoming conference session, Dr. Kanenda will lead a practical teaching session on the technique of tunneled catheter insertion in resource-limited settings, along with a discussion on common complications of tunneled catheters.



Consultant, Interventional Radiology
M.B.B.S , D.N.B (Radiodiagnosis) , F.I.V.R

Dr. Shashank Mishra is a highly experienced Interventional Radiologist, trained at Tata Memorial Hospital and K.E.M. Hospital. He brings extensive expertise in minimally invasive cancer and vascular treatments, with a strong focus on interventional oncology.

Dr. Mishra specializes in advanced image-guided procedures such as liver tumor ablation, transarterial chemoembolization (TACE), and targeted therapies. These cutting-edge techniques enable precise tumor management while preserving surrounding healthy tissue.

He also performs a range of vascular interventions, including angioplasty and stenting, utilizing minimally invasive methods that promote faster recovery, reduced pain, and fewer complications. Renowned for his innovative approach and compassionate patient care, Dr. Mishra is committed to delivering personalized treatment tailored to each patient's unique needs.



Dr. Daniel Msilanga
MD, MMed (Internal Medicine), MSc (Nephrology)
Lecturer and Nephrologist at MUHAS, Tanzania.

Dr. Daniel Msilanga is a Nephrologist and Lecturer at the Muhimbili University of Health and Allied Sciences (MUHAS). He holds a Doctor of Medicine (MD), a Master of Medicine in Internal Medicine (MMed), and a Master of Science in Nephrology (MSc).

His clinical and research interests focus on strengthening kidney care in resource-limited settings, with specific emphasis on early detection of chronic kidney disease (CKD), optimization of dialysis access, and renal complications in people living with HIV. He is actively engaged in both undergraduate and postgraduate medical education.

Dr. Msilanga received advanced training in interventional nephrology through an International Society of Nephrology (ISN) scholarship at St. Helier Hospital, London. At this conference, he will contribute to the pre-conference workshop on permanent vascular access creation for CKD patients.



Dr. Jonathan Mngumi

MD, MMed (Internal Medicine), MSc (Nephrology)
 Medical Specialist and Nephrologist
 Head, Nephrology Unit, Muhimbili National Hospital
 Honorary Lecturer, Muhimbili University of Health and Allied Sciences (MUHAS)

Dr. Jonathan Mngumi is a consultant nephrologist and medical specialist based at Muhimbili National Hospital (MNH), where he currently heads the Nephrology Unit. He is also an Honorary Lecturer at the Muhimbili University of Health and Allied Sciences (MUHAS), actively involved in the training of undergraduate and postgraduate students in internal medicine and nephrology.

He is the Eastern Zone Chapter Secretary of the Nephrology Society of Tanzania (NESOT) and a member of several professional bodies, including the International Society of Nephrology (ISN), the African Association of Nephrology (AFRAN), and the International Society for Peritoneal Dialysis (ISPD).

Dr. Mngumi's professional interests include dialysis access care, chronic kidney disease management, and improving access to renal replacement therapies in resource-limited settings. He is also committed to strengthening nephrology education and promoting awareness of kidney health across Tanzania.

Workshop on STEMI Care in Tanzania



Dr. Khuzeima S. Khanbhai, MD, MMed (Internal Medicine), FCP-ECSA, MSc Cardiology, FESC, FACC, FSCAI

Dr. Khuzeima Khanbhai is a Consultant and Interventional Cardiologist at the Jakaya Kikwete Cardiac Institute (JKCI) in Dar es Salaam, Tanzania. He specializes in advanced cardiac catheterization procedures, including coronary angiography, angioplasty, peripheral interventions, and device implantations. Dr. Khanbhai is a certified expert in all echocardiographic modalities and has a strong research focus on acute coronary syndrome, contributing to several peer-reviewed publications in the field.

As Head of Training at JKCI and an Honorary Lecturer at Muhimbili University of Health and Allied Sciences (MUHAS), he plays a pivotal role in mentoring cardiology fellows, internal medicine residents, and medical students. He also oversees the National Cardiovascular Disease

Registry (NCDR) at JKCI, affiliated with the American College of Cardiology, and serves on the institute's ethics committee.

Dr. Khanbhai's professional affiliations include Fellowships with the European Society of Cardiology (FESC), the American College of Cardiology (FACC), and the Society for Cardiovascular Angiography and Interventions (FSCAI). He is a board member of Madaktari Africa and has been instrumental in organizing major cardiology conferences in Tanzania, such as Heart Team Africa CardioTan 2024



Dr. Mazen S. Albaghdadi, MD, MSc, FACC

Dr. Mazen Albaghdadi is the Director of the Cardiac Catheterization Laboratory and Associate Program Director of the Cardiology Fellowship at the NCH Rooney Heart Institute in Naples, Florida. He is board-certified in Internal Medicine, Cardiovascular Disease, and Interventional Cardiology. Dr. Albaghdadi earned his medical degree from the University of Iowa and completed his residency and cardiology fellowship at Northwestern University. He further specialized in Interventional Cardiology and Vascular Medicine at Massachusetts General Hospital/Harvard University and received additional training in Structural and Congenital Heart Interventions at the University of Toronto.

With over 17 years of clinical experience and more than 50 peer-reviewed publications, Dr. Albaghdadi is actively involved in research and innovation in cardiovascular medicine. He also serves as the Medical Director of Madaktari Africa, a U.S.-based nonprofit that has been instrumental in developing cardiac catheterization and critical care cardiology services at the Jakaya Kikwete Cardiac Institute (JKCI) in Tanzania. Through this collaboration, he has contributed to establishing the first public cardiac catheterization laboratory in Tanzania and training the initial cohorts of interventional cardiologists at JKCI.



Dr. Parag Patel, MD, FACC

Dr. Parag Patel is the Cardiology Fellowship Simulation Director at Advocate Health Systems in Chicago, Illinois. He is the Founder and President of the Foundation for International Cardiac and Community Services (FICCS) in Kenya, a nonprofit dedicated to improving access to cardiac care in underserved regions. As Director of Global FICCS, he leads initiatives to advance ACLS and acute cardiac care training across Africa. Dr. Patel is passionate about medical education, global health equity, and building sustainable cardiovascular programs in resource-limited settings.



Dr. Robert S. Mvungi, MD, FCP(SA), MMed(Wits), Cert.Cardio(SA)Phys, FESC

Dr. Robert S. Mvungi is a Consultant Interventional Cardiologist with expertise in coronary artery disease, structural heart disease, device implantations, and non-invasive cardiac imaging. He holds a Doctor of Medicine from the University of Dar es Salaam, an MMed in Internal Medicine from the University of Witwatersrand, and is a Fellow of the College of Physicians of South Africa with a subspecialty in Cardiology. He also completed a fellowship at the Soweto Cardiovascular Research Unit.

Dr. Mvungi has vast experience in cardiovascular medicine, with particular focus on interventional cardiology, technology innovation, research, and medical education. He is a Fellow of the European Society of Cardiology (FESC) and currently serves as a Consultant Interventional Cardiologist at The Aga Khan Hospital in Dar es Salaam, Tanzania.

A former Head of Cardiovascular Medicine at Muhimbili National Hospital (now JKCI), Dr. Mvungi is also a Member of the WHO Expert Advisory Panel on Drug Evaluation (2016–2028) and currently serves as

President of the Tanzania Cardiac Society (TCS). He has delivered numerous continuing medical education sessions on topics such as acute coronary syndromes, heart failure, aortic syndromes, valvular diseases, hypertension, and cardiac devices.

Workshop on 2nd Regional Bronchoscopy & 1st EBUS Workshop



Dr. Sibtain Moledina

MD, MMed (Internal Medicine), Pulmonology/Critical Care

Dr. Sibtain Moledina obtained his Doctor of Medicine (MD) degree from the Muhimbili University of Health and Allied Sciences (MUHAS) in 2011, followed by a Master of Medicine (MMed) in Internal Medicine from the same institution in 2016. He subsequently pursued sub-specialist training in Pulmonology and Critical Care at MUHAS, Christian Medical College Vellore (India), and Cooper University Hospital (USA).

He currently serves as a Lecturer in the Department of Internal Medicine at MUHAS, where he is actively engaged in both teaching and research, with a particular focus on Pulmonology and Critical Care.



Dr. Grace A. Shayo is a Senior Lecturer in the Department of Internal Medicine at the Muhimbili University of Health and Allied Sciences (MUHAS). She has over 20 years of experience as a physician specializing in respiratory and infectious diseases, serving both as a clinician and academic faculty. Dr. Shayo is a founding member of the modern respiratory services at Muhimbili National Hospital and was among the pioneers in the establishment of HIV services in Tanzania.

She obtained her Doctor of Medicine (MD) degree from the University of Dar es Salaam in 2001, followed by a Master of Medicine in Internal Medicine (MMed) from MUHAS in 2008. Her PhD training, conducted jointly at MUHAS and the T.H. Chan School of Public Health at Harvard University (Massachusetts, USA), focused on tuberculosis chemoprophylaxis in the context of HIV infection. She is currently pursuing postdoctoral training at the T.H. Chan School of Public Health.

As a former Fogarty trainee under the D43 ICOHRTA program, Dr. Shayo has developed a strong research focus in respiratory medicine and infectious diseases. She is currently involved in a D43 grant on Patient-Centered Outcomes Research (PCOR), a collaborative project between MUHAS and Northwestern University, Illinois, USA. In addition, she is part of a research team working on a COSTECH-funded project addressing climate change, supported by the Tanzanian government. Dr. Shayo has served as a mentor to undergraduate, postgraduate, and PhD students, supervising over 25 theses and dissertations. She has authored more than 30 publications in regional and international peer-reviewed journals.



Dr. Hari Kishan Gonuguntla, Yashoda Hospitals, Hyderabad

Dr. Hari Kishan is a graduate of the Amrita Institute of Medical Sciences, Kochi India. He currently heads the Division of Interventional Pulmonology at Yashoda Hospitals, Hyderabad. He serves as the National Delegate for the European Association for Bronchology and Interventional Pulmonology and is also a committee member of the Social Media Section of the World Association for Bronchology and Interventional Pulmonology (WABIP). His primary research interests include transbronchial mediastinal cryobiopsy, benign tracheal stenosis, and airway foreign body extraction. Hari Kishan leads the largest Interventional Pulmonology team in India and established India's first dedicated bronchoscopy simulation center, YH SIM. His publications include mediastinal cryobiopsy techniques.

Conference Committee Members



Dr. Oswin Mwemezi

MD, MMed (Internal Medicine), PGDip (Clinical Dermatology)

Final-Year MSc Nephrology Fellow, MUHAS

Conference Committee Chair.

Dr. Oswin Mwemezi is a specialist in Internal Medicine currently serving at Sekou Toure Regional Referral Hospital in Mwanza, Tanzania. He also holds a Postgraduate Diploma in Clinical Dermatology and is currently in his final year of Master of Science super-specialization in Nephrology at the Muhimbili University of Health and Allied Sciences (MUHAS).

His clinical interests include glomerular diseases, renovascular hypertension, and interventional nephrology. Dr. Mwemezi is also engaged in research, with scientific publications including work on renal dysfunction among people living with HIV. He is dedicated to improving nephrology services and promoting early detection and management of kidney diseases in resource-limited settings.



Dr. Hanifa Mbithe
MD, MMed (Internal Medicine), Endocrinologist
Conference Committee Secretary.

Dr. Hanifa Mbithe is an Internal Medicine physician and Endocrinologist currently serving as a Consultant at Aga Khan Hospital and as an Instructor and Academic Coordinator for the Internal Medicine Residency Program at Aga Khan University in Dar es Salaam, Tanzania.

Her career in clinical medicine is driven by a strong commitment to improving patient outcomes and addressing healthcare challenges within the community. In addition to her clinical and teaching roles, Dr. Mbithe is actively engaged in research focused on metabolic and endocrine disorders in East Africa, with several publications to her credit.

She is also involved in community health initiatives and has served as the Deputy Secretary General of the Jamiibora Health Services Network since 2019.



Dr. Mazhar Hussein Amirali
MD, MMed (Internal Medicine), FCP(SA), MPhil (Nephrology), Cert. Nephrology (SA) Phys., ISN Fellow.

Dr. Mazhar Hussein Amirali is a specialist physician in Internal Medicine and Nephrology, trained in South Africa. He completed a two-year fellowship in general nephrology under the International Society of Nephrology (ISN) and was awarded the ISN Fellowship in November 2019.

He currently serves as the Country Medical Director for Africa Healthcare Network (Tanzania) and holds an honorary lecturer position at the Muhimbili University of Health and Allied Sciences (MUHAS). He is a former nephrologist at Muhimbili National Hospital.

Dr. Amirali's professional interests include clinical nephrology, clinical research, medical education, and student mentorship.



Dr. Mohamed Manji is an Internal Medicine Physician and Neurologist. He earned his Doctor of Medicine (MD) degree from Muhimbili University of Health and Allied Sciences (MUHAS) in 2009 and completed his Master of Medicine (MMed) in Internal Medicine at MUHAS in 2015. In 2022, he graduated with a Neurology specialty through the MUHAS/Apollo Hyderabad program.

Dr. Manji is an early-career researcher with interests in stroke, HIV, tuberculosis, and acute kidney injury associated with malaria and polytrauma. He is certified in Emergency Neurological Life Support (ENLS) by the Neurocritical Care Society and has completed an Electroencephalography (EEG) course accredited by the Neurological Society of South Africa (NASA).

He currently serves at the Ebrahim Haji Health Centre and is actively involved in professional associations including the Tanzania Neuroscience Association (TNA), the Tanzania Epilepsy Association (TEA), and the Movement Disorder Society. Additionally, he is an adjunct faculty member in the Department of Internal Medicine at MUHAS.

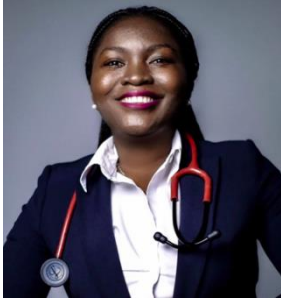


Dr. Aneth T. Bideberi

MD, MMed (Internal Medicine), MSc (Project Management)

Dr. Aneth Telesphore Bideberi is a Physician currently serving as a Medical Officer at Massana Hospital in Dar es Salaam. In addition to her clinical training, she holds a Master's degree in Project Management, which complements her role in leading and coordinating healthcare initiatives.

Dr. Bideberi is dedicated to enhancing the quality and accessibility of medical services, with a particular interest in innovative, patient-centered approaches to care.



Dr. Herieth Filbert Hyera (MD, MMed – Internal Medicine, MSc – Neurology Fellow) is a Lecturer at Muhimbili University of Health and Allied Sciences (MUHAS) and a practicing physician in the Neurology Unit at Muhimbili National Hospital, where she is actively involved in clinical care, teaching, and research.

She currently serves as the Continuing Professional Development (CPD) Coordinator for the Association of Physicians of Tanzania (APHYTA), contributing to the planning and delivery of educational programs aimed at enhancing the skills and knowledge of physicians nationwide. Dr. Hyera is deeply engaged in the field of neurology, with clinical and academic interests in epilepsy, movement disorders, and stroke.

She is an active member of several professional bodies, including the Tanzania Epilepsy Association, the Tanzania Neuroscience Society, the World Federation of Neurology, and the Movement Disorder Society. Through these affiliations, she continues to contribute to the advancement of neurological science and the improvement of patient care both locally and globally.



Dr. Priyank Punatar

Dr. Priyank Punatar is a Medical Specialist at Muhimbili National Hospital with over 10 years of clinical experience and serves as an Honorary Lecturer at Muhimbili University of Health and Allied Sciences (MUHAS). He earned his MD from Hubert Kairuki Memorial University and completed his MMed in Internal Medicine at MUHAS, where he is currently pursuing an MSc in Nephrology.

His clinical interests center on nephrology, with a strong focus on non-communicable diseases and their intersection with infectious diseases.



Dr. Jesca January Munishi, MD

Dr. Jesca Munishi is a committed medical doctor based at Muhimbili National Hospital (MNH), where she works in the Infectious Diseases Unit within the Department of Internal Medicine. She holds a Doctor of Medicine degree and has established herself as a front-line clinician in the management of complex infectious diseases, including HIV/AIDS, tuberculosis, and emerging infections.

Her clinical experience has fueled her passion for advancing **universal health coverage (UHC)**, advocating for health systems that prioritize equitable access, quality care, and financial protection for all, especially the underserved populations in Tanzania.

Dr. Munishi is also a strong proponent of **evidence-based clinical practice** and strives to align day-to-day patient care with emerging scientific knowledge. She believes that impactful healthcare must be informed by high-quality research that is both locally driven and context-specific.

To this end, she is actively involved in **mentoring junior clinicians and medical students**, fostering a culture of scientific inquiry and critical thinking among young professionals. Her vision is to contribute to a generation of physician-scientists who are equipped to tackle the region's evolving healthcare challenges through research, policy engagement, and community-based solutions.

Through her clinical, academic, and advocacy work, Dr. Munishi exemplifies the blend of compassionate patient care and scholarly excellence that is essential for advancing health outcomes in low- and middle-income countries.

Abstracts

Home based palliative care in Kilimanjaro region. A cost analysis

Grunert Katharina¹, Priscus Audifas², Frank Richard Simbila Satta³, David Raymond Mwenesano³, Andrew Elisante Malisa², Nosim Peter Sarikwa², Chantal Morel¹, Lukas Radbruch⁴, Oliver Henke¹, Paul Mmbando²

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Background: In Sub-Saharan Africa (SAA), there is an increasing need for palliative care (PC), but it has not been integrated into most health systems yet. To meet the demands, many obstacles are to overcome, with the question of funding leading the way. Data on cost-effectiveness of PC in SSA is literally non-existent. This study aims at demonstrating the cost effectiveness of home-based PC in Tanzania.

Methods: A cost comparison study by means of a matched-pairs analysis of deceased NHIF (National Health Insurance Fund) beneficiaries has been conducted to assess the cost effectiveness of home-based PC. The data source is the NHIF database. Home based palliative care patients were matched with standard care patients based on diagnosis, sex and age (+/- 5 years), and – if several matches were identified - residency, closest age, and closest date of death were applied. Indicator for the cost comparison is the average NHIF-expenditures per patient during the last six months of life. The study further distinguished outpatient, inpatient, medication and overall costs.

Results: 34 deceased NHIF patients and 17 matched pairs have been analyzed so far. In 14 (of 17) matched pairs, the overall costs of the palliative patients were significantly lower. The overall costs per palliative patient, including the palliative care project costs, were Tsh. 670,784/= while the average costs per standard care patient were Tsh.1,113,216/=. The biggest difference could be observed in the medication costs (Tsh.105,612/= versus Tsh. 391,053/=), followed by outpatient costs (Tsh. 108,467/= versus Tsh. 305,421/=) and inpatient costs (Tsh. 276,877/= versus Tsh. 416,742/=).

Conclusion: This study confirms the cost-effectiveness of home-based PC in Tanzania for patients with advanced life-threatening illnesses in the last 6 months of their life. The highest level of cost-savings has been seen in the medication costs. This evaluation covered only insurance expenditures; additional out-of-pocket payments might have occurred for some patients in both groups.

Title: Three-Year Post-Stroke Outcomes in Urban Northwestern Tanzania

Joshua Ngimbwa¹, Goodluck Nchasi², Innocent Kitandu Paul³, Anna Kasala⁴, Lilian Mwamba⁵, Sospeter Berling³, Matilda K. Basinda³, Gladness Xavier³, Benjamin Andrew⁴, Akili Mawazo⁶, Dorice Lucas⁴, Karim Mahawish⁷, Ladius Rudovick^{3,4}, Bahati Wajanga^{3,4}, Robert Peck^{8,3}, Sarah Shali Matuja^{3*}

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Background: Stroke is one of the leading causes of death and disability globally. Despite advancements in acute stroke care, the long-term outcomes in Tanzania have not been extensively studied. This study aimed to investigate the long-term post-stroke outcomes among adults with stroke admitted at a large tertiary hospital in Northwestern Tanzania.

Methods: Adults (≥ 18 years) with stroke who were registered at the Lake Zone Stroke Registry Study at Bugando Medical Centre between March 2020 and October 2021, were prospectively followed up to October 2024. We collected information on case fatality rates and determined the possible causes of death using the World Health Organization verbal autopsy tool. Kaplan Meier analysis was used to describe survival, and the Cox regression model was used to examine independent factors associated with fatality.

Results: The study included 301 adults with a mean age of 65.5 ± 14 years, 51% (153/301) were females and 68% (205/301) had ischemic strokes. Case fatality rates at 1 year, 2 years and 3 years were: 42.9% (98/228), 75.9% (173/228), 96.5% (220/228) respectively. Heart disease was the major cause of death observed in 25.4% (43/169). Independent factors associated with fatality were severe stroke {aHR 7.9, 95% CI: 2.3-27.4, $p=0.001$ }, moderate to severe stroke {aHR 4.6, 95% CI: 1.3-16.1, $p=0.017$ }, lack of health insurance coverage {aHR 3.7, 95% CI: 1.9-6.8, $p<0.001$ } and previous stroke {aHR 3.3, 95% CI: 1.3-8.3, $p=0.01$ }. Attendance rates of follow-up clinics and physiotherapy among survivors were 28.6% (86/301) and 8.6% (26/301) respectively. Among hypertensives and diabetics adults: 32% (83/257) and 41% (20/49) were adherent to anti-hypertensive and diabetic medications respectively.

Conclusion: This study highlights the high long-term case fatality rates among adults with stroke in Northwestern Tanzania with stroke severity, lack of health insurance, and previous strokes being key factors associated with fatality. Low attendance rates at follow-up clinics and poor adherence to medications among hypertensive and diabetic stroke survivors underline the importance of strengthening post-stroke care systems including health insurance coverage to improve survival and quality of life.

Keywords: Stroke; Long term outcomes; Case fatality; Disability; Registry; Tanzania

Navigating Challenges and Outcomes in a 25-Year-Old Male with Adult Congenital Heart Disease:A Case Study.

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Keywords: Congenital heart disease, Atrial-ventricular septal defect, Heart failure

Background: Adult congenital heart disease (ACHD) is often underdiagnosed in resource-limited settings due to lack of routine screening and specialized diagnostics. Patients may remain asymptomatic into adulthood, delaying identification and intervention.

Case Presentation :We report a 25-year-old male mason with no prior cardiac history who presented with six months of fatigue, nocturnal cough, dyspnea, orthopnea, and leg swelling. He had oxygen saturation of 80–90% on room air, raised JVP, mild pallor, and bilateral basal crackles. Labs showed mild anemia and normal renal/electrolyte status. Echocardiography revealed heart failure with reduced ejection fraction (38.39%), right ventricular hypertrophy, a primum atrial septal defect, inlet ventricular septal defect, a common atrioventricular valve, left ventricular enlargement, and a left-to-right shunt. No Eisenmenger syndrome was noted.

Discussion The patient's late presentation reflects missed early detection opportunities in a setting with limited access to cardiac evaluation. Though asymptomatic in childhood, structural defects were severe. While surgically operable, barriers to advanced care persist.

Conclusion: This case highlights the need for improved awareness and earlier recognition of ACHD in low resource settings. Enhancing diagnostic capacity, strengthening referral pathways, and investing in provider training are crucial to improving patient outcomes.

Community-led Screening For Hypertension and Diabetes in Rombo District, Kilimanjaro: A Pathway to Reducing Disease Complications

Background: Non-communicable diseases, particularly hypertension and diabetes, represent a major public health concern within Tanzania, and as the burden continues to rise, sustainable interventions are critical to prevent, manage and mitigate their impact on the community and health systems. Despite improvements in health care systems around the country in recent years, rural communities are still left at a disadvantage and with many parts changing from rural manual work, to urban lifestyles, the risk of hypertension and diabetes increases.

Objectives: The main objectives were to provide health education to the participants, preventative measures to combat NCDs and to screen for hypertension and diabetes. Moreover, linking newly diagnosed clients to health care providers from nearby health facilities for continuous follow-up.

Methodology: Mass screening campaign was conducted in January 2025 across three wards in Rombo. Locations were selected with local leaders for easy accessibility. Screenings were held at Mamsera in Mengwe, Tarakea and Mashati market. Socio-demographic and medical history, including prior diagnoses and medication use were collected. Blood pressure, blood sugar and anthropometric measurements were recorded. Participants received health education on prevention and management strategies.

Results: Among 525 participants, the prevalence of hypertension (blood pressure $\geq 140/90$ mmHg) was 52.6% and diabetes was 4.6% (random blood sugar > 11.1 mmol/l with previous diabetes diagnosis). The prevalence of hypertension and diabetes was higher among females (76% and 83% respectively), older age and BMI greater than 25. A third of the hypertensive participants were aware of their diagnosis and were not on medication and about 42% of the diabetic participants were never on medication.

Conclusion: This highlights the need for such integrated programs to improve awareness, treatment, and thus improved health outcomes in rural communities.

Impact of Self-Monitoring Blood Glucose on Glycaemic Control among Insulin-Treated Patients with Diabetes Mellitus in Northeastern Tanzania: A Randomised Controlled Trial.

Sophia S. Muhali^{1*}, Fatma S. Muhali², Sayoki Mfinanga³, Abid M. Sadiq^{1,4}, Annette Marandu¹, Nyasatu G. Chamba^{1,4}

Introduction: Self-monitoring of blood glucose (SMBG) is a vital component in managing diabetes mellitus (DM), particularly for patients on insulin therapy. While its benefits are well-documented in high-income countries, there is limited evidence on its effectiveness and feasibility in rural Sub-Saharan Africa. This study explored SMBG adherence and its impact on glycaemic control among insulin-treated DM patients in northeastern Tanzania.

Methods: We conducted a single-blinded, randomised clinical trial from December 2022 to May 2023. Eighty five DM patients on insulin for at least 3 months were randomly assigned to intervention and control groups. The intervention group received glucometers, test strips, logbooks, and detailed SMBG training, while the control group received standard outpatient care. Over a 12-week follow-up, HbA1c and fasting blood glucose (FBG) were measured at baseline and study end. Outcomes assessed included SMBG adherence, barriers to use, self-management capability, logbook usage, and changes in HbA1c.

Results: Eighty participants completed the study (39 intervention, 41 control). In the intervention group, 61.5% showed good adherence to SMBG, as confirmed by glucometer data and logbook entries. Education played a key role in improving adherence. The intervention group experienced a significant HbA1c reduction of -1.01% (95% CI: -1.39 to -0.63), compared to a minimal change in the control group (+0.18%, 95% CI: -0.07 to 0.44) ($p < 0.001$). Conclusion: Structured SMBG, when supported by education and access to tools, led to significantly improved glycaemic control in insulin-treated patients in a rural Tanzanian setting. These results underscore the value of structured testing programmes, even in low-resource environments, to enhance diabetes management and outcomes.

Keywords: SMBG, Glycaemic control, HbA1c, Diabetes mellitus, Tanzania

Title: Diabetic Striatopathy (Hyperglycemic Hemichorea-Hemiballismus Syndrome) in a Young Patient with Type 1 Diabetes Mellitus in Dar es Salaam, Tanzania: A Case Report

Introduction: Diabetic striatopathy, is a rare movement disorder linked to poorly controlled diabetes mellitus. It predominantly affects older women with type 2 diabetes mellitus and presents with characteristic basal ganglia abnormalities on computed tomography (CT) and magnetic resonance imaging (MRI). Even rarer is the presentation in a young patient, which may pose diagnostic and management challenges.

Case Presentation: We report a 17-year-old male with poorly controlled type 1 diabetes mellitus presenting with left-sided hemichorea-hemiballismus of acute onset associated with hyperglycemia without ketoacidosis. Brain imaging revealed increased attenuation in the right caudate and putamen on brain CT and hyperintensity on T1 weighted MRI, consistent with diabetic striatopathy. The abnormal movements abated after 1 month through dietary counseling, increased insulin dosage, and anti-chorea therapy.

Conclusion: Diabetic striatopathy may occur in young patients with type 1 diabetes mellitus. In resource limited settings, its management can be challenging. There is a need for increased awareness among physicians of this potentially reversible condition, especially when seeing atypical patient populations. Strict glycaemic control is an essential part of treatment.

Dermatological Disorders among the Elderly in Urban Areas of Dar es salaam, Tanzania: Prevalence, Associated Factors and Impact on Quality of Life

Uwesu Muki¹, Grace Shayo¹, Eliaichi Minja², Muhammad Bakari¹, Ashura Kazema² Salum J. Lidenge^{3, 4}

Abstract

Background: The global population of people aged 60 years or older (elderly) is increasing. Skin disorders are reported to be common in this population. In view of limited data available, this study determined the burden, pattern and impact on quality of life (QoL) of dermatological disorders among the elderly in Tanzania.

Methods: This was a community-based cross-sectional study conducted from August to November 2021 in Ilala Municipality, Dar es Salaam. Participants were obtained through simple random sampling in multiple stages. Diagnoses were made through a clinical assessment initially performed by a dedicated dermato-venereology officer, and confirmed by a Dermatologist using digital photographs. Quality of Life was assessed using a validated Dermatology Quality of Life Index (DLQI) with scores ranging from 1 to 30. The wealth index was graded from class 1 (poor) to class 5 (rich). Data were analyzed through Chi-squared test, Poisson Logistic regression, and analysis of variance.

Results: A total of 694 elderlies were enrolled. The overall prevalence of dermatological disorders was 85.5% (593). The most frequent category of dermatological disorders were skin infections and infestations (36.1%); eczemas (34.7%); papulosquamous eruptions (6.5%), and keratinization disorders (2.6%). Autoimmune disorders comprised 1.4%, while vascular disorders and tumors comprised 1.2% of all cases. A small proportion (1.7%) of the elderlies had ≥ 2 skin disorders. In multivariate analysis the wealth index was found to be associated with the presence of the dermatological disorder. There was a 61% impairment in QoL due to the dermatological disorders.

Conclusion: Dermatological disorders among the elderly were common and were associated with the wealth index. They had a significant impact on quality of life. Appropriate control measures to address dermatological disorders among the elderly are needed.

Prevalence, risk factors and severity of cardiac autonomic neuropathy (CAN) in patients with Type 2 Diabetes Mellitus at a tertiary hospital in Zanzibar

Background and objective: Cardiac Autonomic Neuropathy (CAN) is a severe but underdiagnosed complication of Type 2 Diabetes Mellitus (T2DM), leading to life-threatening cardiovascular conditions. This study aimed to determine the prevalence, risk factors, and severity-related factors of CAN in T2DM patients attending Mnazi Mmoja Hospital, Zanzibar.

Methods: A cross-sectional study was conducted among 364 T2DM patients. CAN was assessed using the Cardiac Autonomic Neuropathy Analyzer (CAN 504) through Ewing's tests, alongside

demographic, clinical, and biochemical data collected through a questionnaire by using the Kobo tool. Multivariate ordinal logistic regression identified factors associated with CAN severity.

Results: The prevalence of CAN was 79.9%, with 60.4% classified as early, 17.9% as definite, and 1.6% as severe. Key risk factors included diabetes duration >10 years (AOR = 3.26, 95% CI: 1.82-5.86, $p < 0.001$), low income (AOR = 0.20, 95% CI: 0.07-0.57, $p < 0.001$), and a sedentary lifestyle (AOR = 0.05, 95% CI: 0.004-0.57, $p < 0.001$). Severe CAN cases exhibited concurrent abnormalities in both sympathetic and parasympathetic functions, with parasympathetic dysfunction strongly associated with increasing CAN severity (AORs ranging from 2.40 to 20.38, $p < 0.001$).

Conclusion: CAN is highly prevalent among T2DM patients in Zanzibar, with disease duration, socioeconomic status, and lifestyle factors significantly influencing its occurrence and severity. The strong link between severe CAN and parasympathetic dysfunction highlights the need for routine CAN screening and lifestyle-based interventions to mitigate cardiovascular risks in this population.

Keywords: Cardiac Autonomic Neuropathy, Type 2 Diabetes Mellitus, Prevalence, Risk Factors, Zanzibar.

Title: Early Insights from a National Stroke Surveillance Initiative in Tanzania

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Background: Stroke is a leading cause of death and disability worldwide, with low- and middle-income countries, particularly in sub-Saharan Africa, bearing the greatest burden. Tanzania has only one active stroke registry, limiting efforts to guide stroke care and policy. To address this,

we conducted a multi-centre study across eight tertiary hospitals to generate baseline data supporting the development of a national stroke registry.

Methods: We analysed de-identified data from eight large tertiary teaching hospitals in Tanzania, between January and August 2024, that included adults ≥ 18 years admitted with a World Health Organization clinical definition of stroke. We collected data including: demographics, risk factors, brain imaging findings and in-hospital mortality. Logistic regression was used to examine factors associated with mortality.

Results: Among 1,000 patients (mean age 60.2 ± 15 years), most cases were in the 50–69 age group 46.3% (463/1000). Hypertension was present in 90.1% (901/1000), and 3.5% (35/1000) were HIV-positive. Haemorrhagic and ischaemic strokes accounted for 57.9% (579/1000) and 38.3% (383/1000) of cases, respectively; only 5% of ischaemic strokes presented within 4.5 hours of symptom onset. In-hospital mortality was 31.5% (315/1000), highest among patients aged 50–59 years (23.2%). Independent predictors of mortality included previous cardiac disease (aOR 2.15; 95% CI: 1.18–3.94) and haemorrhagic stroke (aOR 1.38; 95% CI: 1.12–2.02).

Conclusions: Stroke is a significant health burden in Tanzania, marked by high mortality and delayed hospital presentations. Strengthening early detection and management of hypertension could significantly reduce stroke incidence. These findings reveal critical gaps in prevention and acute care, and provide essential baseline data to inform the development of a national stroke registry and support evidence-based strategies to improve outcomes.

When Time and Resources Are Scarce: Can Aspirin and Clopidogrel Save the Heart? A Case Report.

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Background: This case highlights the complexities of managing acute myocardial infarction (AMI) in a resource-limited rural environment, emphasizing the challenges posed by the lack of thrombolytic agents, advanced diagnostics, and interventional cardiology facilities.

Case Summary: A 45-year-old obese male with poorly controlled type 2 diabetes mellitus presented with a 24-hour history of severe chest pain, dyspnea, and general malaise. Diagnostic workup confirmed an extensive myocardial infarction with an ejection fraction of 28%, global hypokinesia, and grade 3 diastolic dysfunction. Due to the absence of thrombolysis and catheterization facilities, the patient was managed conservatively with dual antiplatelet therapy, anticoagulation, oxygen, and medications for heart failure. Despite initial deterioration and the development of acute pulmonary edema, the patient showed significant clinical and echocardiographic improvement (EF increased to 35%) by day 14. He was discharged on day 21 with a comprehensive medical regimen and advised to seek follow-up care at a specialized cardiac center.

Conclusion: The report emphasizes the resilience of patients and healthcare providers in overcoming challenges associated with resource limitations, showcasing the importance of innovative approaches to AMI management in low-resource settings.

Effectiveness of hybrid functional electrical stimulation (FES) training exercises for cardiorespiratory rehabilitation in individuals with spinal cord injury (SCI): A systematic review and meta-analysis.

Restrictions on cardiorespiratory function (CRF) are commonly reported in spinal cord injury (SCI). The purpose of this study is to evaluate through systematic review and meta-analysis from randomized control (RCT) and non-randomized controlled trials (NRCT) the effectiveness of hybrid functional electrical stimulation cycling exercise (FESC) and hybrid functional electrical stimulation FES rowing exercise (FESR) in cardiorespiratory function (CRF) to SCI individuals during cardiorespiratory rehabilitation (CRR).

An electronic literature search was conducted to evaluate articles that study the effects of Hybrid functional electrical stimulation exercises (FESE) on CRF in individuals with SCI. Methodological quality appraisal was conducted by using two tools according to the study design. The effect size was estimated through the random effects model and fixed-effects inverse variance model through the weighted mean difference (WMD). The confidence interval (CI) was 95%.

Eighteen studies included 206 participants. There was a significant statistical improvement in relative peak VO₂ [WMD 3.43 mL/min/kg, $p = 0.00$, 95% CI = 2.05 to 4.82; $I^2 = 0.00\%$], absolute peak VO₂ [WMD 0.24 L/min, $p = 0.00$, 95% CI = 0.13 to 0.34; $I^2 = 0.00\%$], and peak Ve [WMD 5.53 L/min, $p = 0.02$, 95% CI = 0.92 to 10.14; $I^2 = 0.00\%$] between FESE and the control interventions. An insignificant statistical difference was found between FESE and control interventions in peak RER, peak PO, and peak HR. Subgroup analysis found a significant difference was obtained in peak Ve, FESC shows more demand on peak Ve than FESR [WMD 5.53 L/min, 95% CI = 0.92 to 10.14; $p = 0.02$]. However, no significant statistical difference between FESC and FESR in relative and absolute peak VO₂.

In conclusion, FESE is effective in improving cardiorespiratory function in SCI individuals during CRR. FESC and FESR equally improve peak VO₂ in SCI individual. However, not all FESE are effective for all cardiorespiratory parameters. Further RCT studies are needed to provide a more comprehensive insights of FESC and FESR interventions in cardiorespiratory function of SCI individuals. Keywords: Cardiorespiratory rehabilitation, functional electrical stimulation, exercise training, spinal cord injury, meta-analysis.

Title: Implementing Acute Stroke Services in sub-Saharan Africa: Steps, Progress and Perspectives from the Tanzania Stroke Project

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Introduction: Stroke is a major cause of morbidity and mortality globally, with sub-Saharan Africa bearing a disproportionate burden due to limited acute care services. In response, the Tanzania Stroke Project (TSP) was launched to establish organized acute stroke services at two large tertiary centres in collaboration with the Tanzanian Ministry of Health, World Stroke Organization, and Hospital Directors.

Methods: TSP followed a three-tier implementation model from August 2023 to August 2024: Establishment of stroke registries, Training of healthcare workers (HCWs) and Development of acute stroke protocols and stroke units at Muhimbili National Hospital-Mloganzila and Bugando Medical Centre.

Results: Tier 1 – Stroke Registry: Two comprehensive registries enrolled 460 adults (mean age 60±15 years). Haemorrhagic stroke was predominant (59%) and hypertension was the most common risk factor (81%). Over half (58%) arrived >24 hours after symptom onset. Swallowing screening was documented in only 11% of cases. Among intracerebral haemorrhage patients, 11% achieved blood pressure targets and 47% met glucose control targets. In-hospital mortality was 27%. Tier 2 – Training: Evidence-based training and mentorship were provided, with higher participation at Bugando (57%, 29/51) than at Muhimbili (23%, 7/31) (p=0.002). Tier 3 – Stroke Protocols: Stroke protocols were developed based on the training and current evidence; leading

to the establishment of dedicated stroke units at each facility, with a minimum of 8 beds per unit. The full impact of these implementations has yet to be fully assessed.

Conclusion: This was the first initiative to implement stroke services at two large tertiary healthcare centers in Tanzania. Our findings highlight the importance of multi-level stakeholder engagement through a 3-tier approach in countries starting to establish stroke services and the need for ongoing quality-of-care monitoring and continuous efforts to sensitize both HCWs and the broader community.

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