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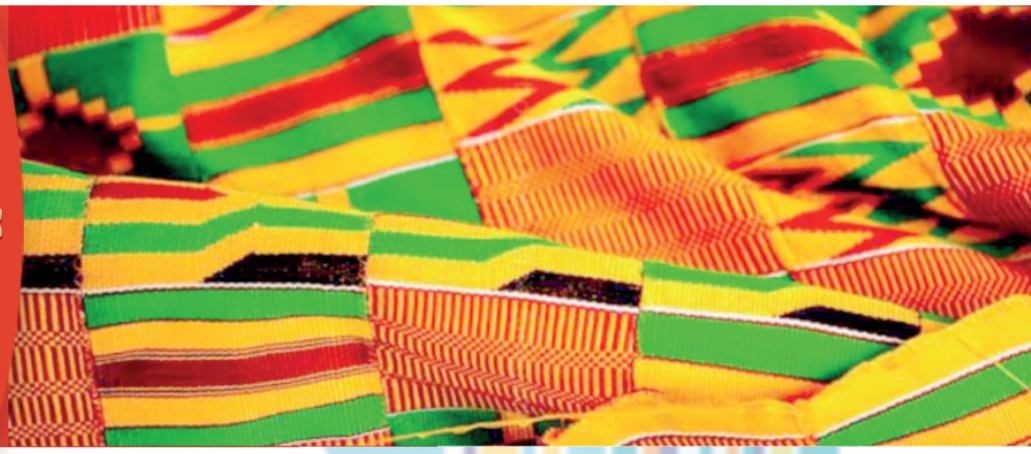
International Society
for Pharmacoepidemiology



5th Annual Conference on PHARMACOEPIDEMIOLOGY IN AFRICA

20-22 April, 2026

La Palm Royal Beach Hotel, Accra, Ghana

MEDICINES UTILISATION RESEARCH IN AFRICA GROUP
MURIA

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MURIA

Conference Website https://afrig2026.com/

Table of Contents

Our Host City, Accra

Akwaaba! Welcome to Ghana, a land with beautiful people where you are met with a smile, greeted with a smile, assisted with a smile; and where everyone is willing to help teach you one of the over 20 Ghanaian languages, or even, give you a local name within minutes! AKWAABA is the traditional greeting for “Welcome”.

Accra, the city where the Conference will be held, is the capital of Ghana situated on the Atlantic coast of West Africa. Kwame Nkrumah Memorial Park honours Ghana’s first President, Dr. Kwame Nkrumah, who helped lead the country to independence in 1957. The park contains Nkrumah’s mausoleum and a museum charting his life. Makola Market is the city’s vast, colorful bazaar.

Accra has a range of attractions- from wonderful beaches dotted with forts and castles, to forest reserves with exotic animals, plus mountain ranges and rich cultural resources of traditional wear, food, arts and crafts.
Beaches near Accra

The coastline of Accra is strewn with beaches that offer relaxation, excitement, and family-friendly activities. An oceanside escape from the noisy, chaotic city is worth a trip. Labadi Beach, Bojo Beach, Kokrobite Beach and Coco Beach, among others, are places of delight; not to mention the popular seafront spots, Labadi Beach and Kokrobite Beach, that offer golden sand and high-energy nightlife.

Interesting places to see in Accra

Come to Accra for three days to the ISPE AfRIG and MURIA's 5th Annual Conference on Pharmacoepidemiology in Africa, and immerse yourself in innovative ideas, success stories, and expert views on drugs, health issues, people and products.

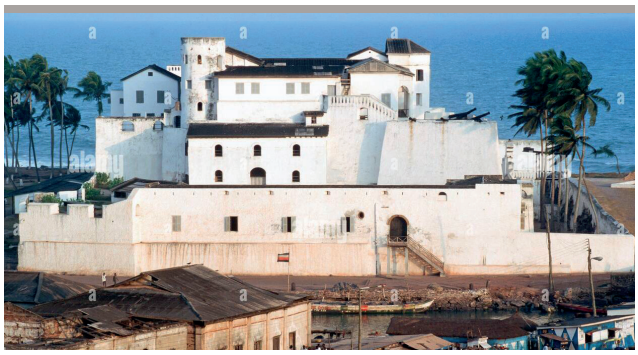
But why not stay longer and maximise your learnings from tours while forging meaningful connections with some of the most fascinating people driving innovation.

Here are some exciting places to visit in Accra and its surroundings to ease stress, boost your mental and physical health while creating lasting memories with first-hand knowledge about the host city:

- The National Museum
- Kwame Nkrumah Memorial Park and Mausoleum
- James Town
- Ussher Fort
- The Makola Market
- Accra Arts Centre
- University of Ghana
- Noguchi Memorial Institute for Medical Research
- W.E.B. DuBois Memorial Centre
- Ashesi University
- Aburi Botanical Garden
- Local bars, clubs and restaurants

We look forward to seeing you in Accra!





Explore interesting places in Ghana

Discover Accra and beyond- a wonderful experience awaits in the beautiful country of Ghana! You may want to take a trip to some important and popular attractions inside the country. There are many exciting places to see in Ghana, apart from the sights and sound in Accra. These include:

- Labaragaga Mosque
- Boti Falls
- Kakum National Park
- Cape Coast Castle
- Elmina Castle
- Busua Beach
- Mole National Park
- Cape Three Points
- Kumasi (Manhyia Palace and Bonwire, the leading centre of Kente weaving in Ashanti)
- Tafi Atome Monkey Sanctuary
- Lake Bosomtwe
- Lake Volta

Conference Venue

La Palm Royal Beach Hotel

No. 1 La-By-Pass Road, Accra, Ghana

Getting to La Palm Royal Beach Hotel by Yourself:
Here is what to do if you want to get to the hotel by yourself. Taxi services are available 24 hours a day at Kotoka International Airport to several destinations in Accra and beyond. Some of them don't have taximeter and the fares are not predetermined. This gives you the opportunity to bargain for reduced fares before boarding the vehicle.

La Palm Royal Beach Hotel is very popular and is situated at La T-Junction.

From the Airport: You will see some drivers in uniform with Lanyard identification cards around their necks. Mention your destination to them making sure to bargain before boarding the cab.

From Around Town: Flag a Taxi with no passengers, tell the driver you are going to La Palm, making sure you are the only passenger on board, and pronto…you are there! This type of flagging or Taxiying is referred to as "Dropping". Trotro- You can use a hand gesture to stop and hop onto a Teshie-Nungua-bound Trotro along the road or from a Trotro terminal and tell the driver you will alight at La Palm. Trotros are minibuses shared with other passengers. At their terminal, they wait until they are full before departure. Trotro fares are very low.

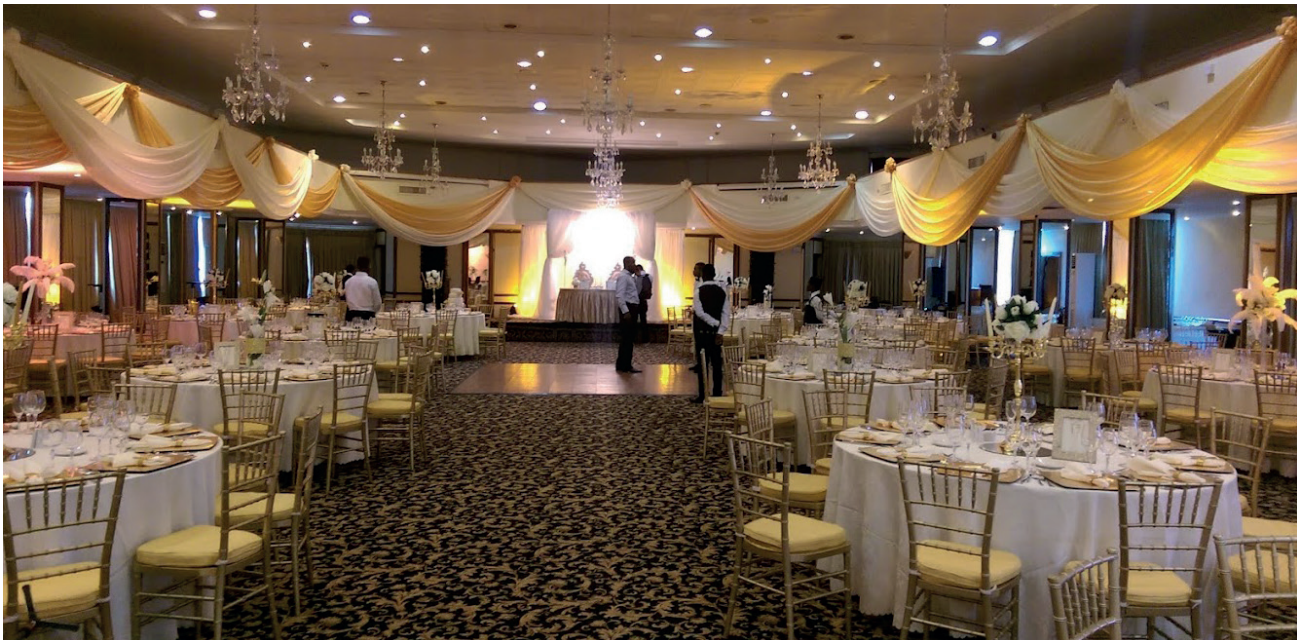
Accra is a large city, and the price and the ride time (15 to 20 minutes) depend on the distance to the destination area and on congestion of the streets.

Joining Online

Sessions being held in the main auditorium will be broadcast live via Zoom. Onsite delegates and online delegates who have registered will be sent their login details via email. However, participants joining remotely online will not be able to interact with panelists (the conference is not a hybrid meeting).

Welcome Reception

Join the welcome reception at the poolside of La Palm Royal Beach Hotel. Meet the other conference attendees and enjoy the breathtaking breezy nighttime from the sea. Finger foods and beverages will be served and are included in your conference fee. The two-hour welcome reception is on Monday, April 20 @ 7:00pm.



Gala Dinner

The Gala Dinner will be held at La Palm Royal Beach Hotel from 7:00pm to 11:00pm on Tuesday, April 21, 2026. Dinner tickets are 50 USD per head – Please check with registrations if you have registered and paid for your dinner ticket. Only participants with purchased tickets will be allowed entry.

Johnson&Johnson

Welcome Message

Ursula Kirchmayer
ISPE President

On behalf of the International Society for Pharmacoepidemiology (ISPE), the Africa Regional Interest Group (AfRIG) and the Medicines Utilizations Research in Africa (MURIA) Group, we welcome you to ISPE AfRIG and MURIA's 5th Annual Conference on Pharmacoepidemiology in Africa, which is taking place in Accra, Ghana, 20-22 April 2026.

A big thank you to the Local Host Committee and the Scientific Program Committee for their commitment and dedication, and for developing an outstanding program.

This year's conference is themed: "African data, African solutions: Harnessing real-world evidence for safer medicines, vaccines and health technologies. The sub-theme is: "Using Epidemiology to Support the WHO Goal of Global Reduction in Chronic Diseases". The conference features pioneers of the field of Pharmacoepidemiology and includes world-renowned speakers, teachers and researchers, and promises an exciting package of foundational and advanced training in Pharmacoepidemiology, Pharmacovigilance, Drug Utilization Research, abstract and poster presentations, as well as thought-provoking topics in plenary and symposia sessions.

Dr. Kwame Appenteng
Chair, ISPE Africa

A special highlight of the conference is the "Presidents' Forum", a once in a lifetime live panel discussion of ISPE presidents (past, present, and future), to give the audience a panoramic view of the origins of the field of Pharmacoepidemiology, ISPE, key organizational initiatives, accomplishments, and vision, and to provide an opportunity for audience interaction with the panelist. We hope you enjoy every session of the conference.

Welcome Message from the Chair of the Local Host Committee

Dr. Chioma Ejekam
Chair, Local Host Committee

On behalf of the Local Host Committee, it is my great pleasure to welcome you to the 5th Annual ISPE AfRIG Conference on Pharmacoepidemiology in Africa, taking place in the heart of West Africa – Accra, Ghana.

This conference jointly organized by the International Society for Pharmacoepidemiology (ISPE) African Regional Interest Group (AfRIG) and the Medicines Utilization Research in Africa (MURIA) network, reflects our shared commitment to advancing the science and practice of pharmacoepidemiology across the African continent. Together, we have curated a dynamic scientific program that addresses the evolving health priorities of our region.

This year's event highlights the growing momentum across Africa to generate and apply real-world evidence to improve the safety and effectiveness of medicines, vaccines, and health technologies. It brings together a diverse and distinguished community of researchers, clinicians, regulators, academics, and public health leaders.

We are excited to offer a rich lineup of keynote lectures, thought-provoking plenaries, scientific symposia, oral and poster sessions, and hands-on capacity-building workshops. The conference provides an ideal platform to explore cutting-edge pharmacoepidemiological methods, strengthen regional and global collaborations, and share impactful research that will advance the practice of pharmacoepidemiology across Africa. It is also a valuable opportunity for early-career scientists to showcase their work and engage with leading experts in the field.

Accra offers the perfect blend of energy, history, and hospitality, and we are thrilled to host you in this remarkable city. Whether you're joining us for the first time or returning, we invite you to engage deeply, share boldly, and help shape a future where African data drives Africa solutions for safer, evidence-driven healthcare in Africa that serve our populations best.

We look forward to welcoming you to what promises to be an intellectually stimulating and culturally enriching gathering.

Local Host Committee

Chioma Ejekam
Daniel Ankrah
Joseph Fadare
Ibrahim Oreagba
Olayinka Ogunleye
Israel Sefah
Harriet Bonful
Ibrahim Amidu
Ivan Eduku Mozu
Kazeem Adeola Oshikoya
Abimbola Opadeyi
Onyinye Akunne
Michael Mireku

2026 Organizing Committees

Steering Committee
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Irene Murimi-Worstell
Chioma Ejekam
Paul Coplan
Daniel Ankrah
Joseph Fadare
Israel Sefah
Karen Cohen
Amanj Kurdi
Julius Asubonteng
Solomon Iyasu
Ilse Truter
Johanita Burger
Ibrahim Oreagba
Olayinka Ogunleye

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Joseph Fadare
Irene Murimi-Worstell
Chioma Ejekam
Karen Cohen
Daniel Ankrah
Ilse Truter
Johanita Burger
Ivan Eduku Mazu
Sylvia Adisa
Paul Coplan

Plenary/ Symposia
Paul Coplan
Kwame Appenteng
Solomon Iyasu
Chioma Ejekam

Pre-Conference Courses
Macarius Donneyong
Joseph Fadare
Ilse Truter
Irene Murimi-Worstell
Sylvia Opanga
Andrea Burden

Keynote Speaker

Brian Strom

Chancellor, Rutgers Biomedical and Health Sciences
Executive Vice President for Health Affairs, Rutgers, The State University of New Jersey

Brian L. Strom, MD, MPH, is the inaugural chancellor of Rutgers Biomedical and Health Sciences and the executive vice president for health affairs at Rutgers. Strom's interests span many areas of clinical epidemiology, and his major research interest is in the field of pharmacoepidemiology, i.e., the application of epidemiologic methods to the study of drug use and effects. He is recognized as a founder of this field and for his pioneer work in using large automated databases for research.

A nationally recognized leader in clinical research training, Strom developed graduate training programs while serving as director of the Center for Clinical Epidemiology and Biostatistics at Perelman School of Medicine – University of Pennsylvania, where he also served as senior advisor to the provost for global health initiatives. Internationally, Strom was a key contributor to the development of the International Clinical Epidemiology Network, created in 1979 with support from the Rockefeller Foundation to provide clinical research training to clinicians from dozens of selected developing country sites.

While at Perelman, Strom led two grants from the National Institutes of Health/Fogarty International Center for a total of more than $2 million, which supported efforts to advance the Penn-Guatemala partnership program by incorporating clinical epidemiology in order to better address the developing country's chronic health issues. He also developed partnerships between Penn and Peru, and oversaw the pre-existing partnership between Penn and Botswana.

Thank you to our volunteer reviewers

Julius Asubonteng
Chioma Ejekam
Kwame Appenteng
Ilse Truter
Johanita Burger
Daneil Ankrah
Ivan Eduku Mozu
Joseph Fadare
Irene Murimi-Worstell
Karen Cohen

Special Thank you

We would like to thank the following people for committing their time and resources to make the conference a success!

Ursula Kirchmayer
Brian Strom
Stan Edlavich
Mary Beth Richey
Laura Simmons
Lisa Pont
Jesper Hallas
Robert Platt
Arnold Chan
Prof. Torpey
Harriett Bonful
Irene Kretchy
Andrea Burden

Pre-Conference Workshop

PRE-CONFERENCE SPEAKERS

Professor Lisa G. Pont

Affiliation:
Professor and Deputy Head of School, Faculty of Health, University of Technology Sydney, Australia

Past President,
International Society of Pharmacoepidemiology (FISPE)

Lisa Pont is Professor of Pharmacy and Deputy Head of School in the Graduate School of Health, University of Technology Sydney, and a practising pharmacist (Westmead Hospital). Professor Pont has honorary positions within Macquarie University's Centre for Health Economics (MUCHE) and Westmead Hospital, Australia's largest teaching hospital. She has a Master of Science in Epidemiology from the London School of Hygiene and Tropical Medicine and a PhD in Clinical Pharmacology on Quality Use of Medicines from the University of Groningen, The Netherlands.

Dr. Pont's research area is drug utilization and health services research to evaluate, understand and improve the quality and safety of medicines in older populations. Lisa has extensive experience in analyzing large administrative datasets, including National claims, eHealth and Pharmacy data, to understand safety and quality issues associated with medication use and in the use of data to design and evaluate health service solutions to address medication-related problems. Her research has informed key policy and clinical guidance internationally as well as nationally, being cited by the World Health Organisation, OECD Health Working Papers, the UK National Institute for Health and Care Excellence (NICE), the Danish Health Authority, Canadian Agency for Drugs and Technologies in Health (CADTH), and the Swedish Agency for Health Technology Assessment and Assessment of Social Services and her research was recognised by the Australian National Health and Medical Research Council in the 2023 "10 of the best".

Professor Pont is a Past President of the International Society of Pharmacoepidemiology, and she has been engaged with ISPE since she was a doctoral student in The Netherlands in the late 1990s when she was awarded a student scholarship to attend ICPE. Her first ICPE was in Berlin in 1998. She

Pre-Conference Workshop Outline

is the past chair of the ISPE Special Interest Group on Drug Utilization Research, the Public Policy Committee, the Strategic Planning Committee, a current member of the ACPE Steering Committee, and Chair of the ISPE scholarship committee. Lisa has served on multiple ICPE Scientific Program Committees and was an ISPE Board member from 2015 to 2025. Lisa has a strong interest in building research capacity in Drug Utilization Research, and as ISPE Faculty has facilitated workshops on drug utilization research, conducting field studies and Statistical methods at ICPE, Eurodurg, MURIA, and Afrig meetings.

Professor Pont has served on national and international expert advisory committees and boards. She has worked with the World Health Organisation as part of the international team Teaching rational pharmacotherapy, and again in 2016 as an invited member to the Global Patient Safety Challenge on Medication Safety held in Geneva in 2016. The Australian Minister of Health has appointed her to 2 regulatory committees for the Australian Therapeutic Goods Administration Expert Advisory Committees. She provides external evaluation advice to the Australian National reimbursement agency, the Pharmaceutical Benefits Advisory Committee. Professor Pont has consulted for the Australian Commission on Safety and Quality in Health Care, the Department of Health, the National E-Health Transition Agency (now known as the Australian Digital Health Agency), the Society of Hospital Pharmacists of Australia (SHPA) and the World Health Organisation. She is a Fellow of the International Society of Pharmacoepidemiology and the Society fo Hospital Pharmacists of Australia. She has received several National awards for her research, including 2 Australian NPS Medicinewise Quality Use of Medicines awards (2014 and 2016) and the Society of Hospital Pharmacists of Australia's Medal of Merit in 2018, a key national award in Australian Pharmacy.

Pre-Conference Workshop Outline

Prof. Joseph Fadare

Professor /Consultant Clinical Pharmacologist
Department of Pharmacology / Therapeutics and Medicine
Ekiti State University College of Medicine,
Ado-Ekiti

Department of Medicine
Ekiti State University Teaching Hospital, Ado-Ekiti, Nigeria

Data sources in Africa for pharmacoepidemiology research and Challenges of data for Drug Utilization Research within the African continent

Prof. Joseph Olusesan Fadare is a Professor in the Department of Pharmacology and Therapeutics, College of Medicine, Ekiti State University. He is an alumnus of Varna Medical University, Bulgaria and a Fellow of the National Postgraduate Medical College of Nigeria in the sub-specialty of Clinical Pharmacology and Therapeutics. His research interests include: pharmacoepidemiology and drug utilization including antimicrobials, antimicrobial stewardship, pharmacovigilance, geriatric pharmacology, drug interactions, therapeutic drug monitoring, clinical trials and research ethics.

Prof. Fadare is a member of several professional societies such as South African Society for Basic and Clinical Pharmacology, British Pharmacological Society, International Society for Pharmacoepidemiology, American Society for Microbiology and Medicines Utilisation Research in Africa group. Prof. Fadare has served as external examiner for 2nd Professional examinations in Pharmacology for many universities in Nigeria and South Africa.

He has published extensively in his chosen areas of research with over 100 publications in peer-reviewed journals, and is a reviewer for highly rated journals including BMJ Open, Frontiers in Pharmacology, BMC Health Research, International Journal of Tuberculosis and Lung Diseases, Expert Review in Clinical Pharmacology, Frontiers in Pharmacology, International Journal of Quality in Healthcare, and Journal of Epidemiology and Global Health. He is an associate editor with Frontiers in Pharmacology (Section Drugs Outcomes Research and Policies) and an editor with the “Nigerian Stethoscope” (a journal of the College of Medicine, Ekiti State University, Ekiti State University Teaching Hospital (EKSUTH) and Medi-

Pre-Conference Workshop Outline

cal and Dental Consultants Association of Nigeria (MDCAN), EKSUTH Branch).

His session will focus on: Data sources in Africa for pharmacoepidemiology research and Challenges of data for Drug Utilization Research within the African continent.

Pre-Conference Workshop Outline

Dr. Andrea Burden
University of Alabama at Birmingham, Department of Medicine, Division of Rheumatology and Clinical Immunology. Birmingham, Alabama, USA

Andrea Burden, currently tenure track Assistant Professor in the Institute of Pharmaceutical Sciences at D-CHAB, has been promoted as Associate Professor of Pharmacoepidemiology in the Department of Chemistry and Applied Biosciences.

Andrea Burden's research in pharmacoepidemiology, is focusing on the role of metabolic syndrome on the safety and effectiveness of medications and the side-effects of paracetamol and rise in opioid consumption in Switzerland.

Her research has contributed significantly to establishing this subject area at ETH Zurich and communicating its importance to Swiss political circles and the general public.

Andrea Burden is exceptionally successful at obtaining third-party funding for her research, and undertakes a large number of tasks for the institution.

Session title: Time series methods for policy research

Pre-Conference Workshop Outline

Macarius Donneyong,
PhD, MPH

Course: Practical application of Artificial Intelligence/ Machine Learning for pharmacovigilance

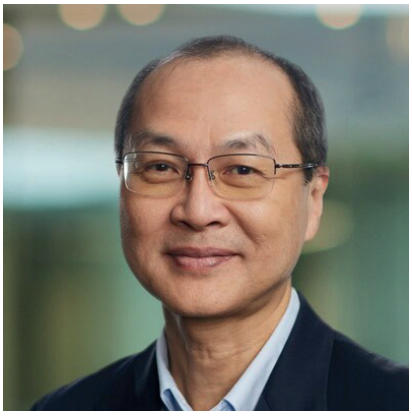
Dr. Macarius Donneyong is an Assistant Professor with joint faculty appointments in the Division of Outcomes and Translational Sciences, College of Pharmacy (70%) and the Division of Health Services Management and Policy, College of Public Health. He is also a faculty affiliate of the Translational Data Analytics Institute (TDAI), Discovery Themes.

His career is characterized by sustained record of multidisciplinary scholarship in the field of pharmacoepidemiology. His research has focused on generating real-world evidence on the effectiveness, safety and acceptability (adherence) of prescribed medication use among patient populations that are under-represented in clinical trials of medications, especially among racial/ethnic minorities and older patient populations.

Dr. Donneyong's commitment to this field of research has resulted in the recognition of his research as exemplified by the extramural (NIH R01 and foundations) and intramural research awards that he has received to improve patient outcomes. His research has been published in top-tier peer-reviewed journals including, the British Medical Journal, Jama Internal Medicine, Circulation-Hear Failure, etc. He has also given multiple talks as an invited speaker at some of the top universities in the US.

His selfless services to professional scientific societies have been rewarded with leadership opportunities. For example, he is currently a board member of the American College of Epidemiology and also previously served as the chair of various committees in the society as well as the International Society of Pharmacoepidemiology (ISPE). Beyond services in professional societies, he is extremely active in shaping the field of pharmacoepidemiology through his services as an associate editor and as a reviewer of extramural research grants and manuscripts. He remains dedicated to teaching and training the next generation of researchers through both formal and informal pedagogical and mentorship activities.

Pre-Conference Workshop Outline



Professor K. Arnold Chan

Department: National Taiwan University College of Medicine

Professor K. Arnold Chan is a physician epidemiologist with more than 30 years of global research experience in academia and private sector. He received medical training at National Taiwan University and advanced training in epidemiology at Harvard School of Public Health. He has served on the faculty at National Taiwan University (NTU) and Harvard School of Public Health and joined the private industry in 2005, subsequently became Chief Scientist of the Epidemiology Unit at Optum. Dr. Chan became a professor at NTU College of Medicine in 2013 and had been Director of the NTU Hospital Clinical Trial Center, Department of Medical Research, and NTU Health Data Research Center. He is transitioning to TriNetX (Vice President for Real World Evidence Consulting). Dr. Chan has authored or co-authored more than 150 peer-reviewed research articles and co-edited a textbook on pharmacoepidemiology. His H-index is 59 according to Google Scholar as of October 2022.

Pre-Conference Workshop Outline

Professor Robert William Platt

Department of Pediatrics and of Epidemiology, Biostatistics, and Occupational Health (EBOH), McGill University.

Robert Platt is Professor in the departments of Pediatrics and of Epidemiology, Biostatistics, and Occupational Health (EBOH) at McGill University. He is a Senior Investigator at the Research Institute of the McGill University Health Centre and the Lady Davis Institute of the Jewish General Hospital, and Investigator at the McGill Pharmacoepidemiology Research Unit, and holds the Albert Boehringer I endowed chair in Pharmacoepidemiology. Prof. Platt is the Executive Co-Lead and leader of the Methods team of the Canadian Network for Observational Drug Effect Studies (CNODES). His research focuses on improving methods for the study of medications using administrative data, with an emphasis on methods for causal inference and a substantive focus on medications in pregnancy. Prof. Platt is on editor-in-chief of Statistics in Medicine and is on the editorial boards of the American Journal of Epidemiology and Pharmacoepidemiology and Drug Safety. He has published over 325 articles, one book and several book chapters on biostatistics and epidemiology.

Pre-Conference Workshop Outline

Professor Jesper Hallas

Clinical Pharmacology, Pharmacy and Environmental Medicine, University of Southern Denmark

Jesper Hallas - Tutored by Professor Lars Gram, Odense University's Clinical Pharmacology Unit, JH established a pharmacoepidemiologic research line in the late 1980s. A major breakthrough came in 1990 with the advent of the Odense University Pharmacoepidemiologic Database (OPED). It has complete capture of all computerised prescriptions in Region of Southern Denmark (population 1.2 million) which allows a detailed account of how drugs are distributed among different users and - by linkage to other data resources - the experience of the drug users in terms of adverse events. Among the research interests are studies of rational prescribing, neurological diseases caused by drug treatment, interventions to improve prescribing among GPs, development of indices to characterise patterns of prescribing and management of dyspepsia. Among the collaborators are the General Practice Research Unit, the Research Unit of Demographics and Statistics and a number of clinical research units at Odense University Hospital.

Recent activities include studies of association between long-term drug use and cancer, on self-controlled designs and on use of communicative measures of risk and benefit.

Pre-Conference Workshop Outline

Dr. Paul M Coplan

Head, Medical Device Epidemiology and RWD Analytics at Johnson & Johnson

Paul Coplan is the Vice President of Epidemiology and Real-World Data Sciences for Medical Devices at Johnson and Johnson, leading a team of 30 epidemiologists, data programmers and health service researchers. Paul completed a Master's in Public Health at the University of Massachusetts, Amherst, a Doctor of Science in Epidemiology and Biostatistics at Harvard School of Public Health, and an MBA at Wharton Business School at the University of Pennsylvania.

Paul has been a pioneer in using epidemiology and real-world evidence to develop new vaccines, medicines and medical technology, to assess their safety and effectiveness after marketing, and in using real world evidence for market access and label expansion purposes. He has helped develop 9 widely used vaccines, 9 medicines and several medical devices. In addition, Paul has taught Epidemiology at the University of Pennsylvania Perelman School of Medicine as an adjunct professor for the past 22 years. He has authored over 100 peer-reviewed scientific articles and 500 international medical conference presentations, conducted studies in 15 countries and has worked with the FDA, EMA, Chinese, Canadian and other national regulatory authorities.

Paul is a member of the National Evaluation System for Health Technology's Data Quality Workgroup and the Medical Device Innovation Consortium Science of Patient Input Steering Committee. He has led pre-competitive initiatives for collaboration between companies, regulators and academics in creating benefit-risk frameworks for medical product evaluations; assessing the safety of HIV medications, vaccines, and opioid analgesics; establishing clinical trial infrastructure in Africa and Southeast Asia for HIV vaccine and microbicide trials; building and evaluating Risk Evaluation and Mitigation Strategies (REMS); and epidemiologic evaluation of cobalt-containing orthopedic implants.

Pre-Conference Workshop Outline

Dr. Mary Beth Ritchey

Mary Beth Ritchey is a part-time Associate Research Professor at PETS where she conducts pharmacoepidemiology research, teaches, and mentors students/fellows in pharmacoepidemiology methodology. Outside of PETS, she is the Principal and Owner of Med Tech Epi, LLC where she conducts strategic evidence generation planning and analysis of health care databases for regulatory decision-making under contract with pharmaceutical and medical device clients.

Dr. Ritchey is an innovative and dynamic epidemiologist with over 15 years "real-world evidence" observational research experience across government, industry, and academia in study design and implementation. She is adept with scientific, technical, and logistical aspects of conducting regulatory-grade feasibility, utilization, safety, and effectiveness studies of medical products. Dr. Ritchey is experienced leading international multi-stakeholder teams for research, strategic planning and coordination of scientific programming, agenda-setting, and decision-making. She has proficiency in garnering efficiency in a continuous learning environment, specifically medical product safety and real-world evidence, through review of research processes and clarification of stakeholder needs.

Dr. Ritchey is a Fellow of in the International Society of Pharmacoepidemiology (ISPE), Associate Editor for Pharmacoepidemiology and Drug Safety (PDS) and serves on the Executive Operations and Scientific Oversight Committees for the Medical Device Epidemiology Network (MDEpiNet) public private partnership with FDA.

Pre-Conference Workshop Outline

Irene Murimi-Worstell,
PhD, MA

Assistant Professor of
Pharmacoepidemiology &
Health Policy
Massachesetts College
of Pharmacy and Health
Sciences

Dr. Irene Berita Murimi-Worstell is an Assistant Professor of Pharmacoepidemiology and Health Policy at the Massachusetts College of Pharmacy and Health Sciences in Boston, MA. She holds a PhD in Pharmaceutical Outcomes and Policy from the University of Florida and an MA in Religion and Gender from Yale University.

Her research uses large, complex administrative datasets to study how treatment regimens change over time, particularly among patients with cancer and multimorbidity. She examines how these patterns relate to clinical and economic outcomes in routine care with a focus on treatment adherence, switching, and regimen complexity.

At MCPHS, she teaches courses in statistical analysis and applied pharmacoepidemiology. She is also involved in international teaching collaborations focused on comparative healthcare systems and pharmaceutical policy.

Dr. Murimi-Worstell serves as the current Co-Chair of the ISPE Africa Regional Interest Group.

Course Title: Use and Limits of AI for Systematic Reviews and Meta-Analysis

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Mr. Godwin Gulbi

Profession: Health
Economist and Pharmacist

Godwin Gulbi is a Ghana-based health economist and pharmacist affiliated with the Korle-Bu Teaching Hospital in Accra. He has contributed to research on health technology assessment, including studies on diabetes, vaccine deployment, and childhood cancer treatment coverage.

Pre-Conference Workshop Outline

Dr. Maribel Salas
MD MSc, DSc, FACP, FISPE
- Bayer

Maribel Salas is an Executive Medical Director at Bayer Corporation. She has experience in Pharmacoepidemiology, Pharmacovigilance, Pharmacoeconomics, Clinical Epidemiology, and Outcomes Research. Dr. Salas is a medical doctor with a specialty in Internal Medicine and epidemiologist with more than 20 years of experience in pharmacovigilance and pharmacoepidemiology. Dr. Salas holds degrees in Medicine, Outcomes Research, Epidemiology, Clinical Epidemiology, and Pharmacoepidemiology. She worked in the Internal Medicine Department at the National Medical Center. She also worked at the Department of Preventive Medicine and School of Public Health (SOPH) at the University of Alabama at Birmingham. At the SOPH, Dr. Salas developed the Pharmacoepidemiology program and represented the Birmingham Center for Education, Research and Therapeutics (CERTs) at the CERTs National Educational Consortium. As a pharmacoepidemiologist, Dr. Salas wanted to get experience in the pharmaceutical industry, and she joined the Patient Safety Departments at AstraZeneca Pharmaceuticals, Pfizer Inc, Merck Research Laboratories, Daiichi Sankyo and, lately, Bayer Corporation. Dr. Salas obtained various federal grants, worked with multiple large databases, published more than 100 scientific articles in peer-reviewed journals, and has more than 1000 citations in scientific literature.

Pre-Conference Workshop Outline

Prof. Stanley Edlavitch

Session title: Methods for evaluating the role of pharmacogenomic testing on drug safety and effectiveness

Dr. Stanley Edlavitch is a professor of epidemiology in the Department of Psychiatry at the UMKC School of Medicine. He is also an adjunct professor of infectious disease at the University of Kansas Medical Center and adjunct professor of epidemiology at Tianjin Medical University in Tianjin, China. Dr. Edlavitch served as graduate training director for the Department of Informatic Medicine and Personalized Health.

Before joining the School of Medicine Dr. Edlavitch was an adjunct professor of dental health at the School of Dentistry. He worked at the University of Kansas Medical Center as professor of preventive medicine, a member of the Institutional Review Board and director of the Master of Public Health program.

In 1984, Dr. Edlavitch founded the International Society for Pharmacoepidemiology and served as its executive director through 1997. He serves on multiple advisory and editorial boards and is a contributing editor for the Chinese Journal of Pharmacoepidemiology and the senior editor of the Pharmacoepidemiology Newsletter.

Dr. Edlavitch received a bachelor's degree in mathematics from the University of Maryland and went on to earn a Master of Public Health and a master's degree in mathematical statistics from the University of Missouri-Columbia. He received his Ph.D. in epidemiology from the University of California-Berkeley.

Pre-Conference Workshop Outline

Dr. Nicholas Ekow Thomford

Dr. Nicholas Ekow Thomford completed his undergraduate degree in Biochemistry at the University of Ghana. He completed a degree in Master of Philosophy in Medical Biochemistry at the University of Ghana. He worked at the University of Ghana Medical School, Tamale Teaching Hospital/University for Development Studies School of Medical Sciences and University of Cape Coast School of Medical Sciences, teaching. He completed his PhD under the supervision of Professor Collet Dandara in a project involving pharmacogenomics of herb-drug interaction and was awarded a Faculty of Health Sciences postdoctoral research fellowship to conduct research into herbal medicines as potential activators of transcriptionally silent HIV. His research interests are in precision and genomic medicine focusing on pharmacogenomics of herb/drug-drug interactions and genomic basis for diseases in African populations and potential therapeutic targets towards personalized/precision medicine. He is an ad hoc reviewer for reputable peer-review journals and has supervised postgraduate students (Hons and MSc) and has several publications in peer-reviewed journals.

Session title: AI/ML for pharmacogenomics research

Conference Schedule

Pre-Conference : 20th April 2026

TIME	AUDITORIUM	BREAKAWAY ROOM 1 (KUNDUM)	BREAKAWAY ROOM 2 (DAMBA 1&2)
7 - 8am	**REGISTRATION**		
	Pharmacoepidemiology		
8 - 9am	Pharmacoepidemiology applications in clinical practice, regulatory decisions and commercial product development **Prof. Arnold Chan**	NO SESSION	NO SESSION
9 -10am	Methods for studying comparative effectiveness of medications **Prof. Robert Platt**	NO SESSION	NO SESSION
10:00 - 10:15am	**BREAK**		
10:15am -11:15am	Machine Learning-based causal inference in Pharmacoepidemiology **Prof. Robert Platt**	Pharmacovigilance: concepts and methods on causality and signal detection **Dr. Maribel Salas**	Medical Device Pharmacoepidemiology **Dr. Paul Coplan**
11:15am -12:15pm	Self-controlled designs in Pharmacoepidemiology **Prof. Jesper Hallas**	Practical application of AI/ ML for Pharmacovigilance **Dr. Macarius Donneyong**	Methods in Medical Device Epidemiology **Dr. Mary Beth Ritchey**
12:15pm - 1:15pm	**LUNCH**		

Conference Schedule

Pre-Conference : 20th April 2026

TIME	AUDITORIUM	BREAKAWAY ROOM 1 (KUNDUM)	BREAKAWAY ROOM 2 (DAMBA 1&2)
1:15pm - 2:15pm	**Drug Utilization Research** Methods for measuring and assessing appropriate medication use **Prof. Lisa Pont**	Use and Limits of AI for Systematic Reviews and Meta-Analysis **Dr. Irene Murimi-Worstell**	NO SESSION
2:15pm - 3:15pm	Evaluation methods for policy research **Prof. Andrea Burden**	NO SESSION	NO SESSION
3:15pm - 3:30pm	**BREAK**		
3:30pm - 4:30pm	Data sources in Africa for pharmacoepidemiology research and Challenges of data for Drug Utilization Research within the African continent. **Prof. Joseph Fadare**	Pharmacoeconomics: Cost-effectiveness analysis **Mr. Godwin Gulbi**	NO SESSION
4:30pm - 6:30pm	**Early Symposium** Key Roles for Pharmacoepidemiologists in the Pharmacogenomics and Precision Medicine Revolution • **Prof. Stanley Edlavitch** • **Chancellor Brian Strom** • **Dr. Nicholas Ekow Thomford** • **Prof. Collet Dandara** • **Prof. Gregory Peck**	NO SESSION	NO SESSION
7:00pm - 9:00pm	**WELCOME RECEPTION**		

Conference Schedule

Main Conference Day 1 : 21st April 2026

7-8:00 am	**REGISTRATION**		
8-9:45 am	**KEY NOTE/PLENARY I**		
	Opening Remarks, Welcome and Keynote Session	Dr. Kwame Appenteng (ISPE AfRIG Chair)	
	African data, African solutions: Harnessing real-world evidence for safer medicines, vaccines and health technology	Dr. Chioma Ejekam (LOC Chair)	
	Keynote Address	Chancellor Brian Strom	
		Ursula Kirchmayer (ISPE President)	
		WHO AFRO Rep. – Dr. Kwasi Nyarko	
		Hudu Mogtari, Board Chair, Ghana Standards Authority	
		Deputy Minister for Health - Hon. Dr. Grace Ayensu-Danquah	
	Address by the Special Guest of Honor	Ghana Government Official	
9:45 -10am	**BREAK**		
TIME	**AUDITORIUM**	**BREAKAWAY ROOM 1 (KUNDUM)**	**BREAKAWAY ROOM 2 (DAMBA 1&2)**
10 -11am	**Symposium and Oral Presentations**		
	Symposium	**Oral Abstract Presentations**	
	Moderator: Prof. Rebecca Chandler Pharmacovigilance: Case definitions for safety outcomes as a critical component of preparedness and generation of evidence during public health emergencies **Panelists** • **Prof. Rebecca Chandler** • **Edinam Agbenu** • **Dale Nordenburg** • **Nana Ansah**	**Moderator: Irene Murimi-Worstell** **Co-Moderator: Michael Mireku**	**Moderator: Joseph Fadare** **Co-Moderator: Mary Beth Richey**
		Acute Post-Cesarean Section Pain Severity, Associated Factors And Management Approaches Among Obstetric Patients At Kenyatta National Hospital.	Beliefs, Concerns, and Medication Adherence among Adults with Type 2 Diabetes in Ghana

Main Conference Day 1 : 21st April 2026

TIME	AUDITORIUM	BREAKAWAY ROOM 1 (KUNDUM)	BREAKAWAY ROOM 2 (DAMBA 1&2)
	NO SESSION	Safety of Isoniazid Preventive Therapy in Pregnant Women Living With HIV: A Rapid Evidence Review to Inform South African Guidelines	Predictors of Health-Related Quality of Life Among Patients with Comorbid Hypertension and Type 2 Diabetes Mellitus in Ghana
	NO SESSION	Variability In Response To Different Brands Of Oxytocin Among Individuals Receiving Obstetric Care In A Tertiary Care Facility	Blood Pressure Control And Its Association With Lifestyle Factors Among Hypertensive Patients At The Sunyani Teaching Hospital
	NO SESSION	Mupirocin In The First Trimester Of Pregnancy And The Risk Of Congenital Malformations	A preliminary evaluation of Antithrombotic Prescribing Patterns in Medical In-Patientss at the University of Benin Teaching Hospital, (UBTH).
11-12pm		**Oral Abstract Presentations**	
	NO SESSION	**Moderator: Daniel Ankrah** **Co-Moderator: Jesper Hallas**	**Moderator: Israel Abebrese Sefah** **Co-Moderator: Stan Edlavich**
	NO SESSION	Sex disparities in initiation of attention-deficit/ hyperactivity disorder treatment after diagnosis: A systematic review	Adverse effects of chemotherapy in breast cancer patients in Ouagadougou (Burkina Faso): a hospital-based pharmacoepidemiologic study
	NO SESSION	Switching patterns of antidepressant treatment in children and adolescents in Australia, 2014-2022: A retrospective population-based cohort study	Prevalence of CYP2C19*17 Gain-of-Function Allele and Its Association with Stroke Recurrence in Nigerian Cardiovascular Patients on Clopidogrel Therapy: A Single-Centre Study

Conference Schedule

Main Conference Day 1 : 21st April 2026

	NO SESSION	Pattern and Characteristics of Antipsychotic-Related Adverse Drug Reactions among Nigerian Patients	Beyond Diagnosis Men's Lived Experiences of Prostate Cancer and Patient-Centered Care in Kenya
	NO SESSION	Orthostatic Hypotension among patient onPpsychotropic Drugs in Ekiti State, South Western Nigeria.	Decreased Risk of Clinical Gallstone Disease in New-Users of Statins
LUNCH AND POSTER WALK			
TIME	**AUDITORIUM**	**BREAKAWAY ROOM 1 (KUNDUM)**	**BREAKAWAY ROOM 2 (DAMBA 1&2)**
1-2:30 pm	**Plenary II**		
2:30-3:00pm	**Break/Poster Walk**		
3-4 pm	**Symposium**	**Oral Abstract Presentations**	
	Moderator: Prof. Karen Cohen	Moderator: Amanj Kurdi Co-Moderator: Paul Coplan	Moderator: Chioma Ejekam Co-Moderator: Jesper Hallas
	Exploring methodological approaches to address pharmacovigilance priorities in Africa **Panelists** • **Prof. Karen Cohen** • **Prof. Ushma Mehta** • **Prof. Emma Kalk** • **Prof. Rebecca Chandler**	Geographical Inequities in Medicine Availability and Affordability in Public Hospitals: Evidence from Ghana's Ashanti Region	NO SESSION

Main Conference Day 1 : 21st April 2026

	NO SESSION	Implementing the WHO Rapid Alert System for Substandard and Falsified Medicines: Six Years of National Medicines Regulatory Authorities' Experience in Eastern and Southern Africa.	NO SESSION
TIME	**AUDITORIUM**	**BREAKAWAY ROOM 1 (KUNDUM)**	**BREAKAWAY ROOM 2 (DAMBA 1&2)**
	NO SESSION	Evaluating the Utilization of Electronic Medical Records and Telemedicine Features in Mitigating Medication Errors in Selected Medical Centres in South West, Nigeria	NO SESSION
	NO SESSION	Machine Learning - Driven Record Linkage to Mitigate Exposure Misclassification in Pregnancy Pharmacovigilance: A Case Study in Western Kenya	NO SESSION
4-5 pm		**Oral Abstract Presentations**	
	NO SESSION	**Moderator: Karen Cohen Co-Moderator: Ivan Eduku Mozu**	NO SESSION
	NO SESSION	COVID-19 Vaccine Hesitancy among Healthcare Workers in Ghana: Insights from a Cross-Sectional Study in a Tertiary Hospital	NO SESSION
	NO SESSION	Consensus Workshop on the Causality Assessment of AEFIs (Adverse Events Following Immunization), Lome, Togo	NO SESSION

Conference Schedule

Main Conference Day 1 : 21st April 2026

	NO SESSION	Incidence and Predictors of Adverse Events Following the Use of Rabies Vaccine Post-Exposure Prophylaxis (PEP) Among Rabid Suspect Animal Bite Victims in Selected Regions of Tanzania	NO SESSION
	NO SESSION	External Quality Control of Causality Assessment of Adverse Event Following Immunization from 2021 to 2025 in West and Central Africa	NO SESSION
	NO SESSION	Experiences and perceptions about vaccination safety and adverse events reporting procedures: A qualitative study among mothers in Northern Ghana	NO SESSION

Main Conference Day 2 : 22nd April 2026

TIME	AUDITORIUM	BREAKAWAY ROOM 1 (KUNDUM)	BREAKAWAY ROOM 2 (DAMBA 1&2)
7-8:00 am	**REGISTRATION**		
8:00am-10:00 am	**PLENARY III** **Moderator: Dr. Paul Coplan** **Co-Moderator - Dr. Irene Murimi-Worstell** **DATA - MAPPING OUR WAY FORWARD** Ghana NHIS Rep. - **Dr. Mrs. Ruby Aileen Mensah Annan** African Registries **- Dr. Bernard Omondi Ong'ondo** Canadian Network for Observational Drug Effect Studies (CNODES) - **Prof Robert Platt** Nordic Experience - **Prof Jesper Hallas**	NO SESSION	NO SESSION
10-11 am	**Symposium**	**Oral Abstract Presentations**	
	Moderator: Dr. Macarius Donneyong	**Moderator: Harriet Bonful** **Co-Moderator: Robert Platt**	**Moderator: Karen Cohen** **Co-Moderator: Micheal Mireku**
	Establishing the African Vaccine Safety Sentinel Surveillance Network (AVASSN): A Regional Framework for Real-Time Vaccine Safety Monitoring **Panelists** • **Dr. Macarius Donneyong** • **Dr. Alemayehu Duga** • **Dr. George Tsey Sabblah** • **Dr. Tedi Angasa** • **Mr. Nacer Adamou Saidou**	Optimizing Antibiotic Use in Pediatric Care in Ghana: An Urgent Call for Stewardship	Impact of Three Antimalarial Therapies on Renal Function in Nigerian Children with Uncomplicated Plasmodium Falciparum Infection.

Conference Schedule

Main Conference Day 2 : 22nd April 2026

	NO SESSION	A Systematic Review of Adverse Effects of Anti-Epileptic Drugs in Pediatric Population	Isotretinoin use and risk of idiopathic intracranial hypertension: A nationwide cohort study
	NO SESSION	Persistence of antidepressant treatment in children and adolescents: A population-based cohort study	Assessment of Factors for Achieving Target Activated Clotting Time in Patients Undergoing Open Heart Surgery with Unfractionated Heparin at Jakaya Kikwete Cardiac Institute (JKCI), Dar Es Salaam, Tanzania.
	NO SESSION	Assessing the Impact of Teacher-Led School-based Hygiene Intervention on Children's Handwashing Practices for Childhood Disease Prevention in Lagos, Nigeria: A Cluster Randomised Control Trial	Comparing Ablation Versus Anti-Arrhythmic Drugs for the Treatment of Atrial Fibrillation in Black Patients: Analysis of An Administrative Claims Database Of United States Commercially Insured Patients
TIME	**BREAKAWAY ROOM ODWIRA**	**BREAKAWAY ROOM 1 (KUNDUM)**	**BREAKAWAY ROOM 2 (DAMBA 1&2)**
11-12pm	**Moderator: Chioma Ejekam** **Co-Moderator: Jesper Hallas**	**Moderator: Ursula Kirchmayer** **Co-Moderator: Joseph Fadare**	**Moderator: Irene Murimi-Worstell** **Co-Moderator: Israel Sefah**
	HIV/AIDS patients on ARV and their perceptions towards traditional medicines in South Africa	Safety Update from the First Large-Scale Use of a Pentavalent Meningococcal A/C/W/Y/X Conjugate Vaccine for Outbreak Response in Niger and Nigeria, 2024	Assessing the Knowledge, Awareness, and Practice of Human Immunodeficiency Virus (HIV) Post-Exposure Prophylaxis among Nurses and Midwives at Sunyani Teaching Hospital

Main Conference Day 2 : 22nd April 2026

	Antimalarial Potential of Phragmanthera Capitata: An insight into the activity of its Extracts and Isolated Compounds	Robustness and agreement of signal detection algorithms applied to COVID-19 vaccines individual case safety reports from the U.S. FDA Vaccine Adverse Event Reporting System (VAERS) and EudraVigilance	Bridging Professional Gaps: Interprofessional Perceptions Among Final-Year Medical and Pharmacy Students at SMU
	Antimalarial Properties of the Stem Bark of Amphimas Pterocarpoides: An Insight into the In Vitro Antiplasmodial Activity of Bioactive Constituents Against Plasmodium Falciparum Resistant Strains	Vaccine safety Reporting trends in the African Region	Background Rates of Adverse Events for Vaccine Evaluation In Africa (Brave): A Multi-Country Study
	NO SESSION	Mpox vaccine safety surveillance in Africa: update from the use from August 2024 to December 2025.	Preparing for Unexpected Vaccine Adverse Events of Special Interest (AESI-X): a standardized approach applied to novel vaccines
12pm - 1:30 pm	**LUNCH AND POSTER WALK**		
TIME	**AUDITORIUM**	**BREAKAWAY ROOM 1 (KUNDUM)**	**BREAKAWAY ROOM 2 (DAMBA 1&2)**
1:30pm - 2:30 pm	NO SESSION	**Moderator: Macarius Donneyong** **Co-Moderator: Maribel Salas**	**Moderator: Julius Asubonteng** **Co-Moderator: Chioma Ejekam**
	NO SESSION	Centre of Excellence for Pharmacovigilance in Southern Africa (CEPSA): Hands-On Capacity Building to Empower a New Generation of Pharmacovigilance Experts	Improving Compliance with Surgical Antibiotic Prophylaxis Guidelines through Antimicrobial Stewardship Interventions in a Ghanaian Teaching Hospital

Conference Schedule

Main Conference Day 2 : 22nd April 2026

TIME	AUDITORIUM	BREAKAWAY ROOM 1 (KUNDUM)	BREAKAWAY ROOM 2 (DAMBA 1&2)
	NO SESSION	Evaluation of Pharmacovigilance and Factors Associated with Adverse Drug Reaction Reporting: A Case Study at Military Healthcare Facilities in South West, Nigeria	Assessment of Drug Use Practices in the Basic and Comprehensive Primary Health Care Centres in Lagos State, Nigeria
	NO SESSION	Adverse Drug Reaction Reporting: Knowledge, Attitudes, and Practices of Nigerian Public Healthcare Professionals	Development of Quality Indicators to Assess the Appropriateness of Antibiotic Prescribing in Primary Healthcare in South Africa
	NO SESSION	NO SESSION	Knowledge, Attitude, Practices of healthcare workers and Antibiotic Consumption Patterns Related to Antimicrobial Stewardship in two public hospitals in Nairobi, Kenya.
2:30pm-3:30pm	**Moderator: Dr. Kwame Appenteng** ISPE Presidents Forum - Past, Present and Future **Panelists** • **Dr. Kwame Appenteng** • **Ursula Kirchmayer** • **Chancellor Brian Strom** • **Prof. Lisa Pont** • **Dr. Mary Beth Ritchey** • **Prof. Stanley Edlavitch** • **Prof. Jesper Hallas**	NO SESSION	NO SESSION
3:30pm	**Coffee and Socialisation**		

Abstracts

Concurrent Sessions: Oral Presentations

Impact of Three Antimalarial Therapies on Renal Function in Nigerian Children with Uncomplicated Plasmodium Falciparum Infection.

Zacchaeus Olofin[1,2], Adebola Orimadegun[1], Catherine Falade[1]
[1]University of Ibadan, Ibadan, Nigeria. [2]Lead City University, Ibadan, Nigeria

Abstract

Background: Antimalarial therapy has been associated with renal function derangements, often attributed to drug-induced nephrotoxicity. However, it remains uncertain whether these changes persist following treatment completion.

Objective: To investigates the impact of three antimalarial therapies—artemether-lumefantrine (AL), atovaquone-proguanil (A/P), and chloroquine (CQ)—on renal function in Nigerian children with uncomplicated Plasmodium falciparum infection.

Methods: This retrospective pharmacoepidemiological analysis utilized clinical trial data collected between 1998 and 2002 from children aged 3–119 months who participated in antimalarial drug efficacy studies conducted in Southwest Nigeria. A total of 128 case records were analyzed. Changes in serum creatinine levels from baseline to the 28-day follow-up were compared among children treated with AL (n = 73), A/P (n = 32), and CQ (n = 23). A general linear model (GLM) was employed for repeated measures analysis.

Results: The median age of the participants was 26 months (interquartile range: 17.0–39.8), with 52% being female. Over the 28-day follow-up period, the AL group demonstrated a statistically significant reduction in serum creatinine levels, decreasing from a baseline mean of 1.27 ± 0.37 mg/dL to 1.07 ± 0.48 mg/dL at day 28 (mean difference: –0.20 mg/dL, 95% CI: –0.30 to –0.10, p = 0.001).In contrast, the AP group showed a non-significant increase from 1.16 ± 0.34 mg/dL at baseline to 1.20 ± 0.41 mg/dL at day 28 (p = 0.480), while the CQ group also showed a non-significant rise from 1.15 ± 0.29 mg/dL to 1.34 ± 0.36 mg/dL (p = 0.145).Overall, treatment with AL significantly improved renal function, whereas AP and CQ had no notable impact.

Conclusion: Among the three antimalarial therapies studied, AL demonstrated superior renal function improvement in children, suggesting it as the preferred option for those with renal impairment. Further studies are recommended to confirm these findings and guide treatment decisions.

Optimizing Antibiotic Use in Pediatric Care in Ghana: An Urgent Call for Stewardship

Israel Abebrese Sefah[1], Dennis Komla Bosrotsi[2]
[1]University of Health and Allied Sciences, Ho, Ghana. [2]University of Health and Allied Sciences, Hohoe, Ghana

Abstract

Background: Antibiotic use is common among hospitalized pediatric patients; however, inappropriate utilization, including overuse of Watch group antibiotics, contributes to antimicrobial resistance (AMR), adverse events, and increased healthcare costs. This study aimed to assess the prevalence, pattern, and appropriateness of antibiotic use among pediatric inpatients in a Ghanaian teaching hospital.

Methods: A retrospective review of electronic medical records of all pediatric patients (under 12 years) admitted and treated with antibiotics between January and March 2022 was conducted. The prevalence and appropriateness of antibiotic prescriptions were evaluated by comparing prescribed agents with national and institutional treatment guidelines. Factors associated with appropriateness were analyzed using multivariate logistic regression.

Results: Of 410 admitted patients, 319 (77.8%) received at least one antibiotic. Most were aged 0–2 years (68.7%, n = 219/319) and male (54.6%, n = 174/319). Ceftriaxone was the most frequently prescribed antibiotic (20.7%, n = 66/319). The majority of systemic antibiotics were on the WHO Access and Watch lists or both (42.9%, n = 136/319). The leading indications for antibiotic use were neonatal sepsis (24.1%, n = 77/319) and pneumonia (14.4%, n = 46/319). Overall, 42.3% (n = 135/319) of antibiotic prescriptions were appropriate. In multivariate analysis, ceftriaxone prescriptions (aOR = 0.12; 95% CI: 0.02–0.95; p = 0.044) and surgical prophylaxis (aOR = 0.07; 95% CI: 0.01–0.42; p = 0.004) were significantly associated with lower appropriateness, whereas pneumonia diagnosis increased appropriateness (aOR = 15.38; 95% CI: 3.30–71.62; p < 0.001).

Conclusion: Antibiotic use among hospitalized pediatric patients was high, with less than half of prescriptions deemed appropriate. Appropriateness was influenced by antibiotic type, diagnosis, and the use of surgical prophylaxis. Strengthened antimicrobial stewardship interventions, particularly prescriber education and regular audits, are warranted to optimize antibiotic use in pediatric care in Ghana and similar settings.

Improving Compliance with Surgical Antibiotic Prophylaxis Guidelines through Antimicrobial Stewardship Interventions in a Ghanaian Teaching Hospital

Israel Abebrese Sefah[1], Varsha Bangalee[2]

[1]University of Health and Allied Sciences, Ho, Ghana. [2]University of KwaZulu-Natal, Durban, South Africa

Abstract

Background: Inappropriate use of surgical antibiotic prophylaxis (SAP) to prevent surgical site infections (SSIs) is a major driver of antimicrobial resistance (AMR) globally, including Ghana. This study evaluated the impact of antimicrobial stewardship (AMS) interventions on SAP guideline compliance and surgical outcomes such as SSI rate and length of hospital stay.

Methods: A nine-month quasi-experimental (before-and-after) study was conducted among 300 obstetric and gynecological surgery patients in a Ghanaian teaching hospital. Medical records of 150 patients were reviewed at baseline and 150 after AMS interventions. Interventions comprised educational sessions on hospital SAP guidelines and feedback of baseline audit results to the surgical team. Data were extracted using a standardized tool. Descriptive analyses were performed, and Pearson's chi-square and Wilcoxon rank-sum tests assessed intervention effects.

Results: Most participants (73.3%, n = 220/300) were aged 24–44 years, and the most frequent procedure was emergency caesarean section (30.7%, n = 92/300). Post-intervention, SAP guideline compliance improved significantly for antibiotic choice ($p = 0.001$), duration ($p < 0.001$), and total antibiotic consumption ($p < 0.001$). No significant changes were observed in the timing of administration ($p = 0.636$), SSI rate ($p = 0.054$), or length of hospital stay ($p = 0.161$).

Conclusion: AMS interventions focused on education and feedback significantly enhanced SAP compliance regarding antibiotic choice and duration, and reduced antibiotic use without worsening SSI rates or hospital stay. These findings support wider adoption of audit-feedback and educational AMS strategies in Ghanaian and similar healthcare settings to optimize SAP use and mitigate AMR.

Abstracts

Concurrent Sessions: Oral Presentations

COVID-19 Vaccine Hesitancy among Healthcare Workers in Ghana: Insights from a Cross-Sectional Study in a Tertiary Hospital

Israel Abebrese Sefah, Perry Ofori
University of Health and Allied Sciences, Ho, Ghana

Abstract

Background: Vaccination remains one of the most effective public health interventions; however, vaccine hesitancy continues to hinder optimal coverage. This study aimed to assess the level of COVID-19 vaccine hesitancy and its associated factors among healthcare workers in a teaching hospital in Ghana.

Methods: A cross-sectional study was conducted using a self-administered questionnaire. Data were analyzed with Stata version 14 using descriptive statistics, Chi-square tests of independence, and multiple logistic regression to determine factors associated with vaccine hesitancy.

Results: A total response rate of 78.6% (n = 216/275) was achieved. Most respondents were females (62.5%, n = 135), aged 20–39 years (94.4%, n = 204), and predominantly nurses or midwives (64.8%, n = 140), followed by medical doctors (19.9%, n = 43). The overall prevalence of COVID-19 vaccine hesitancy was 19.9%. The most cited reasons for hesitancy were apathy (18.6%, n = 8/43) and the belief of not being at risk of infection (16.3%, n = 7/43). Vaccine hesitancy was significantly reduced among participants with knowledge of vaccine effectiveness (aOR = 0.01; 95% CI: 0.001–0.0996; $p < 0.001$), those who had received COVID-19–related training (aOR = 0.34; 95% CI: 0.13–0.85; $p = 0.022$), and those with a history of previous vaccinations (aOR = 0.18; 95% CI: 0.07–0.45; $p < 0.001$). Conversely, hesitancy was more likely among respondents who believed vaccine uptake should be voluntary (aOR = 3.28; 95% CI: 1.08–10.01; $p = 0.037$).

Conclusion: Nearly one in five healthcare workers demonstrated COVID-19 vaccine hesitancy, driven primarily by apathy and perceived low risk of infection. As healthcare workers play a pivotal role in promoting vaccination, sustained educational interventions on vaccine safety and efficacy are crucial to improving uptake and reducing hesitancy within this population.

Beliefs, Concerns, and Medication Adherence among Adults with Type 2 Diabetes in Ghana

Israel Abebrese Sefah, Edith Amuzu Seyram
University of Health and Allied Sciences, Ho, Ghana

Abstract

Background: Optimal adherence to anti-diabetic medication is critical for effective glycaemic control and prevention of complications in type 2 diabetes mellitus (T2DM). Patients' beliefs about the necessity and safety of their medicines strongly shape adherence behaviours. This study examined how medication-related beliefs influence adherence among adults with T2DM in Ghana, providing evidence to guide culturally sensitive interventions.

Methods: A cross-sectional study was conducted among 222 adults with T2DM attending the ambulatory diabetes clinic of Cape Coast Teaching Hospital. Medication adherence was assessed using the 5-item Medication Adherence Report Scale (MARS-5), and beliefs were measured using the Beliefs About Medicines Questionnaire—Specific (BMQ-S) and Overall (BMQ-Overall). Data were analysed with Stata 14 using descriptive statistics, Chi-square tests, and multiple logistic regression to identify predictors of adherence.

Results: Most participants were female (78.8%) and aged 51–75 years (82.4%). The overall adherence rate was high (91.0%). Predictors of good adherence included absence of stigmatization (aOR = 0.38; 95% CI: 0.17–0.86; p = 0.019), lack of belief in the superiority of herbal medicine (aOR = 0.47; 95% CI: 0.26–0.84; p = 0.012), and an accepting belief profile—high necessity with low concern for orthodox medicines (aOR = 3.52; 95% CI: 1.09–11.40; p = 0.036). Forgetfulness and busy lifestyles were the most cited barriers to adherence.

Conclusion: High adherence to anti-diabetic medication among Ghanaian adults was driven by strong necessity beliefs, low concern about harm, minimal trust in herbal medicine superiority, and absence of stigma. Sustained adherence requires integrating culturally tailored education, stigma-reduction strategies, and collaboration with traditional healers to align belief systems influencing medication use.

Abstracts

Concurrent Sessions: Oral Presentations

A Systematic Review of Adverse Effects of Anti-Epileptic Drugs in Pediatric Population

Oreoluwa Ogundele, Kazeem Oshikoya
Lagos State University, Lagos, Nigeria

Abstract

Background: Anti-epileptic drugs (AEDs) are essential in pediatric epilepsy management but are frequently associated with adverse drug reactions (ADRs). Despite their widespread use, pediatric safety data, particularly from low- and middle-income countries is scarce, limiting safe and evidence-based prescribing.

Objectives: To systematically review global evidence on AED-associated adverse effects in children, identify commonly implicated drugs and the organ systems affected.

Methods: A systematic search of PubMed was conducted according to PRISMA guidelines. Eligible studies included case reports, case series, and observational or cohort studies reporting AED-related adverse effects in patients aged <18 years. Extracted data included study design, country, implicated drug, adverse effect type, affected organ system, and clinical outcome. A narrative synthesis was performed because of study heterogeneity.

Results: Nineteen studies met the inclusion criteria, including ten case reports and nine observational studies. Both first-generation AEDs (phenytoin, carbamazepine, valproate, and phenobarbital) and newer agents (levetiracetam, lamotrigine, topiramate, and oxcarbazepine) were implicated. The central nervous system and skin were most frequently affected, with severe reactions such as psychosis, Stevens–Johnson syndrome, and toxic epidermal necrolysis. First-generation drugs accounted for approximately two-thirds of the reported ADEs. Geographical representation was limited to Asia (n=12), Europe (n=4), and North America (n=3), with no studies identified from Sub-Saharan Africa.

Conclusions: AED-related adverse effects in children remain a significant and under-reported public health concern. The absence of safety data from high-burden regions underscores the urgent need for pharmaco-epidemiological studies and active pediatric ADE surveillance systems in low-resource settings.

Funding and Conflict of Interest Disclosure
This study received no external funding. The Author declares no financial or personal conflicts of interest relevant to this research.

Sex disparities in initiation of attention-deficit/hyperactivity disorder treatment after diagnosis: A systematic review

Philip Wickham[1], Saima Orangzeb[2], Jacqueline Cohen[2], Ugochinyere Vivian Ukah[1]
[1]McGill, Montreal, Canada. [2]University of Oslo, Oslo, Norway

Abstract

Background: Attention-Deficit/Hyperactivity Disorder is a common type of neurodevelopment disorders and often requires treatment to improve long-term outcomes in children and adolescents. Sex disparities may exist in the initiation of treatment after diagnosis, but this has not yet been reviewed.

Objective: To perform a systematic review of studies investigating the association between sex and time-to-treatment initiation in children and adolescents after a diagnosis of attention-deficit/hyperactivity disorder.

Methods: We conducted a comprehensive search of MEDLINE, EMBASE, PsycINFO, and CINAHL from inception to July 2025. We included quantitative studies comparing when treatment was started for attention-deficit/hyperactivity disorder between male and female children and adolescents diagnosed with attention-deficit/hyperactivity disorder. Two reviewers independently conducted title/ abstract screening, followed by full text screening, and data extraction. Risk of bias was assessed using the Newcastle-Ottawa Scale.

Results: Ten out of 6223 studies initially identified examined disparities between male and female children and were included in this systematic review. All studies were observational cohort studies and were classified as having low risk of bias. Majority of studies reported on pharmacological treatment alone except for one study which examined both pharmacological and non-pharmacological (e.g., psychosocial) treatments. In eight out of 10 studies, males were more likely to initiate treatment earlier than females (Odds/Hazard ratios ranging from 1.02 to 1.36), although the results were not statistically significant for all studies. Only one study reported earlier treatment initiation in females while another indicated no sex difference.

Conclusions: This review highlights sex disparities in attention-deficit hyperactivity/disorder treatment initiation and the need for targeted interventions to improve equitable care after diagnosis of attention-deficit hyperactivity disorder.

Abstracts

Concurrent Sessions: Oral Presentations

Acute Post-Cesarean Section Pain Severity, Associated Factors and Management Approaches Among Obstetric Patients at Kenyatta National Hospital.

Imbali Stanley Lugadiru, Sylvia Opanga,
Department of Pharmacology, Clinical Pharmacy and Pharmacy Practice, University of Nairobi, Kenya

Abstract

Background: Acute post-cesarean section (CS) pain is a significant challenge affecting maternal recovery, mobility and newborn care. Despite advanced analgesic techniques, severe pain remains highly prevalent, particularly in low-resource settings, and its management is often inconsistent.

Objectives: This study aimed to review the severity of acute post-cesarean section pain, determine factors affecting its intensity and evaluate the pharmacological and non-pharmacological management approaches used among obstetric patients at Kenyatta National Hospital (KNH).

Methodology: This study employed a cross-sectional design with 65 obstetric patients who delivered through cesarean section within maternity wards and had provided consent at Kenyatta National Hospital. The data were collected during the standard 72 hours admission for one month using a standardized questionnaire and medical record review. The findings are representative of tertiary care population. The primary outcome was pain severity, measured with the Visual Analogue Scale at predetermined intervals. Analysis was performed using STATA software employing descriptive statistics, Pearson correlation and logistic regression

Results: Analysis revealed a distinct pain trajectory, with severity peaking at 6 hours post-surgery (mean VAS: 8.11) and declining to mild levels by 72 hours. A higher number of previous CS scars was significantly correlated with increased maximum pain ($r=0.257$, $p=0.039$). A multi-modal regimen of morphine, kettesse and paracetamol was universally used, supplemented with tramadol (29.2%) and diclofenac (23.1%). Patient-reported data identified immobility as the primary pain trigger while ambulation was the predominant non-pharmacological relief strategy.

Conclusion: Despite an effective multi-modal analgesic protocol for background pain, the universal severe pain peak at 6-hours post-CS underscores a critical need for more proactive analgesia. A history of multiple cesarean sections is a risk factor for some severe pain and the formal integration of early ambulation into proactive care protocols is strongly supported by patient experiences.

Key words - Acute post-cesarean section pain, analgesics, severe pain

Safety of Isoniazid Preventive Therapy in Pregnant Women Living with HIV: A Rapid Evidence Review to Inform South African Guidelines

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Abstract

Background: Tuberculosis during pregnancy is associated with adverse maternal and infant outcomes. The World Health Organisation recommends IPT for all people with HIV, including pregnant women (PWLHIV) despite safety concerns.

Objectives: To synthesise evidence on the safety and effectiveness of antenatal IPT. To describe considerations raised in the multi-stakeholder engagement that informed South African IPT policy for PWLHIV.

Methods: The South African National Essential Medicines List Committee (NEMLC) conducted a rapid evidence review of studies evaluating IPT in pregnancy versus placebo/no-IPT/postpartum-IPT, that reported pregnancy and/or infant outcomes, tuberculosis incidence, or mortality.

Results: We included six studies, all in PWLHIV: one systematic review, one randomised control trial (RCT), three prospective, and one retrospective, cohorts. In the RCT, antenatal IPT was associated with low birth weight and impaired infant growth compared to postpartum initiation. Two cohorts found increased risk of miscarriage with first-trimester IPT exposure compared to no IPT. Three cohorts found similar or reduced adverse pregnancy outcomes with antenatal IPT compared to no IPT. Cohorts did not adjust for obstetric history, smoking or alcohol. In the RCT, antenatal IPT did not reduce maternal mortality or tuberculosis incidence compared to postpartum initiation. In a large South African cohort, tuberculosis incidence was reduced with antenatal IPT only when CD4 ≤350 cells/mm^3.

Conclusions: The NEMLC and Tuberculosis Programme deliberated on evidence and programmatic feasibility. IPT in pregnancy may cause harm. Withholding IPT in PWLHIV with advanced HIV increases tuberculosis risk in high-incidence settings. CD4-stratified IPT balances these risks but poses implementation challenges. It is more feasible to nest IPT during pregnancy within the South African package-of-care for advanced HIV (CD4 <200 cells/mm^3). NEMLC therefore recommended initiating antenatal IPT if CD4 < 200 cells/mm^3 and deferring IPT initiation to postpartum at higher CD4 counts. This policy decision addresses both safety and feasibility concerns.

Assessment of Heavy Metal Contamination in Herbal Medicinal Products marketed for Diabetes Mellitus in Nairobi City County

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Abstract

Background: The use of herbal Medicines has continued unabated despite advancement in modern healthcare technology. Although reputed for their perceived safety, there are growing concerns regarding heavy metal contamination of herbal products as exposure to such may lead to serious health risks

Objective: The main aim of this study was to evaluate compliance of herbal products marketed in Nairobi City County with regulatory standards for heavy metal content.

Experimental: Seven herbal products were sampled appropriately and quantitatively analyzed for the heavy metals namely: Arsenic, Lead, Cadmium, and Mercury using ICP-OES and the concentrations compared to the World Health Organization (WHO) regulatory limits. Heavy metals levels were expressed statistically using descriptive and inferential statistics. Pearson's (r), Spearman's rank correlation coefficients and regression modelling were used to predict the relationship between co-occurring elements. Toxicological risk assessment models evaluated carcinogenic and non-carcinogenic risks.

Results: Lead and arsenic were the only detectable heavy metals in the samples analyzed. Three samples exhibited the highest contamination for both lead and arsenic. In all samples, Pb (4.14±0.63 ppm) levels were below WHO limit (10 ppm) while As (1.52±0.44 ppm) was above WHO limit (1 ppm) in all samples with two products exceeding it by >100%. Correlational analysis showed that arsenic and lead had a positive association indicating a possible shared source of contamination. Hazard quotients, and hazard indices were greatly elevated in children due to a lower body mass compared to adults. Incremental Lifetime Cancer Risk and Total Cancer Risk modelling showed that arsenic was the main contributor to carcinogenic end points.

Conclusion: This study demonstrated the levels of potentially harmful levels of heavy metals in the herbal products sampled. The findings of this study highlighted the importance of routine quality control tests, regulatory enforcement and consumer awareness to minimize exposure and protect public health.

Abstracts

Concurrent Sessions: Oral Presentations

Exploring methodologic approaches to address pharmacovigilance priorities in Africa.

Karen Cohen[1], Ushma Mehta[1], Emma Kalk[2], Rebecca Chandler[3]
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Abstract
Background: Regulatory reliance procedures leveraging decision-making by mature regulatory authorities and regional licensing harmonisation efforts support rapid and widespread access to novel medicines in Africa. There is a need for scientifically robust and "smart" post-marketing surveillance approaches to support clinical, programmatic and regulatory decision-making in resource-constrained African settings.

Objectives: This symposium will review analytic techniques and methodologies to support the generation of robust evidence in alignment with medicines safety priorities in the African context. The speakers will reflect on the successes, potential pitfalls and limitations of approaches that have been recommended and used to date.

Description: Karen Cohen (University of Cape Town South Africa) will moderate the session and will open with a brief outline of current clinical, regulatory and programmatic medicine safety priorities in the region. (10 min)
The first talk will reflect on lessons learnt for vaccine safety surveillance approaches during public health emergencies to support programmatic and regulatory decision-making - (Rebecca Chandler, CEPI). (15 min)

The second talk will discuss pregnancy exposure registries, using examples of recent projects in the region (Ushma Mehta, Division of Clinical Pharmacology, University of Cape Town, South Africa) (15 min)

The third talk will discuss leveraging routine population-level electronic health data for surveillance and pharmacoepidemiologic analyses using the effectiveness and safety of antituberculosis and antiretroviral medicines as case studies within the Western Cape Provincial Health Data Centre in South (A/Prof Emma Kalk, Centre for Integrated Data & Epidemiological Research, School of Public Health, University of Cape Town, South Africa) (15 min)
The session will end with 5 minutes for Q and A.

Isotretinoin use and risk of idiopathic intracranial hypertension: A nationwide cohort study

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Abstract
Background: Isotretinoin is a cornerstone in the management of severe acne vulgaris, yet concerns persist regarding the rare adverse reaction idiopathic intracranial hypertension (IIH) or pseudotumor cerebri—a disorder characterized by elevated intracranial pressure and papilledema.

Objectives: To examine the risk of IIH following isotretinoin initiation in a nationwide cohort.

Methods:
Design and Setting: Nationwide cohort study in Denmark.
Population: Individuals aged 10–35 years who initiated isotretinoin or topical anti-acne therapy between 1995 and 2024.

Exposure: Isotretinoin versus topical anti-acne therapy.

Main Outcome: Incident diagnosis of IIH within one year after treatment initiation, identified in the Danish National Patient Registry as benign intracranial hypertension or papilledema.
Secondary Outcomes: Cerebrovascular, ophthalmological, and headache diagnoses, and acetazolamide use.

Statistical Analysis: Adjusted hazard ratios (aHR) with 95% confidence intervals were estimated using Cox proportional hazards regression, adjusting for age, sex, calendar period, and recent (past-year) tetracycline use.

Results: During the study period, 173,555 individuals initiated isotretinoin and were compared with patients treated exclusively with topical anti-acne therapy. Mean age was 20.5 years among isotretinoin users and 21.2 years among controls; females comprised 52% and 62%, respectively. Within one year, IIH was diagnosed in 9 isotretinoin users (0.0052%) and 21 controls (0.0075%), yielding an aHR of 0.42 (95% CI, 0.18–0.99). Secondary neurological and ophthalmological outcomes were rare (<0.2%) and similar across groups. Acetazolamide use occurred in 40 isotretinoin users and 48 controls (aHR, 1.14; 95% CI, 0.71–1.81).

Conclusion: Isotretinoin initiation was not associated with an increased risk of IIH compared with topical anti-acne therapy, and related neurological and ophthalmological outcomes were similarly infrequent.

Centre of Excellence for Pharmacovigilance in Southern Africa (CEPSA): Hands-On Capacity Building to Empower a New Generation of Pharmacovigilance Experts

Nicolas Praet[1], Ebenezer Wiafe[2], Carine Dochez[1], Michelle Viljoen[2], Renier Coetzee[2], Star Khoza[2], Hazel Bradley[2], Albert Figueras[3], Raffaella Ravinetto[1,2]

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Abstract

Introduction: Many African countries have established pharmacovigilance (PV) systems, yet the effective collection, interpretation, and communication of medicine safety data still faces significant challenges that stem from limited technical expertise and operational resources.

The Centre of Excellence for Pharmacovigilance in Southern Africa (CEPSA) aims to address these gaps by providing PV training, tools, and peer-support, to strengthen expertise in (1) signal detection, validation, and risk communication, (2) generating local scientific evidence on medicine safety, and (3) science-driven policy making. CEPSA's ultimate goal is to support the development of a stronger regulatory ecosystem around production hubs.

Objectives: Present CEPSA's flagship PV training programme

Share preliminary results from a survey that maps national training, routine PV, research, and risk communication capacities

Methods: CEPSA has developed an innovative, immersive, advanced training model delivered through in-person workshops that foster peer-learning, guiding participants through a real-world problem-solving journey, from signal detection to effective risk communication.

In parallel, a multilingual online survey was distributed to national PV Officers from 16 Southern African countries to map training, routine PV, research, and risk communication capacities, and related gaps.

Results: We will present the unique training concept and materials, including simulated datasets and the stepwise approach, along with a critical appraisal of strengths and opportunities based on the first iteration (November 2025).

Abstracts

Concurrent Sessions: Oral Presentations

Out of nine PV Centres that responded to the survey to date, five run in-house training programmes. Safety data collection was generally limited. Seven Centres routinely disseminate PV information, while only one publishes in peer-reviewed journals.

Conclusions: CEPSA uses a hands-on, "Train-the-Trainer" approach to develop national PV experts into skilled facilitators, able to effectively cascade training and build internal capacity for consistent, high-quality learning across their organisations. The survey results will be used to develop and refine tailored training materials and targeted support, based on local needs.

Knowledge, Attitude, and Practice of Insulin and Insulin Pen Use Amongst Diabetic Patients in Selected Hospitals in Kenya

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Abstract

Introduction: Diabetes is a major global health concern, particularly in low- and middle-income countries. Insulin is essential for managing diabetes. This study assessed the knowledge, attitude, and practices related to insulin use and delivery devices among diabetic patients in Kenya, an area that is poorly understood.

Objectives: This study assessed and compared the knowledge, attitude, and practice of insulin use and insulin pens among diabetic patients in a public and private hospital.

Methodology: A comparative cross-sectional study was conducted at Kenyatta National Hospital (KNH) and Presbyterian Church of East Africa Kikuyu Hospital (PKH) diabetic clinics. Data was collected from 300 participants through consecutive sampling using questionnaires. Descriptive and inferential data analysis was performed using STATA.

Results: The private hospital demonstrated better knowledge (20 [17,23]) and practice (3 [3,3]) towards insulin compared to the public hospital. Logistic regression analysis revealed the facility where one received care as the best predictor for both knowledge and practice on insulin with the private hospital exhibiting better odds of good knowledge (aOR: 7.087, 95% C.I: 3.941,12.744) and practice (aOR: 10.926, 95% C.I: 4.232,28.21). Patients in the private hospital knew about (82.7% versus 42.7%) and used (40.0% versus 22.7%) insulin pens nearly twice as much as public hospital patients. Almost all private hospital patients primed their pens before use (97% versus 62%). Patients in both facilities rarely removed insulin needles from the pen (Private 72% versus Public 77%).

Conclusion: The private hospital's approach to insulin education and practice should be considered for implementation at the public hospital. Both facilities need to improve training on insulin needle replacement.

Abstracts

Concurrent Sessions: Oral Presentations

Ensuring Safe Access to Medicines: Regulation of Aggregator Pharmacies

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Abstract: Introduction: Online pharmacy engagement is rising globally. Aggregator pharmacies are an innovative solution to maximize the benefits of online pharmacies for consumers. Aggregator pharmacies operate as centralized platforms connecting consumers to multiple online pharmacies, with the actual service fulfilled by the one located closest to the consumer's delivery address. A lack of or inadequacy in the policies governing their establishment and operations presents a significant risk for public safety.

Objectives: This policy brief assessed existing laws governing aggregator pharmacies worldwide and prepared recommendations for Kenya, where an inadequate policy landscape for their regulation is observed.

Methods: A descriptive, mixed-methods design that combined exploratory comparative policy analysis with a cross-sectional online survey was used. The policy analysis focused on countries recognized for exemplary pharmacy practice policies across different regions of Africa and continents worldwide. One or two countries from each African region were selected, along with two countries each from North America and Europe. Reports, laws and guidelines from drug regulatory authorities and pharmacy practice regulators were examined. Additionally, a brief online survey was performed to identify the existence and operational models of aggregator pharmacies in these regions.

Results: Aggregator pharmacies were operational in most African countries, but regulated only in a select few. In contrast, European and North American nations predominantly recognize and regulate aggregator pharmacies through established legal frameworks. Establishing a nationwide aggregator pharmacy operated by the drug regulatory authority, which integrates licensed pharmacies into its network, and adopting mutual recognition of aggregator pharmacies across borders emerged as high-impact regulatory strategies.

Conclusion and Recommendations: Regulating aggregator pharmacies should be prioritized by adapting proven best practices and developing policies tailored to local needs. Clear and enforceable regulatory frameworks, backed by cross-border collaboration and stakeholder engagement, are essential to ensure safe access to medicines, build consumer trust, and support effective operations.

AI-Assisted Hybrid Teleophthalmology for Enhanced Diabetic Retinopathy Management in Kenya

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Abstract: Introduction: Diabetic Retinopathy (DR) and Diabetic Macular Edema (DME) are major causes of preventable vision loss globally, with a disproportionate burden in LMICs. In Kenya, diabetes affects 3.1% of adults, with DR prevalence estimated at 41% among diabetics. However, annual eye exams uptake remains low, with <15% of patients screened annually. Poor awareness, limited diagnostic equipment and specialists exacerbate the risk of blindness.

Objective: To enhance patient knowledge of DR and DME, increase uptake of routine eye screening, establish streamlined referral pathways, and improve adherence to appointments and follow-ups through an AI-assisted hybrid teleophthalmology model to be piloted in Mombasa County.

Methodology: The proposed 18-month pilot will employ a stepwise screening approach. First-line screening will be conducted at community level using smartphone cameras operated by patients or community health workers. Second-line screening will utilize portable fundus cameras at level 2 hospitals. Images will be uploaded to a cloud-based AI platform built on PyTorch Lightning, trained on global datasets and fine-tuned for local populations. High-risk cases will be referred for confirmatory diagnosis using Optical Coherence Tomography. Patient engagement will be supported through SMS/USSD/WhatsApp reminders, while clinicians will access risk scores and patient data via a secure dashboard.

Results: The pilot is expected to demonstrate expanded screening coverage, greater patient awareness, and improved adherence to referral appointments. It will prioritize specialist care through risk stratification, enabling timely management of DR in high-risk cases. Further, the project will generate prevalence estimates of DR and DME, stratified by risk categories, and provide real-world evidence on the effectiveness of AI-enabled screening in LMICs.

Conclusion: This proposal outlines a scalable, patient-centric intervention that integrates community-level screening with innovative technology. If successful, the model could inform national diabetic eye screening programs and contribute to reducing vision loss in Kenya and LMICs.

Assessment of Drug Use Practices in the Basic and Comprehensive Primary Health Care Centres in Lagos State, Nigeria

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Abstract

Background: Inappropriate medicines use and increasing antibiotic overprescription pose public health challenges in low- and middle-income countries. A gap exists in understanding how drug use varies between basic and comprehensive PHCs in Lagos State.

Objectives: To assess baseline drug-use practices in basic and comprehensive PHCs in Lagos State, Nigeria.

Methods: The study, conducted from February to October 2021, employed proportionate stratified and simple random sampling to select 68 basic and 20 comprehensive PHCs, from which 2,040 and 600 encounters, respectively, were obtained. Observations included retrospective prescribing (by doctors at comprehensive PHCs and by nurses or CHEWs at basic PHCs) and prospective dispensing (by pharmacists or pharmacy technicians). Outcome measures included WHO core drug use indicators and AWaRe antibiotic categorisation. Descriptive statistics and Mann–Whitney U tests were used to compare indicators across PHC types. Level of significance was set at ≤ 0.05. Ethical approval was obtained prior to study initiation.

Results: Average drugs per encounter were 3.6 and 3.8 in basic and comprehensive PHCs, with 31.3% and 25.6% encountering major polypharmacy (5–9 drugs). Generic prescribing was 76.7% and 75.9% respectively. Antibiotics were prescribed in 63.0% and 64.3%. Adherence to Essential Drug Lists (EDL) was higher in comprehensive PHCs (93.4% vs. 87.9%, p=0.001). Consultation and dispensing times averaged 11.0 minutes and 245.4 seconds, and 9.5 minutes and 243.2 seconds, respectively. Adequate labelling was low (43.8% vs. 40.6%). All basic PHCs had EDL copies. Access group antibiotics were prescribed most (58% vs. 64%).

Conclusions: Baseline findings reveal high antibiotic use, polypharmacy, and poor patient-care indicators, emphasising the need for targeted interventions to promote rational medicines

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Robustness and agreement of signal detection algorithms applied to COVID-19 vaccines individual case safety reports from the U.S. FDA Vaccine Adverse Event Reporting System (VAERS) and EudraVigilance

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Abstract

Background: Multiple disproportionality algorithms are used to detect safety signals in pharmacovigilance databases, but their agreement and robustness across databases vary, and no single algorithm performs optimally in all settings.

Objectives: To assess the robustness of disproportionality algorithms in detecting safety signals for mRNA compared with other COVID-19 vaccines in two large spontaneous reporting databases and to measure how much the algorithms agree with each other within each database. Methods: We analyzed individual case safety reports (ICSRs) from VAERS and EudraVigilance (December 1, 2020–October 31, 2023), harmonized using a common data model (CDM). Signal detection employed proportional reporting ratio (PRR), reporting odds ratio (ROR), empirical Bayes geometric mean (EBGM), Bayesian confidence propagation neural networks (BCPNN), and time-to-onset (TTO) via Kolmogorov-Smirnov tests. Robustness refers to an algorithm's ability to detect the same signals across databases. Agreement between algorithms was assessed with Kappa; concordance within each database was evaluated using the correlation of lower bounds of metrics.

Results: In the CDM dataset (3,166,843 ICSRs), 514 signals were identified from 6,436 vaccine-event combinations across all algorithms. PRR and ROR each detected 1,036 signals, BCPNN identified 1,464, and EBGM 519. When restricting to reports with available TTO, 135 signals were identified across algorithms (PRR and ROR:535 each, BCPNN:869, EBGM:254, and TTO:406). Overall, EudraVigilance yielded more signals (479) than VAERS (236). ROR and

PRR showed perfect agreement (k=1.00) in all datasets, with BCPNN substantial (k=0.85-0.92) and EBGM moderate (k=0.57-0.61). Kappa values across algorithms were 0.77-0.78, and correlations ranged from 0.50-1.00 across databases.

Conclusions: PRR and ROR algorithms demonstrated substantial robustness and concordance across VAERS, EudraVigilance, and CDM, while BCPNN and EBGM were more cautious. These findings reinforce the value of adopting multiple algorithms and integrating data from EudraVigilance and VAERS to enhance signal detection and underscore the need for subsequent case-by-case causality evaluation.

HIV/AIDS patients on ARV and their perceptions towards traditional medicines in South Africa

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Abstract

Background: Traditional Medicine (TM) is central to South African healthcare, with estimates indicating that approximately 80% of the population relies on Traditional Health Practitioners (THPs) for primary health needs. Recognising this critical role, the Traditional Health Practitioners Act 22 of 2007 legislated a framework to regulate THPs and foster integration into the mainstream health system

Aim(s): To determine perceptions of HIV infected patients attending ARV clinics in the eThekwini Metro of KZN to Traditional and Western Medicines.

Method(s): This study is a cross-sectional descriptive analytical study. It involved 201 participants attending 5 Antiretroviral Clinics in the eThekwini Metro of KwaZulu-Natal, who were interviewed with an anonymous, coded questionnaire.

Results: 18.4% of these participants reported using Traditional Medicines. 12.4% of the sample population used Traditional Medicine prior to the commencement of ARV treatment, and 6.5% utilised both methods concurrently. Participants more inclined towards Traditional Medicine use are female, single, reside in townships and are unemployed. This study revealed that only 10.4% of the sample population would consider using Traditional Medicines in the future.

Discussion/Conclusion: Qualitative analysis demonstrated that the general trend in the perceptions of the participants is that ARVs are highly effective in maintaining their well-being and that concurrent use of ARVS and any other medication is both unsafe and detrimental to their condition. While the majority of the participants perceive Western Medication to be more effective, a significant portion still utilises Traditional medicines. This indicates that these patients must have a positive opinion regarding Traditional medicines. Because these perceptions have a direct effect on patient adherence to treatment regimens, ascertaining patients' beliefs and perceptions is the foundation for facilitating open communication lines between patients and health care providers about concurrent use of Traditional remedies and ARVs, and providing adequate counselling to patients.

Abstracts

Concurrent Sessions: Oral Presentations

Regulation of AI in Pharmacy Practice: A Scoping Review Protocol

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Abstract

Background: Artificial intelligence (AI) is shaping pharmacy practice in Kenya and other low- and middle-income countries (LMICs). Its adoption should be structured to avoid critical gaps in regulation, trust and ethics. In Kenya, no AI focused legislation exists providing a landscape that creates uncertainty for regulators and practitioners tasked with ensuring safe integration of AI in pharmacy practice.

Objective: To generate evidence on current frameworks and instruments guiding AI regulation, trust and ethics in pharmacy practice in Kenya and comparable LMICs.

Methodology: Defined search terms will be used to obtain peer-reviewed and gray literature (2013–2025) from defined databases and sources. A PRISMA flow diagram will be used to select studies that fit the inclusion criteria. Data relating to regulation, trust and ethics in AI will be deduced from these studies.

Results: Preliminary findings suggest rapid integration of AI in pharmacy practice across LMICs, but fragmented regulation and limited evidence on accountability and trust. The final review will provide policymakers, regulators, and professional bodies with an evidence-informed map of policy gaps and practical points for strengthening regulatory frameworks.

Incidence and Predictors of Adverse Events Following the Use of Rabies Vaccine Post-Exposure Prophylaxis (PEP) Among Rabid Suspect Animal Bite Victims in Selected Regions of Tanzania

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Abstract

Background: Rabies has almost 100% mortality rate once symptoms manifest, however the disease can be prevented with timely and adequate rabies vaccine post exposure prophylaxis (PEP). Consequently, generating data on safety profile of locally used rabies vaccines is crucial to safeguard the public health.

Objectives: To determine the incidence and factors associated with adverse events following the use of rabies vaccine PEP among suspected rabid dog bite victims.

Methodology

Design: A Hospital-based, cohort study involved suspected rabid animal bite victims who received at least one shot of rabies vaccine post exposure prophylaxis. Participants were intended to be followed up for 30 days.

Setting: 653 out of 782 suspect rabid animal bite victims of all age categories, eligible for rabies vaccine PEP were randomly enrolled from five regions of Tanzania and followed up for an average period of 28.5 days.

Exposure or interventions: Rabies vaccines used for post exposure prophylaxis in Tanzania; Purified vero cell rabies vaccine and anti-rabies serum.
Main outcome measures: Any adverse event following the use of rabies vaccine post exposure prophylaxis. These include, local to systemic, serious and non-serious events.
Statistical analysis: R programming (4.5.1) was deployed. Modified Poisson regression was used to determine predictors.

Results: Of the 653 participants, 180 (27.6%) experienced at least one adverse event. Significant predictors of adverse events included being under 20 years of age [(p = 0.0394, aRR = 2.27, 95% CI: 1.21–3.64)], receiving both rabies vaccine and anti-rabies serum [(p = 0.0339, aRR = 2.16, 95% CI: 1.31–3.55)], and being on concomitant medications [(p = 0.0343, aRR = 2.24, 95% CI: 1.27–3.95)].

Conclusions: Adverse events following rabies vaccine PEP are relatively common. Individuals under 20 years of age, those on concomitant medications, and receiving both anti-rabies serum and rabies vaccine should be closely monitored for adverse events.

Persistence of antidepressant treatment in children and adolescents: A population-based cohort study

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Abstract

Introduction: Antidepressants are one of the most frequently dispensed class of psychotropics to children and adolescents, with increasing utilisation trend particularly during the COVID-19 pandemic. Data on the duration of antidepressant use in children and adolescents outside of clinical trials remains limited.

Objective: To determine the prevalence and predictors of persistent antidepressant use among Australian children and adolescents.

Methods: A population-based cohort study was conducted including children and adolescents aged 5-18 years who initiated an antidepressant between 2014 and 2022, using 10% randoms sample of Pharmaceutical Benefits Scheme (PBS) dispensing data. We measured persistence at one and two years after initiation, as defined by continuous supply of any antidepressant with no gaps of more than 90 days between dispensings.

Results: A total of 44366 children and adolescents initiated on antidepressants during the study period. Approximately one-quarter (23.1%) received only a single antidepressant dispensing, with a further 33.0% considered persistent users after one year and 19.8% considered persistent users after two years. Persistence at one year was significantly higher in females (adjusted odds ratios (aOR) 1.13 [1.09-1.18]) than males, and in concurrent users of antipsychotics (aOR 1.37 [1.22-1.54]) or psychostimulants (aOR 1.60 [1.49-1.71]) than non-users. The likelihood of persistent antidepressant use at one year was lower in individuals with a concession card (aOR 0.81 [0.78-0.85]) than general beneficiaries and in those who initiated with serotonin and norepinephrine reuptake inhibitors (aOR 0.60 [0.54-0.67]) or mirtazapine (aOR 0.45 [0.34-0.51]) compared with selective serotonin reuptake inhibitors. Findings were similar for persistent antidepressant use at two years.

Conclusion: Persistent antidepressant use beyond one or two years is common among children and adolescents and showed an increasing trend over time. The reasons for and appropriateness of prolonged treatment with antidepressants in this population warrants further investigation.

Switching patterns of antidepressant treatment in children and adolescents in Australia, 2014-2022: A retrospective population-based cohort study

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Abstract

Background: Antidepressant switching is often indicative of treatment dissatisfaction; however, data regarding patterns, associated factors, and timing of switching in children and adolescents remain limited.

Objectives: This study aimed to determine switching patterns of antidepressant use and predictors of switching in Australian children and adolescents.

Methods: A retrospective cohort study of children and adolescents aged 5 to 18 years who initiated antidepressants between 2014 and 2022 was conducted, using 10% random sample of national Pharmaceutical Benefits Scheme dispensing data. We determined the proportions of initiators who switched between antidepressants within 12 months of initiation. A Cox proportional hazards model was used to determine the risk of switching by patient characteristic factors and adjusted hazard ratios (aHR) with 95% confidence intervals (95%CI) were reported.

Results: We included 44,381 child and adolescent antidepressant initiators, the most commonly initiated antidepressant being fluoxetine. Approximately one in six children and adolescents aged 5-18 years at initiation (15.0%) switched to a different antidepressant within the first 12 months. Most switches were to selective serotonin reuptake inhibitors. Individuals with a commonwealth healthcare concession card were less likely to switch antidepressants within 12 months (aHR 0.91 95%CI 0.86, 0.96). Females (aHR 1.24 95%CI 1.17,1.31), those starting with antidepressants other than fluoxetine, and concurrent anxiolytic users were more likely to switch.

Conclusions: Switching between antidepressants is a common practice among children and

adolescents in Australia, with most switches occurring during the early phases of treatment and primarily to selective serotonin reuptake inhibitors. Better understanding of reasons for switching is important for informing tailored management approaches and improving treatment outcomes.

Case definitions for safety outcomes as a critical component of preparedness and generation of evidence during public health emergencies

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Abstract

Background: Vaccines are one of our most powerful tools in the response to public health emergencies caused by transmissible infectious disease agents. Given that harms from vaccines are rare, it is critical that the same definitions of adverse outcomes are used in the generation of evidence of safety throughout the vaccine life cycle. The use of standardised definitions is critical in both preparedness initiatives and the active generation of evidence of safety.

Objectives: The objective of this symposium is to identify pragmatic approaches to the application of standardised safety outcome definitions across the spectrum of activities involved in safety surveillance of vaccines developed and deployed in public health emergencies.

Description: Rebecca Chandler (Coalition Epidemic Preparedness Innovations) will open and moderate the session.

The first talk will address the implementation of safety outcomes standards in clinical development programmes (Alex Dodoo, African Medicines Agency) (15 min)

The second talk will address the implementation of safety outcomes standards in post-authorisation safety monitoring (Alex Duga, Africa CDC) (15 min)

The third talk will discuss the use of safety outcomes standards in the generation of background incidence rate data to inform safety assessments during both clinical development and post-authorisation use. (Nana Ansah, Navrongo Health Research Center) (15 min)

The session will end with 10 minutes for Q and A.

Assessment of Factors for Achieving Target Activated Clotting Time in Patients Undergoing Open Heart Surgery with Unfractionated Heparin at Jakaya Kikwete Cardiac Institute (JKCI), Dar Es Salaam, Tanzania.

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Abstract

Background: Activated clotting time (ACT) is commonly monitored to assess Unfractionated heparin effectiveness in real time. Understanding factors led to variations of ACT among patients undergoing cardiac surgery is crucial to counterbalance the clotting risks and excessive bleeding.

Objectives: To determine factors associated with the achievement of ACT among patients undergoing open heart surgery at Jakaya Kikwete Cardiac Institute.

Methods

Design: Analytic cross-sectional design involved adults who underwent open heart surgery.
Setting: 69 adult patients underwent cardiac surgery at JKCI, inclusion criteria; 1. Adult patients (≥18 years) 2. Patients receiving unfractionated heparin for anticoagulation during surgery exclusion criteria; 1. Patients with history of heparin-induced thrombocytopenia 2. Patients with coagulation disorders not related to unfractionated heparin.
Exposures or interventions: Unfractionated heparin during cardiac surgery
Main outcome measures: Target Activated Clotting Time
Statistical analysis: R programming (4.5.1). T-test and logistic regression deployed to identify mean variation of ACT and factors associated with the achievement of target ACT respectively.

Results: Target ACT was achieved after initial unfractionated heparin dosing in 78.3% of patients, while 20.3% required additional doses. Factors significantly associated with ACT attainment included age 36–55 years (AOR = 1.81, 95% CI: 1.01–1.37, p = 0.030), having one pre-existing condition (AOR = 1.50, 95% CI: 1.23–3.64, p = 0.026), and normal PTT (AOR = 2.13, 95% CI: 1.98–12.31, p = 0.014). Prior unfractionated heparin use (AOR = 0.45, 95% CI: 0.38–0.86, p = 0.048) and normal platelet count (AOR = 0.86, 95% CI: 0.76–0.97, p = 0.021) were associated with lower odds of reaching target ACT.

Conclusion: Standard weight-based dosing of unfractionated heparin allows most patients to achieve therapeutic ACT; a considerable number still require individualized adjustments. Key factors influencing ACT outcomes include patient age, preoperative coagulation profile, platelet count, comorbidities, and prior heparin exposure.

Background Rates of Adverse Events for Vaccine Evaluation in Africa (Brave): A Multi-Country Study

Clare Cutland[1], Nana Akosua Ansah[2], Patrick Ansah[2], Ben Atkins[3], Tresor Bodjick[4], Hazel Clothier[3], Melissa Collins[3], Bernard Ebruke[5], Luam Ghebreab[3], Jennifer Griffin[3], Kimberley Gutu[1], Anthony Hama[2], Judith Hammond[3], Husna Ismail[1], Yannan Jiang[3], Eunice Wangeci Kagucia[6], Arier Lee[3], Tapiwa Matsika[3], Stephen Obaro[5], Stephen Rulisa[7], Andy Stergachis[8], Gaston Tona[4], Jessica Ann Yun[1], Jim Buttery[3], Steve B Black[3]

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Abstract

Introduction: Vaccine safety monitoring in low- and middle-income countries (LMICs) relies on passive reporting systems, which are constrained by underreporting, incomplete data, and a bias toward events occurring soon after vaccination. These constraints hinder timely identification and response to potential safety concerns, particularly when rare but serious events—such as deaths or hospitalisations—occur. Such events fuel public fear and misinformation about vaccines, primarily through social media, even when unrelated to vaccination. Consequently, surveillance systems should be strengthened to maintain public confidence in vaccines.

Understanding the natural occurrence of specific medical conditions—known as background rates—is essential for assessing whether adverse events following immunisation (AEFI) are vaccine-related. The BRAVE project aims to generate these background rates for selected adverse events of special interest (AESIs), providing critical context for interpreting post-vaccine events. This is especially important as new vaccines for emerging pathogens (e.g., Nipah, Rift Valley Fever, Lassa fever) are introduced.

Methods: BRAVE is a multi-country observational study that combines retrospective and prospective data collection, supported by the Coalition for Epidemic Preparedness Innovations (CEPI). From August 2025 to mid-2027, data will be collected in Ghana, Nigeria, Rwanda, Kenya,

and DR Congo through active hospital admission monitoring and health and demographic surveillance systems (HDSS). Historical background rates will be calculated using electronic health records.

Results: Data collection started in Ghana in August 2025, in Rwanda in October 2025, and in Kenya in December 2025.By 10th December 2025, 5,691 patients had been screened and 1,311 enrolled. Other sites will start data collection in Q1 2026.

Conclusion: The infrastructure developed through BRAVE will enhance the detection and evaluation of rare but serious AEFIs in future vaccine trials and rollouts in LMICs. By generating locally relevant data, the project will support accurate interpretation of adverse events and help sustain public trust in immunisation programmes.

Variability in Response to Different Brands of Oxytocin Among Individuals Receiving Obstetric Care in a Tertiary Care Facility

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Abstract

Background: Amidst the myriad novel indications for oxytocin, its indispensable role in obstetric units, underscores its prominence. Globally, the alarming concerns over the variable individuals' response to oxytocin has been attributed to an interplay of individual heterogeneity, pharmaceutical and institution factors.

Objective: To determine the factors contributing to the variation in response of different brands of oxytocin administered in a tertiary care facility.

Method: This was a mixed method study conducted in two phases in two proposed study sites; the obstetric unit of the tertiary level facility and the national regulatory board. The initial phase included a 3-month cross-sectional review of oxytocin utilization and the rollout of a close-ended questionnaire to healthcare providers (HCPs) stationed in the obstetric unit. The second phase involved a retrospective review of individual case safety reports (ICSRs), supplemented by a Focus Group Discussion (FGD). Three population categories were included individuals receiving obstetric care, selected through stratified sampling technique (n=372), HCPs in the obstetric unit, selected included; individualsling technique and FGD participants recruited through purposive sampling. Quantitative data was analyzed using both descriptive and inferential statistics utilizing STATA, while qualitative data was coded and analyzed through content analysis. Convergent parallel design was then employed.

Results:38.7% of HCPs reported variability in response to the two different brands of oxytocin. This was primarily attributed to individual -related factors (58.1%), including differences related to uterine sensitivity, parity and co-morbidities such as obesity, diabetes and hypertension. Although drug related factors such as improper storage (19.4%) and poor-quality formulations (12.9%) were also reported, inconsistencies across the brands were noted. Analysis of ICSRs showed that nationwide, poor quality reports on oxytocin outpaced the suspected adverse drug reaction reports.90.5% of these reports citing therapeutic ineffectiveness often requiring doubled doses.

Conclusion: Variability in brand quality, storage and individual responses underscores the need for stronger surveillance, procurement reforms and individualized administration strategies.

Abstracts

Concurrent Sessions: Oral Presentations

Adverse effects of chemotherapy in breast cancer patients in Ouagadougou (Burkina Faso): a hospital-based pharmacoepidemiologic study

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Abstract

Background

The use of systemic oncology chemotherapy is increasing in sub-Saharan Africa, but real-world data on its related adverse effects (AEs) in routine practice remain scarce. We described the pattern and documentation of chemotherapy-related adverse effects among women with breast cancer treated at tertiary hospitals in Ouagadougou, Burkina Faso.

Methods

We included all women with breast cancer who received at least one course of chemotherapy, defined by a documented chemotherapy regimen between January 2021 and September 2025. We summarized their socio-demographic and clinical characteristics and described patient-reported AEs recorded in specific fields for neoadjuvant chemotherapy. We also examined the completeness of an overall AE severity grade.

Results

Among 881 women with breast cancer, 260 (29.5 %) had at least one course of chemotherapy documented. Their median age was 46 years (interquartile range [IQR]: 40–56). At treatment initiation, 54.8 % were classified as No distant metastasis (M0), 29.7 % as Distant metastasis (M1), and 15.4 % as Metastasis not assessed (MX). Detailed patient-reported AEs during neoadjuvant chemotherapy were available for 125/260 (48.1%) women. An AE was reported in 104/125 (83.2%) patients, and at least one specific AE was documented in 21/125 (16.8%) patients. The most frequently specified AEs were gastrointestinal (nausea and/or vomiting) in 14/125 (11.2 %) patients, followed by fatigue in 8/125 (6.4 %) and alopecia in 4/125 (3.2 %). An overall AE severity grade was recorded in only 48/125 (38.4 %) women, among whom 79.2 % were coded as grade 0, 8.3 % as grade 1, and 12.5 % as grade 2; severity was missing for the remaining 61.6 %.

Conclusions
In this Burkinabè breast cancer cohort, nearly half of chemotherapy-treated women had a recorded adverse effect. However, incomplete and non-specific documentation highlights the need to standardize AE recording to strengthen pharmacovigilance and chemotherapy safety in low-resource settings.

Funding: ORTambo Africa Chair in Research and Action Against Cancer

Abstracts

Concurrent Sessions: Oral Presentations

Experiences and perceptions about vaccination safety and adverse events reporting procedures: A qualitative study among mothers in Northern Ghana

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Abstract

Background: Immunisation is a cost- effective method of preventing infectious diseases. The emergence of new diseases, including COVID-19, and advances in malaria vaccines, have led to increased vaccinations. However, safety concerns have eroded trust and increased vaccine hesitancy, with low uptake of newly introduced vaccines, such as PCV-13, in Ghana. Adverse events following immunisation (AEFIs) range from mild to severe, raising concerns because vaccines are administered to healthy individuals. Underreporting of AEFIs is common in Ghana. This study examines mothers' knowledge and experiences regarding vaccine safety reporting in Northern Ghana.

Methods: This cross-sectional exploratory study employed a qualitative research design, comprising 10 focus group discussions (FGDs) with mothers from five administrative regions in resource-limited Northern Ghana. Participants for the FGDs were selected through purposive sampling at childhood vaccination clinics. All interviews were recorded, transcribed, and coded into themes using QSR NVivo 12 software to support thematic content analysis.

Results: Mothers understood vaccines but were unaware of the specific diseases they protect against. They believed vaccines shield their children from infectious diseases. However, many were concerned about the severe pain and discomfort their children experienced. AEFI reporting was influenced by a lack of responses from health workers, the perception that adverse events are normal, and prior experiences after vaccination. Fears of serious adverse events, like paralysis, combined with insufficient explanations of vaccine benefits, could discourage them from vaccinating their children. The findings indicated that mothers were not sufficiently informed about vaccines and the importance of reporting adverse events.

Conclusion: Mothers should receive comprehensive education on vaccines, be supported in recognising AEFIs, and be informed about how and where to report these events. Providing mothers with extensive educational materials on vaccines will improve vaccine safety reporting.

Evaluation of Pharmacovigilance and Factors Associated with Adverse Drug Reaction Reporting: A Case Study at Military Healthcare Facilities in South West, Nigeria

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Abstract

Background: Medication safety underpins quality healthcare, and pharmacovigilance (PV) ensures the safety of medicines. Despite its importance, underreporting of adverse drug reactions (ADR) persists, and military healthcare facilities remain underrepresented in PV research. This study is the first to evaluate PV within a military setting.

Objective: We assessed PV knowledge, attitudes, and factors influencing ADR reporting among healthcare professionals (HCPs) in military healthcare facilities in South West Nigeria.

Methodology: A cross-sectional survey was conducted across 31 military healthcare facilities. A validated questionnaire was administered online to eligible HCPs actively involved in patient care and selected by stratified random sampling. Data were analyzed in STATA v11 using descriptive statistics, chi-squared tests, and multivariate logistic regression ($p < 0.05$).

Results: Of 430 eligible HCPs, 351 participated (81.6%). The mean age was 32 ± 8 years with equal gender distribution. Good PV knowledge was demonstrated by 73.2% of participants, and 97.2% exhibited positive attitudes; however, only 26.2% had reported ADRs. Major barriers included lack of awareness (64.4%) and complex reporting procedures (16.8%). Pharmacists had superior PV knowledge ($p < 0.001$), and HCPs aged < 30 years reported ADRs more frequently ($p = 0.033$). Regression analysis identified pharmacist designation (OR = 4.33; 95% CI = 1.44–13.07) and prior reporting experience (OR = 2.17; 95% CI = 1.21–3.89) as predictors of good PV knowledge. Age < 30 years predicted positive attitudes (OR = 6.60; 95% CI=1.38–31.50).

Conclusion: Despite high PV knowledge and positive attitudes, ADR reporting remains suboptimal. Training, simplified reporting workflows, digital systems, and policy reforms mandating PV frameworks are recommended. Collaborative engagement among military leadership, regulators, and PV units will be essential to sustain improvements and enhance medication safety in military healthcare settings.

Evaluating the Utilization of Electronic Medical Records and Telemedicine Features in Mitigating Medication Errors in Selected Medical Centres in South West, Nigeria

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Abstract

Background: Medication errors (ME) are a major cause of patient harm in healthcare. Integrating Electronic Medical Records (EMR) and Telemedicine offers a promising solution to mitigate these errors by enhancing medication management, tracking, and communication.

Objective: This study assessed the knowledge, awareness, and utilization of EMR and telemedicine among healthcare professionals in selected medical centers in southwest Nigeria, focusing on their effectiveness in preventing medication errors and improving patient safety.

Methodology: Using structured questionnaires, a cross-sectional survey was conducted among 334 healthcare professionals (Physicians, Pharmacists, and Nurses). Data were analyzed with chi-square tests to examine relationships between EMR/telemedicine use and medication error reduction, with $p < 0.05$ considered significant.

Results: The study revealed that 94.17% of respondents using EMRs believed they helped identify potential medication errors (Chi2 = 63.29, $p < 0.001$), while 94.46% reported reduced error incidence (Chi2 = 126.54, $p < 0.001$). Similarly, 96.75% credited telemedicine with enabling timely error interventions (Chi2 = 66.08, $p < 0.001$). However, barriers such as high implementation costs, resistance to change, and insufficient training were noted.

Conclusion: EMR and telemedicine are highly effective tools in mitigating medication errors by enhancing patient data management, communication, and timely interventions. To maximize their potential, challenges like financial constraints, workforce training, and adoption resistance must be addressed, ensuring safer, more efficient healthcare delivery.

Geographical Inequities in Medicine Availability and Affordability in Public Hospitals: Evidence from Ghana's Ashanti Region

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Abstract

B**ackground:** Equitable access to essential medicines is crucial for universal health coverage, yet in low- and middle-income countries, persistent disparities in medicine availability and cost continue to limit treatment access.

Objectives: To determine the availability, affordability, and geographical inequities in access to medicines across public primary hospitals in Ghana's Ashanti Region.

Methods: Design and Setting: A retrospective cross-sectional analysis was conducted using outpatient prescription data issued between July 2022 and June 2023 across 25 public hospitals (11 rural, 9 peri-urban, 5 urban) in the Ashanti Region, Ghana. Population and Sampling: Prescriptions containing at least one medication were systematically sampled using WHO-recommended methods. Specialized clinics (e.g., ART, TB, ANC) were excluded.

Exposures and Outcomes: The key exposures were hospital location (rural, peri-urban, urban). Primary outcomes included medicine availability—defined as the proportion of prescribed medicines dispensed—and prescription affordability, measured as the number of days' wages required for the lowest-paid unskilled worker to purchase a full prescription. Statistical Analysis: Descriptive statistics summarized outcomes. The Kruskal–Wallis test evaluated geographical differences, with Bonferroni-adjusted Mann–Whitney U tests for pairwise comparisons.

Results: Out of 5,088 prescriptions analysed, average medicine availability was 71.96%, with only 28% of hospitals meeting the WHO's 80% benchmark. Availability ranged from 34.5% in rural to 96.85% in urban hospitals. The median prescription cost was GHS 19.12 (≈USD 1.63), exceeding the daily wage of an unskilled worker (GHS 14.88; ≈USD 1.27) in 84% of hospitals. Significant differences were found across locations for both medicine availability ($\chi^2(2)=178.70$, $p<0.001$) and treatment cost ($\chi^2(2)=22.99$, $p<0.001$).

Conclusions: Public hospitals in Ghana's Ashanti Region face substantial disparities in medicine availability and affordability. Strengthening last-mile supply chains, enforcing rational prescribing, and improving reimbursement efficiency under the National Health Insurance Scheme are critical to achieving equitable access to essential medicines.

Pattern and Characteristics of Antipsychotic-Related Adverse Drug Reactions among Nigerian Patients

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Abstract

Introduction: Antipsychotic medications are important in the management of schizophrenia and other psychotic disorders. Their use, however, is associated frequently with adverse drug reactions that significantly affect medication adherence, quality of life of patients and overall outcomes. The pattern and severity of ADRs to antipsychotic drugs may vary in different countries because of drug use pattern and genetic differences. This study assessed the types of ADRs and severity experienced by Nigerian patients taking antipsychotics drugs.

Methods: This cross-sectional study was conducted among patients attending the psychiatric outpatient clinics of a tertiary hospital in South-West Nigeria using self-administered questionnaire. Information on socio-demographic characteristics, diagnoses, duration of illness and prescribed medications were obtained. In addition, patients completed the Glasgow Antipsychotic Side-effect Scale (GASS) and the Liverpool University Neuroleptic Side Effect Rating Scale (LUNSERS) instruments. Descriptive and inferential statistics were used to analyze the data.

Results: One hundred and fifty-three (153) participants competed the study with majority (55.6%) being female patients. Mean age was 38.5 (SD: 12.4) years and median duration of antipsychotic use was 3.0 years. The atypical antipsychotic, Risperidone was the most commonly used in 52.3% of the cases. The mean GASS score was 10.2(SD:8.3) with majority of participants (90.3%) being classified as having “absent/mild ADR”. The median LUNSERS score was 9.0 (Range- 0-106). There was significant correlation between the GASS and LUNSERS scores ($r = .620$; $p < .001$).

Conclusion: The self-reported adverse effect to antipsychotics in this study was predominantly mild and this may be due to the predominant use of atypical antipsychotics among the participants. There is a need therefore to pay particular attention to specific ADRs such as weight gain that may further complicate patients’ health outcomes.

Conflict of interest: None declared
Funding: None

Blood Pressure Control and its Association with Lifestyle Factors among Hypertensive Patients at The Sunyani Teaching Hospital

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Abstract

Background: Hypertension remains a leading contributor to cardiovascular morbidity and mortality in low- and middle-income countries, with persistently low rates of blood pressure control despite treatment. Lifestyle factors may significantly influence blood pressure control among treated hypertensive patients.

Objectives: To assess the association between blood pressure control and lifestyle factors among adults with hypertension receiving treatment at Sunyani Teaching Hospital, Ghana.

Methods: A cross-sectional study was conducted among hypertensive adults aged ≥18 years who had been on treatment for at least six months at Sunyani Teaching Hospital in the Bono Region of Ghana. Pregnant women and individuals with mental health conditions were excluded. Participants were selected using simple random sampling. Blood pressure was measured three times at three-minute intervals using a sphygmomanometer. Data on sociodemographic characteristics, body mass index (BMI), dietary practices, physical activity, stress management, and medication adherence (assessed using the Medication Adherence Rating Scale-10) were collected using standardized questionnaires. Blood pressure control was the primary outcome. Associations were assessed using chi-square tests and multivariable logistic regression, with statistical significance set at $p<0.05$.

Results: Among participants, 51.5% had controlled blood pressure. Blood pressure control was not significantly associated with age, sex, or marital status, although men had a higher control rate than women (57.0% vs 47.7%). Higher income showed borderline association with better control (p=0.053). In multivariable analysis, high medication adherence (aOR=0.054, 95% CI: 0.05–0.623; p=0.019), BMI >25 kg/m² (aOR=22.946, 95% CI: 2.968–244.682; p=0.003), healthy dietary practices (aOR= 0.001, 95% CI: 0.001-0.012; p< 0.001), and physical activity (aOR=0.005, 95% CI: 0.001–0.102; p=0.001) were independently associated with blood pressure control.

Conclusions: Blood pressure control among treated hypertensive patients was suboptimal. Lifestyle factors, particularly medication adherence, physical activity, diet, and BMI were significantly associated with control, highlighting the importance of integrating lifestyle-focused interventions into hypertension management.

Abstracts

Concurrent Sessions: Oral Presentations

Development of Quality Indicators to assess the appropriateness of Antibiotic Prescribing in Primary Healthcare in South Africa

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Abstract

Background: The overuse and misuse of antibiotics contribute to antimicrobial resistance globally. This is particularly true of inappropriately prescribed antibiotics for common community-acquired infections at primary healthcare (PHC) level, which must be urgently addressed.

Objectives: This study aimed to develop and apply quality indicators specific to public sector PHC settings in South Africa based on the World Health Organization's Access, Watch, and Reserve (AWaRe) guidance, which assesses the appropriateness and quality of antibiotic prescribing.

Methods: The indicators used were a combination of indicators developed by City St George's, University of London, a published review of AWaRe-based indicators, and those developed based on findings from point prevalence surveys, which identified infection presentations and antibiotic prescribing patterns at eight PHC clinics in two South African provinces. The indicators were developed using the RAND/UCLA appropriateness method. In Round 1, a multidisciplinary national expert panel individually rated 78 indicators for clarity and appropriateness. In Round 2, the panel rated 89 indicators for appropriateness and feasibility during an online meeting. Data were analysed using Microsoft Excel™.

Results: Indicators were developed for seven infection- and one general category. There was agreement on 77/89 (86.5%) indicators for appropriateness ratings and 75/89 (84.3%) indicators for feasibility ratings. The final set had 61/89 (68.5%) indicators that were rated both appropriate and feasible with agreement. Dental infections (9/9; 100%) and skin and soft tissue infections (11/13; 84.6%) categories had the highest percentage of indicators rated appropriate

and feasible with agreement, contrasting with the lowest, i.e. sexually transmitted infections (5/12; 55.6%), lower urinary tract infections (6/11; 54.5%) and general (4/8; 50%).

Conclusion: Results reflect that most of the identified indicators are beneficial and can be implemented in the South African context. These indicators can be used to assess the quality of prescribing at PHC facilities in South Africa and beyond.

Abstracts

Concurrent Sessions: Oral Presentations

Assessing the Knowledge, Awareness, and Practice of Human Immunodeficiency Virus (HIV) Post-Exposure Prophylaxis among Nurses and Midwives at Sunyani Teaching Hospital

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Abstract

Background: Healthcare professionals, particularly nurses and midwives in sub-Saharan Africa, are at increased risk of occupational HIV exposure. Although HIV post-exposure prophylaxis (PEP) is an effective preventive strategy, gaps persist in knowledge, uptake, and institutional readiness.

Objectives: To assess knowledge of HIV PEP, describe PEP use following occupational exposure, and identify factors associated with good knowledge among nurses and midwives at Sunyani Teaching Hospital, Ghana.

Methods: A cross-sectional survey was conducted among 453 nurses and midwives using a structured self-administered questionnaire. Data collected included sociodemographic characteristics, awareness and knowledge of HIV PEP, occupational exposure history, PEP utilization, perceived barriers, and training experience. Descriptive statistics summarized study variables. Associations between participant characteristics and good knowledge of HIV PEP were examined using chi-square tests and logistic regression, with statistical significance set at $p<0.05$. Analyses were performed using SPSS 26.

Results: Awareness of HIV PEP was high (84.8%); however, only 52.3% of respondents demonstrated good knowledge of PEP indications and protocols. Nurses and midwives with bachelor's degrees had higher odds of good knowledge compared with those holding certificates or diplomas. Longer duration of professional practice (>10 years) was also associated with higher knowledge levels. Among respondents reporting occupational exposure to potentially infectious fluids (n=237), 65.8% initiated PEP and completed the 28-day regimen. Reported barriers to PEP uptake included fear of side effects (40.5%), reliance on patients' HIV-negative test results (31.6%), and limited service availability (21.5%). Fewer than 20% of participants reported receiving regular PEP-related training. Most respondents expressed favorable perceptions toward digital health tools to support PEP access and adherence.

Conclusions: Despite high awareness of HIV PEP, substantial gaps remain in knowledge, uptake, and institutional preparedness among nurses and midwives. Strengthening routine training, ensuring continuous access to PEP services, and integrating digital health–supported interventions may improve occupational HIV prevention in healthcare settings.

Knowledge, Attitude, Practices of healthcare workers and Antibiotic Consumption Patterns Related to Antimicrobial Stewardship in two public hospitals in Nairobi, Kenya.

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Abstract

Background: Antimicrobial resistance (AMR) is a growing public health threat globally and disproportionately affects. Antimicrobial stewardship (AMS) programs are key to optimizing antibiotic use and mitigating resistance; however, evidence on healthcare workers' (HCWs) stewardship-related knowledge, attitudes, practices, and antibiotic consumption patterns in Kenyan public hospitals remains limited.

Objectives: To assess knowledge, attitudes, and practices (KAP) of healthcare workers regarding AMS and to describe antibiotic consumption patterns using the WHO AWaRe classification in selected public hospitals in Nairobi City County.

Methods: A descriptive cross-sectional study was conducted among 129 HCWs (medical officers, clinical officers, nurses, pharmacists, and medical officer interns) at Mbagathi County Hospital and Mama Lucy Kibaki Hospital. Data was collected using structured, pretested questionnaire assessing AMS-related knowledge (9 items), attitudes (7 items), and practices (7 items). Descriptive statistics were used to describe distribution of KAP scores among HCWs. Multivariate logistic regression was used to identify factors associated with good knowledge, attitudes, and practices. Additionally, retrospective analysis of Antibiotic Consumption at Mbagathi County Hospital was conducted from January- December 2024 using WHO AWaRe Classification.

Results: While most HCWs demonstrated positive attitudes toward AMS (73.6%), only 30.2% had adequate knowledge and 17.1% reported good stewardship practices, revealing pronounced knowledge–attitude–practice gap. Nurses and interns exhibited lowest knowledge and practice scores. Facility-level factors were significantly associated with AMS knowledge and practices. Antibiotic consumption analysis revealed that Access antibiotics accounted for 61.1%, meeting the WHO targets; however, Watch antibiotics constituted 38.6%, exceeding the WHO-recommended levels, primarily driven by ceftriaxone use. Reserve antibiotics accounted for less than 1%.

Conclusion: Despite favorable attitudes toward AMS, significant knowledge gaps and clinical practice disparities persist among HCWs. High reliance on Watch antibiotics underscores need for targeted stewardship interventions, cadre-specific training, strengthened institutional support, and routine monitoring of antibiotic use to curb AMR in Kenyan Public Hospitals.

Abstracts

Concurrent Sessions: Oral Presentations

Adverse Drug Reaction Reporting: Knowledge, Attitudes, and Practices of Nigerian Public Healthcare Professionals

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Abstract

Background: Underreporting of Adverse Drug Reactions (ADRs) remains a significant public health concern globally, with pronounced challenges in low- and middle-income countries (LMICs) such as Nigeria.

Objectives: This study aimed to evaluate knowledge, attitudes, and practices regarding ADR reporting among healthcare professionals in Nigerian public health institutions.

Methods: A cross-sectional, questionnaire-based survey was administered to physicians, nurses, and pharmacists across three geopolitical zones in Nigeria. The instrument obtained data on participants' knowledge, attitudes, and practices concerning ADR reporting. Knowledge and attitude responses were scored and categorised. Associations between variables were analysed using bivariate and multivariate logistic regression, with statistical significance set at $p < 0.05$.

Results: Of the 1,450 questionnaires distributed, 1,240 were completed and returned, yielding an 85.5% response rate. The respondents comprised nurses (669; 54.0%), physicians (487; 39.3%), and pharmacists (84; 6.8%), with the Southwest region showing the highest participation (859; 69.3%). Physicians (81.9%) and pharmacists (78.6%) demonstrated significantly greater knowledge of ADRs and pharmacovigilance compared to nurses (68.1%; $p < 0.001$). Negative attitude towards ADR reporting was observed across all groups, with pharmacists exhibiting a more positive attitude than physicians and nurses ($p = 0.016$). Among healthcare professionals,

789 (63.6%) encountered patients with ADRs, but only 95 (12.1%) reported them using the official form. Physicians and nurses reported ADRs more frequently than pharmacists ($p < 0.001$). The determinants of ADR reporting included working in the Southwest region (aOR: 3.0, 95% CI: 1.1–8.4; $p = 0.038$), professional category (aOR: 0.1, 95% CI: 0.04–0.21; $p < 0.001$), prior training (aOR: 2.5, 95% CI: 1.5–4.3; $p < 0.001$), and attitudes towards ADR reporting (aOR: 0.3, 95% CI: 0.2–0.6; $p < 0.001$).

Conclusions: ADR reporting among healthcare professionals in Nigeria is suboptimal despite adequate knowledge levels. Negative attitudes towards ADR reporting persist. Factors influencing ADR reporting are geopolitical zone, profession, training, and attitude.

Predictors of Health-Related Quality of Life Among Patients with Comorbid Hypertension and Type 2 Diabetes Mellitus in Ghana

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Abstract

Background: The dual burden of hypertension and type 2 diabetes mellitus (T2DM) is often accompanied by complex treatment regimen and long-term treatment demands that adversely affect patients' health-related quality of life (HRQoL). Understanding the predictors of HRQoL is essential for clinicians to individualise treatment, improve adherence and address factors that influence overall patient well-being.

Objective: To identify the predictors of HRQoL among patients with comorbid hypertension and T2DM.

Methods: A hospital-based cross-sectional study was conducted between June and August 2025 in Ghana. Adult patients with documented comorbid hypertension and T2DM were recruited by convenient sampling. Data on socio-demographic, clinical, and lifestyle characteristics were collected using a structured questionnaire. HRQoL was assessed and categorised with the EuroQol Five-Dimension Five-Level instrument. A multivariable logistic regression model was used to identify the significant predictors of HRQoL.

Results: A total of 202 participants were involved (mean age 62.8 ± 12.3 years; 69.8% female). Mobility was the most affected HRQoL domain, while anxiety/depression was least affected. The overall mean EQ-5D-5L score was 1.59 ± 0.94 (95% CI: 1.46–1.72), suggesting that participants experienced more than slight problems across dimensions. Age showed a statistically significant positive correlation with mobility (r = 0.26, 95% CI: 0.13–0.38), self-care (r = 0.18, 95% CI: 0.04–0.31), and usual activities (r = 0.20, 95% CI: 0.06–0.33). Hypertension was uncontrolled (<130/80 mmHg) in 55.4% of participants, while 64.9% were euglycemic. Medication burden demonstrated a weak positive relationship with the pain/discomfort domain (r = 0.116). Physical activity was the strongest modifiable predictor of better HRQoL (p=0.002).

Conclusion: Patients with comorbid hypertension and T2DM experience reduced HRQoL,

particularly related to mobility and pain/discomfort. Interventions focusing on promoting physical activity, pain management, supporting older adults and optimising clinical management may enhance health-related quality of life alongside clinical outcomes.

Abstracts

Concurrent Sessions: Oral Presentations

Implementing the WHO Rapid Alert System for Substandard and Falsified Medicines: Six Years of National Medicines Regulatory Authorities' Experience in Eastern and Southern Africa.

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Abstract

Background: Access to quality, safe, and efficacious medicines is essential for reducing morbidity and achieving universal health coverage by 2030; however, substandard and falsified (SF) medicines pose a significant public health threat. In response, the World Health Organization launched Rapid Alert Systems (RAS) to promote the reporting of SF medicines by various stakeholders. However, compared to other settings, National Medicines Regulatory Authorities (NMRAs) in Sub-Saharan Africa largely lag in providing SF alerts.

Objectives: To describe the categories and six-year trends of SF medicine alerts and recalls issued by NMRAs in Eastern and Southern Africa, and to identify the key operational barriers and enabling factors influencing effective RAS implementation within these agencies.

Methods: A mixed methods study was conducted among ten NMRAs in Eastern and Southern Africa. Key informant interviews were conducted to explore operational barriers and enablers for improving RAS implementation. A customized excel sheet was used to capture quantitative data from NMRAs' websites and shared databases. Thematic analysis was used for qualitative data, while quantitative data were analyzed using R software.

Results: There was an increase in SF reports between 2019 and 2024. A total of 757 alerts and recalls were recorded, with 90.1% involving substandard medicines. Antibiotics (18.9%) and analgesics (11.8%) were the most affected therapeutic classes, and tablets were the predominant dosage form (42.9%). Leading reasons for recalls included physical or organoleptic defects (36.0%), regulatory non-compliance (21.1%), and contamination (19.4%). Key barriers included limited resources and political constraints, while enabling factors involved existing regulatory frameworks and technology adoption.

Conclusions: This study has highlighted aspects for the smooth implementation of SF Rapid Alert Systems by NMRAs in the wider region of SSA. Their possible adoption of the key enablers and strategies by respective NMRAs will substantially contribute to the ongoing efforts in combating the SF medicines crisis.

External Quality Control of Causality Assessment of Adverse Event Following Immunization from 2021 to 2025 in West and Central Africa

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Abstract

Background: The establishment of functional national expert committees to carry out the causality assessment of serious adverse events post immunization is recent in Africa. The external quality control is part of the tools for continuous maintenance of the committees beyond their initial training.

Objectives: Expose trained committees to the same cases to determine the gap in classification across committees. Identify possible areas of further strengthening.

Methods:1 A sample library of serious AEFIs cases was sent to 17 NECs for classification and feedback. The submissions were scored comparing the observed to the expected classification. A headcount of participating experts collected their specialty, seniority, and familiarity with the causality assessment method. The NEC's performance was assessed by the average scores from all cases classified and the case's complexity was assessed by the average score of all the NECs for a given case.

Results: Sixteen (94%) NECs responded with 107 (66.9%) submissions. The proportion of clinicians in NECs varied from 40% to 80% with experts in medical biology, paediatrics and neurology in 84.6% of countries and infectious diseases in 73.1%. The average seniority in specialty was 14 years. The average seniority in causality assessment was 4 years. Among the experts, 92.8% were trained, 51% familiar and only 6% had never used the worksheet. The overall average score was 3.2 over 5. The likelihood to classify a case as true A1, A2 or C was respectively 90%, 100% and 70%. Half of indeterminate cases (B1 and B2) were wrongly classified as A.

Conclusions: Expertise is available for AEFI Causality Assessment in Africa. These study shows that training (but not familiarity) increases the matching of the classification to the expected. Indeterminate cases lead to diverse unjustified classifications. Trainings/refresher are key to keeping committees up to date.

Machine Learning - Driven Record Linkage to Mitigate Exposure Misclassification in Pregnancy Pharmacovigilance: A Case Study in Western Kenya

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Abstract

Background: The exclusion of pregnant populations from pre-marketing clinical trials necessitates the use of Real-World Data (RWD) for safety signal detection. However, the utility of RWD is often compromised by data fragmentation and poor linkage, leading to imprecise definitions of pregnancy episodes and subsequent exposure misclassification.

Objectives: The study aims to develop and apply probabilistic linkage methods to integrate multiple data sources and link all records belonging to a single pregnancy episode in the absence of a unique identifier.

Methods: We used data from a pregnancy exposure registry comprising 35,953 women of reproductive age across 42 facilities in Western Kenya. Data sources included antenatal care, maternity, inpatient, and outpatient records. We implemented a sequential framework for pregnancy episode construction: (1) defining precise temporal pregnancy windows using a refined GA estimation algorithm, and (2) classifying fragmented clinical records into these windows. The record classification employed a hybrid strategy: initial deterministic matching followed by a probabilistic XGBoost model trained on synthetic, source specific profiles. Model performance was assessed via Area Under the Curve (AUC) and manual audit.

Results: The model accurately identified correct record links with high reliability (AUC: 0.9768) when tested on validation datasets where the true matches were known. We report the comparative performance of the ML-augmented approach versus deterministic linkage, specifically quantifying the incremental yield of records grouped into pregnancy episodes. This demonstrates a reduction in unlinked data points that would otherwise contribute to exposure misclassification.

Conclusion: Enhanced record linkage using machine learning has the potential to improve the reconstruction of longitudinal pregnancy episodes in fragmented RWD environments. This methodology ensures the temporal alignment of medication exposures with pregnancy outcomes by anchoring episode identification in accurate gestational age estimation. These methods enhance the validity of pregnancy pharmacoepidemiology studies by recovering critical exposure data that standard linkage methods may miss.

Abstracts

Concurrent Sessions: Oral Presentations

Safety Update from the First Large-Scale Use of a Pentavalent Meningococcal A/C/W/Y/X Conjugate Vaccine for Outbreak Response in Niger and Nigeria, 2024

Uchenna Elemuwa[1], Olga Menang[2], Moustapha Gambo[3], Kolie Cece-Vieux Keoulon[4], Edinam Agbenu[5], Sufiyan Muawiyyah Babale[6], Omotayo Hamzat[7], Mor Diaw[8], Joaquin Baruch[9], Lorenzo Pezzoli[9], Crépin Hilaire Dadjo[5], Ado Bwaka[5], Ibrahima Camara[10], André Arsène Bita Fouda[11]

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Abstract

Background: The African meningitis belt experiences recurrent outbreaks of invasive meningococcal disease (IMD), mainly caused by Neisseria meningitidis serogroups C, W, and X. In 2024, Niger and Nigeria conducted the first large-scale, real-world deployment of a pentavalent meningococcal conjugate vaccine (MMCV) targeting serogroups A, C, W, Y, and X for outbreak response.

Objective: To characterize the safety profile of the Pentavalent Meningococcal A/C/W/Y/X Conjugate Vaccine for Outbreak Response in Niger and Nigeria, 2024

Methods: A two-pronged vaccine safety surveillance strategy was implemented, comprising enhanced routine pharmacovigilance and cohort event monitoring (CEM). CEM prospectively collected data on solicited local and systemic reactions, healthcare visits, and medical records up to 28 days post-vaccination. Adverse Events Following Immunization (AEFI) were analyzed by age, seriousness, and System Organ Class (SOC). Disproportionality analyses using VigiBase® and Vigilyze® were conducted to detect potential safety signals.

Results: A total of 48,889 participants were enrolled in the CEM, with follow-up rates of 77% at day 7 and 65% at day 28. Common local reactions included injection site pain, erythema, swelling, itching, and induration, while frequent systemic reactions were pyrexia, myalgia, headache, arthralgia, fatigue, nausea, vomiting, and diarrhoea.

Overall, 4,881,027 individuals were vaccinated, generating 1,109 AEFI reports (22.7 per 100,000 vaccinees). Eleven AEFIs (0.99%) were classified as serious, including one death. Most AEFIs

were mild, occurred on the day of vaccination, and resolved without sequelae. Children aged 2–12 years accounted for most reports (61.9%). No new or unexpected safety signals were identified.

Conclusions: The pentavalent meningococcal A/C/W/Y/X conjugate vaccine demonstrated a favorable safety profile during its first large-scale outbreak use. Adverse events were predominantly mild to moderate, serious events were rare, and no confirmed safety signals were detected. Continued post-licensure surveillance is recommended.

Abstracts

Concurrent Sessions: Oral Presentations

Challenges and Opportunities for Setting up Active Pregnancy Pharmacovigilance in Sub-Saharan Africa: Lessons Learnt from the MiMBa Pregnancy Exposure Registry

Benard Omondi[1,2], Toussaint Rouamba[3], Hellen Barsosio[1,4], Benard Opiyo[4], Titus Ochieng'[4], Mercy Chepkirui[4,1], Kennedy Maube[4], Michael Alaw[4], Caroline Osoro[5], Athanase Some[3], Innocent Valea[3], Simon Kariuki[4], Aninda Moitry[6], Rhys Peploe[6], James Watson[6], Myriam el Gaaloul[7], Stephan Duparc[7], Jenny Hill[1], Philippe Guerin[6], Wiweka Kaszubska[7], Halidou Tinto[3], Feiko ter Kuile[1], Stephanie Dellicour[1]

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Abstract

Background: Post-marketing surveillance of medicines and vaccines is essential to understand real-world safety, particularly in pregnancy, a population routinely excluded from pre-licensure trials. In sub-Saharan Africa (SSA), weak health information systems limit the feasibility of population-based safety studies, necessitating active surveillance approaches. We established the MiMBa pregnancy exposure registry (PER) to evaluate first-trimester antimalarial safety.

Objectives: To describe the recruitment strategies and outcomes, exposure ascertainment findings and key methodologic lessons from implementing a PER in Sub-Saharan Africa.

Methods: A prospective observational cohort of women of childbearing age (15-49 years) between February 2021 and July 2025 in western Kenya and Nanoro district in Burkina Faso, both malaria endemic zones. We developed data systems to capture information from pregnancy detection to delivery and one-year post-partum.

Results: Among 50,447 enrolled women, we identified 16,097 pregnancies and recorded 905 antimalarial first-trimester exposures, including 474 artemisinin-based combination therapies. We recorded outcomes for 14,150 (88%) of the pregnancies, including 721 (5%) spontaneous pregnancy losses (miscarriages and stillbirths) and 86 (0.6%) major congenital anomalies adjudicated by an independent expert panel. The average gestational age at pregnancy detection

was slightly lower for community-detected pregnancies than for antenatal clinics:16.7 vs 23.4 weeks in Burkina Faso and 18.5 vs 21.7 weeks in Kenya. In Kenya, the largest proportion of first-trimester antimalarial exposures (55.0%, 378/689) was captured from outpatient department, whereas in Burkina Faso most exposures (73.1%, 392/536) were reported by participants themselves. 625 (4%) of all deliveries occurred at home. In contrast, 39% (134/346) and 40% (29/73) of miscarriages occurred at home in Kenya and Burkina Faso respectively.

Conclusions: PERs in SSA require integration with community health structures to capture early pregnancies, miscarriages, and medication exposures occurring outside formal health facilities. Leveraging multiple service points enhances data completeness and supports scalable, cross-therapeutic pharmacovigilance.

Abstracts

Concurrent Sessions: Oral Presentations

Consensus Workshop on the Causality Assessment of AEFIs (Adverse Events Following Immunization), Lome, Togo

Gylchrist HOUNDJO[1], Mouhoudine Yerima[2], Ido Kole[3], Calida Veiga[4], Chadha Ahmed[5], Sefiani Houda[6], John Jabang[7], Valentin NCHAFOR NDIKUM[8], Olivier Ewane[9], Kolie Cece Vieux[10], Didier Nzolo[11], Alex Nkayamba[12], Edinam Agbenu[13], Marcelline Tene[14], Aurel ALLABI[15]

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Abstract

Background: Serious adverse events following immunization (AEFIs) represent a major public health concern and may undermine confidence in vaccination programs. In the WHO African Region, causality assessment by national expert committees remains heterogeneous because of methodological limitations, incomplete clinical data and the lack of harmonized, context-appropriate reference standards.

Objectives: To improve the quality, harmonization and reliability of AEFI causality assessment in the WHO African Region through regional consensus workshops based on clinical manifestations, time to onset, biological plausibility, specific diagnostic tests and scientific evidence.

Methods: Four consensus workshops were held in Lome, between September and October 2023, covering cardiological and respiratory; cutaneous, mucosal, gastrointestinal, hepatobiliary, hematological and infectious; neurological and psychiatric; and metabolic, endocrine, renal and urinary manifestations. AEFIs were selected from diagnoses evaluated by national expert committees over the previous three years. Multidisciplinary expert groups reviewed each selected AEFI using a standardized framework including MedDRA case definitions, time to onset, biological plausibility, differential diagnoses, specific tests and literature references. Participants were selected through a survey of causality assessment experts. 101 experts from 24 African countries representing a wide range of medical and laboratory specialties participated. Group work alternated with plenary sessions, and an editorial committee harmonized and validated the outputs.

Results: Of the 224 AEFIs submitted, 180 (80.36%) were fully analyzed and documented, including events with plausible or certain vaccine causality such as anaphylaxis and Guillain–Barré syndrome (A1), and indeterminate events (B2) such as bullous pemphigoid following the Sinopharm vaccine. Agreement between the WHO and French causality methods was moderate (Kappa = 0.35). Forty-four redundant AEFIs were grouped as synonyms, and 77 consensus reports were published on VIGILOGOS.

Conclusions: CACONS23 established a robust regional consensus framework for AEFI causality assessment based on 180 standardized and documented diagnoses, strengthening scientific rigor, harmonization and vaccine pharmacovigilance capacity across Africa.

Abstracts

Concurrent Sessions: Oral Presentations

Key Roles for Pharmacoepidemiologists in the Pharmacogenomics and Precision Medicine Revolution

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Abstract Session:

1. Overview, Objectives Opanga
2. State of related sciences: Omics, Pharmacogenomics, Precision Medicine State of the art and current contribution of epidemiology/pharmacoepidemiology Senior African Professor Invited
3. Pharmacoepidemiology and the micribiome Gregory Peck, Rutgers
4. African Initiatives Speaker invited
5. Pediatric Initiative, Planned African Vaccine Collaboration Bruce Carlton Univ of Brit Columbia

Panel Discussion: Moderator Professor Edlavitch:
Panel: Chancelor Brian Strom and Speakers

Prevalence of CYP2C19*17 Gain-of-Function Allele and Its Association with Stroke Recurrence in Nigerian Cardiovascular Patients on Clopidogrel Therapy: A Single-Centre Study

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Abstract

Background: Clopidogrel is a widely used P2Y12 inhibitor for the secondary prevention of cardiovascular events, shows inter-individual variability, mostly due to polymorphisms in the cytochrome P450 2C19 (CYP2C19) enzyme. The gain-of-function CYP2C19*17 allele enhances drug activation, and as such, it may increase haemorrhagic risk; however, the information regarding African cohorts is underrepresented in pharmacogenomic studies.

Objectives: This study aimed to determine the prevalence of CYP2C19*17 allele carriage among patients receiving clopidogrel at the Central Hospital, Warri, Delta State Nigeria, and to investigate its association with recurrent stroke and other clinical variables.

Methods: A cross-sectional study recruited 104 cardiovascular patients (subset from 355) receiving clopidogrel. Genomic DNA was extracted from dried blood spots, and CYP2C19*17 genotyping was performed via PCR and agarose gel electrophoresis. Clinical data included demographics, comorbidities, blood pressure, fasting glucose, and stroke history/recurrence. Associations were assessed using chi-square tests ($p<0.05$).

Results: CYP2C19*17 carriage was detected in 41 patients (39.42%). Recurrent stroke occurred in 7 patients, with 6 (86%) being *17 carriers ($\chi^2=6.73$, $p=0.009$). No significant associations were found with initial stroke diagnosis ($p=0.1398$), blood pressure categories ($p=0.154$), fasting glucose ($p>0.05$), or alcohol intake. Hypertension predominated (80%), and the cohort showed female predominance (64%) and advanced age (majority 55+ years).

Conclusions: The prevalence rate of the CYP2C19*17 allele in this Nigerian cohort is higher than the relatively lower rates reported in non-African groups. The paradoxical relationship between this allele and higher occurrence of stroke recurrence in carriers suggests that this allele predisposes to a higher risk of bleeding in high-comorbidity conditions. The findings highlights the need to consider African-specific pharmacogenomic data to guide personalized antiplatelet therapy and to offer real-world data to support the use of clopidogrel in resource- limited setting

Abstracts

Concurrent Sessions: Oral Presentations

Orthostatic hypotension among patient on psychotropic drugs in Ekiti State, South Western Nigeria.

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Abstract

Background: Psychotropic medications play an important role in the management of various forms of mental illness, and cardiovascular side effects of this drugs had been widely documented including orthostatic hypotension (OH). Few studies have examined the burden of OH on patients on psychotropic drugs worldwide and there is very little published research on the prevalence and contributing factors of OH.

Objectives: To assess the prevalence of orthostatic hypotension in patients taking psychotropic drugs

Methodology: A total of 225 participants were recruited. This included 150 patients from the Psychiatry clinic on psychotropic medications for at least 6 months and 75 age and sex matched apparently healthy individuals as controls. Total dose of antipsychotic and antidepressant medications were calculated using the Chlorpromazine and fluoxetine equivalent respectively. The pulse rate for one minute and blood pressure (BP) were taken in a supine position and thereafter taken while standing after one minute and also after three minutes. Orthostatic hypotension (OH) was defined as a fall in blood pressure of at least 20mmHg systolic BP (SBP) or 10mmHg diastolic BP (DBP) or decrease in SBP < 90mmHg after either 1 or 3 minutes of standing. A 95% confidence interval was used while statistical significance was set at $P < 0.05$.

Result: The prevalence of OH was significantly higher in the patients compared the controls 22.7% vs 1.3%; $p<0.001$. The prevalence of OH was highest among patients on typical antipsychotics (particularly chlorpromazine) and those patients on either three or four drugs had significantly higher prevalence of OH (54.5%) than patients on either one or two drugs (20.1%) ($p=0.017$).

Conclusions: The prevalence of OH in patients on psychotropic drugs was significantly higher than the control and was observed to be highest among patients using chlorpromazine either as monotherapy or in combination and those on polytherapy.

Beyond Diagnosis Men's Lived Experiences of Prostate Cancer and Patient-Centered Care in Kenya

Diana Njuguna[1], Ann Muthiru[2], Bahaty Riogi[3], Omar Abdihamid[4], Charlse Wasihenya[2], Stephen Chege[5], Rukia Kibaya[6], Sharon Mweni[7], Idah Kinya[8], Jennifer Murithi[5], Ibrahim Kuno[4], Amanda Caballero[9], Umar Afzal[9], Francis Makokha[10], Ewan Cobran[9]

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Abstract

Background: Prostate cancer incidence is rising in Kenya, where men are frequently diagnosed at advanced stages and managed within resource-constrained health systems. While barriers to screening and diagnosis are well documented, limited attention has been paid to men's lived experiences following diagnosis, particularly the emotional, social, and cultural consequences of the disease.

Objective: To examine the lived experiences of men diagnosed with prostate cancer in Kenya and assess how the illness shapes identity, masculinity, social relationships, and engagement with care.

Methods: We conducted a qualitative phenomenological study using in-depth interviews with 130 men diagnosed with prostate cancer across five Kenyan counties (Nairobi, Garissa, Meru, Machakos, and Kisii). Participants were recruited from oncology clinics at referral hospitals. Interviews were conducted in English, Kiswahili, or local languages, transcribed verbatim, translated where necessary, and analyzed using thematic analysis guided by Braun and Clarke's six-phase framework. NVivo 12 Plus supported data management. Coding was iterative and reflexive, combining inductive and deductive approaches informed by phenomenological theory.

Results: Five interrelated themes characterized men's post-diagnosis experiences: (1) profound emotional and existential disruption at diagnosis; (2) treatment as a paradox of hope and physical, financial, and psychological hardship; (3) geographic and economic barriers shaping care trajectories; (4) threats to masculine identity, autonomy, and dignity; and (5) family and community as simultaneous sources of support, surveillance, and stigma. Men's narratives

illustrated how gender norms and structural inequities intersected to influence coping, disclosure, and continuity of care.

Conclusions: Prostate cancer imposes multidimensional burdens on Kenyan men that extend beyond biomedical outcomes, deeply affecting emotional well-being, social roles, and engagement with health services. Integrating culturally responsive psychosocial support into prostate cancer care from diagnosis onward may strengthen patient-centered care. These findings highlight the value of incorporating men's lived experiences into cancer care delivery and planning in Kenya and similar settings.

Antimalarial Potential of Phragmanthera Capitata: An insight into the activity of its Extracts and Isolated Compounds

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Abstract

Phragmanthera capitata is widely used in Ghanaian traditional medicine to treat malaria. However, there is no scientific data to support its antimalarial properties, and the specific phytoconstituents responsible for the antimalarial effect remain unknown. This study was, therefore, carried out to evaluate the antimalarial activity of the plant extract and to isolate bioactive constituents.

The antiplasmodial activities of the crude aqueous and methanolic stem extracts, together with isolated compounds from the crude methanol extract, were evaluated against 3D7 and Dd2 strains of P. falciparum using the SYBR green assay method. Test samples were evaluated for their antimalarial activity using Peter's and Rane's assays against Plasmodium berghei-infected mice.

All tested samples were active against the P. falciparum strains. Among the crude extracts, the methanolic extract was the most active with IC_{50} of 0.84±0.07 (3D7) and 1.92±0.10 µg/ml (Dd2). Friedelin, friedelinol, β-sitosterol and daucosterol, isolated from the methanolic extract, demonstrated promising in vitro activity, with daucosterol the most active (IC_{50} of 0.84±0.002 (3D7) and 2.05 ± 0.003 µg/ml (Dd2)). The aqueous and the methanol extracts showed comparable suppressive activities with 88% and 89% parasitaemia suppression, respectively. Contrary, the aqueous extract was more active in the Rane's curative assay, with 89 % clearance. Friedelin and β-sitosterol displayed similar curative activities with % parasitaemia clearance of 85.66±4.88 % and 86.49±5.52, respectively.

This study is the first to justify the antimalarial activity of Phragmanthera capitata, as well as isolate friedelin, friedelinol, β-sitosterol, and daucosterol from the stem, compounds partly responsible for the observed antimalarial activity of the plant part.

Abstracts

Concurrent Sessions: Oral Presentations

Vaccine safety Reporting trends in the African Region

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Abstract

Background: Pharmacovigilance (PV) is essential to ensuring the safe use of vaccines, particularly in the African region where large-scale routine and emergency vaccination campaigns are common. African countries have strengthened PV systems through increased participation in global surveillance networks and adoption of standardized tools.

Objectives: Describe the reporting trends before, during and after covid-19 vaccines deployment.

Methods: We conducted a retrospective analysis of vaccine safety surveillance data using reports submitted through ODK and VigiFlow over a seven-year period spanning the pre-COVID-19 era, COVID-19 vaccine deployment, and post-deployment phases. Descriptive and comparative analyses examined reporting trends, seriousness, demographic characteristics, reporter profiles, geographic coverage, vaccine types, and data completeness.

Results: A total of 92,744 individual case safety reports from 19 countries were analyzed. Reporting increased during COVID-19 vaccine deployment. In countries using ODK Collect,

86,143 reports were submitted between 2018 and 2024, while 21,400 between 2001 and 2018. The proportion of serious cases remained below 10% throughout the study period, suggesting increased system sensitivity. Reporting patterns varied by age and sex, with a temporary shift towards adult and male reporting during COVID-19 vaccine deployment, followed by a return toward pre-pandemic patterns. Geographic coverage improved over time; however, approximately half of districts did not report at least once annually. Nurses accounted for most reports, with growing contributions from physicians and community health workers. Vaccines from mass campaigns, particularly COVID-19 and outbreak-responses, accounted for most reports.

Conclusions: Pharmacovigilance in the African region expanded over the past decade, driven by digital reporting tools, targeted capacity building, and coordinated partner support. There were notable progress in geographic coverage, follow-up and system responsiveness. Strengthening routine reporting, expanding district-level participation, and improving case follow-up are critical to sustaining sensitive and responsive pharmacovigilance systems capable of supporting both routine immunization and emergency vaccine deployment.

Abstracts

Concurrent Sessions: Oral Presentations

Antimalarial Properties of the Stem Bark of Amphimas Pterocarpoides: An insight into the In Vitro Antiplasmodial Activity of Bioactive Constituents against Plasmodium Falciparum Resistant Strains.

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Abstract: Malaria-related infant mortality and the emergence of drug resistance continue to undermine its eradication efforts. Amphimas pterocarpoides is traditionally used to treat malaria; however, its scientific validation remains limited. Our study evaluated the antimalarial activity and safety of the stem bark extract, characterized bioactive constituents from the most active fraction, and assessed their interaction with the Plasmodium falciparum lactate dehydrogenase (pfLDH) enzyme.

The acute oral toxicity of the extract was evaluated in accordance with OECD Guideline 425. In vivo antimalarial activity of the extract was assessed in Plasmodium berghei-infected mice using Peter's suppressive and Rane's curative models, while in vitro antiplasmodial and cytotoxicity activities were determined using SYBR Green and MTT assays, respectively.

The extract was safe and demonstrated favourable activity against P. falciparum 3D7, K1, and Dd2 strains (IC_{50} = 0.771–1.861 µg/ml) with CC_{50} values >80 µg/ml. At 400 mg/kg, significant ($p < 0.0001$) chemosuppression of 84.64% (95% CI: 84.06–85.22) and 79.37% (95% CI: 78.15–80.59) was observed, along with prevention of infection-induced weight loss, PCV reduction, and hypothermia. Bio-directed fractionation of the extract yielded three compounds: betulinic acid (AP1), 6-methoxyisofomononetin (AP2), and daucosterol (AP3). All isolates exhibited potent activity against 3D7, K1, and Dd2 strains (IC_{50} = 0.25–1.13 µM) with selectivity indices >10. AP2 showed a strong predicted binding affinity to pfLDH (–8.1 kcal/mol).

Findings from our study support the safety and antimalarial potential of A. pterocarpoides and, to our knowledge, report for the first time the isolation of betulinic acid and daucosterol from this plant. Also, it reports, for the first time, the remarkable antiplasmodial activity of 6-methoxyisoformononetin.

Decreased Risk of Clinical Gallstone Disease in New-Users of Statins

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Abstract

Statins lower hepatic cholesterol synthesis and serum LDL levels, which could be associated with less decreased gallstone formation. Prior research has yielded conflicting results about statin exposure in humans and the risk of clinical gallstone disease (cGD). This study aims to evaluate the impact of new statin exposure on cGD. We hypothesize that statin initiation decreases cGD risk.

This study utilized US MarketScan data (2015-2019) in an ACNU design, including adults ≥18 years. In an intention-to-treat analysis, new-users of statins were compared to new-users of non-statin lipid-lowering agents. New-users of statins were also compared to new-users of ACEIs or ARBs, which lack lipid-lowering effects and are prescribed for another chronic condition. cGD occurrence, identified by an inpatient or outpatient claim for cholecystectomy, was assessed 1, 2, 3, 6, and 12 months after the index date, calculating relative risks (RR, 95% CI) and adjusting for age and sex.

There were 1,678,378 statin (87.75%) new-users compared to 234,393 (12.25%) non-statin lipid-lowering agent new-users, and 1,678,378 (58.59%) statin new-users compared to 1,186,285 (41.41%) ACEI/ARB new-users. New-users of statins had a lower cGD risk than those initiating non-statin lipid-lowering agents in the 1-, 2-, 3-, 6-, and 12-month periods [RRs ranging from 0.29 (95% CI: 0.17–0.48) to 0.45 (0.36–0.56], with RR estimates increasing with increased time after initiation. Similarly, new-users of statins had a lower cGD risk than new-users of ACEI/ARBs at all time points [RRs ranging from 0.54 (0.36–0.82) to 0.74 (0.63–0.88)], with a similar trend of increasing RR with time after initiation.

New statin use was linked to a lower cGD risk. If validated and supported by dose, duration, and discontinuation analyses, and results are confirmed, therapeutic strategies that reduce serum LDL could help prevent cGD and reduce the need for invasive biliary surgery.

Mpox Vaccine Safety Surveillance in Africa: Update from the use from August 2024 to December 2025.

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Abstract

Background: Prequalified vaccines are safe. Intentional monitoring of adverse events aims to maintain safety and improve acceptance. Since the deployment of Mpox vaccines, efforts are made towards safety surveillance.

Objectives: Collate safety data on the use of Mpox vaccine in Africa since 2024.

Methods: Nigeria and Rwanda paid follow-up calls to vaccinees one week after vaccination to inquire about AEFIs. CAR, DRC, Liberia, Sierra Leone, and Uganda implemented routine pharmacovigilance. In all cases, the report was transferred to Vigibase. In addition to that, a Cohort Event Monitoring (CEM) was conducted across thirteen districts in DRC, targeting 30,000 consenting individuals. Each participant was followed up weekly for one month, then monthly up to three months. Data were recorded on a smartphone using a mobile app (ODK Collect).

Results: As at September 2025, 1,720 AEFIs were notified, of which 39 (%) were serious. The overall notification rate was 202.5 AEFIs/100,000 doses. The signs and symptoms associated with severe cases included flu-like symptoms, asthenia, fever, asthma, pruritus, headache, drowsiness, visual field defects, decreased eye contact, spontaneous abortion, vulvovaginal dryness, vaginal bleeding, sexual, libido disorders, lactation disorders. cough, chest pain and pain at the injection site.As at December 2025, 23,367 people were enrolled in the CEM; 53.8% were female, 19.2% received the MVA-BN vaccine and 80.8% received LC16m8. Ninety-nine adverse events were reported as hospitalizations, among which Asthma, hypertension, Hypoesthesia, motor weakness, persistent crying and injection site abscess.

Conclusions: Available data indicate that the mpox vaccine has an acceptable safety profile. Adverse events have been reported, including a small number of serious events. The performance of pharmacovigilance systems varies between countries, and several districts remain silent. Addressing these issues would improve the AEFI reporting and data quality, facilitating early medical management of serious cases and regular updates of the vaccine's safety updates.

Establishing the African Vaccine Safety Sentinel Surveillance Network (AVASSN): A Regional Framework for Real-Time Vaccine Safety Monitoring

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Abstract

Background: African Union (AU) Member States are rapidly introducing vaccines for priority infectious diseases. Novel vaccine platforms and accelerated regulatory pathways increase the need for robust post-authorization safety surveillance. However, many African countries rely on largely passive pharmacovigilance systems, which face challenges such as under-reporting, delays, and limited capacity for causality assessment and signal detection.

Objectives: This session will describe the design and operational framework of the African Vaccine Safety Sentinel Surveillance Network (AVASSN)—a regionally coordinated, sentinel-based platform for active vaccine safety surveillance—and discuss its role in strengthening pharmacovigilance capacity across AU Member States. AVASSN will establish sentinel hospitals in ten AU Member States to actively identify and report adverse events following immunization (AEFI) and adverse events of special interest (AESI) using standardized protocols and interoperable digital tools. The symposium will outline implementation strategies and anticipated impact, followed by audience discussion on future directions for vaccine safety surveillance in Africa.

Description: The symposium will feature panelists from the Africa CDC pharmacovigilance team and partners. Dr. Donneyong, who recently trained Africa CDC technical officers on applying AI in pharmacovigilance, will moderate the session. Dr. Duga, lead of the Africa CDC pharmacovigilance team and currently spearheading AVASSN's establishment, will join three colleagues. Each panelist will present on aspects of AVASSN they lead or support. The session will begin with a 10-minute introduction by Dr. Donneyong, followed by four 15-minute presentations. The final 20 minutes will be dedicated to audience questions and closing remarks. This session will benefit attendees with diverse expertise and interests, as the Africa CDC team welcomes feedback on this ambitious initiative.

Assessing the Impact of Teacher-Led School-based Hygiene Intervention on Children's Handwashing Practices for Childhood Disease Prevention in Lagos, Nigeria: A Cluster Randomised Control Trial

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Abstract

Background and Objectives: Poor hand hygiene contributes significantly to preventable childhood diseases in Nigeria. Teacher-led school-based interventions offer a promising approach to improve childhood hygiene behaviours. This study assesses the impact of such an intervention on handwashing practices among schoolchildren in Lagos, Nigeria.

Methods: A cluster randomised controlled trial was conducted from January to October 2024 among 3,458 pupils (primaries 1–6) in 50 low-cost private schools across Lagos State. 25 schools received the teacher-led WASHED-UP (Water Sanitation and Hygiene Education Against Diarrhoea, Pneumonia and Undernutrition) hygiene intervention, while 25 served as controls. Data on handwashing knowledge, practices, and absenteeism were collected at baseline and endline using structured questionnaires and observational checklists. Intervention effects were analysed using multilevel mixed-effects linear and logistic regression models, adjusting for clustering and baseline covariates ($p < 0.05$).

Results: Although 50 schools were initially enrolled as planned, 5 withdrew after baseline, resulting in 45 schools with 2,300 pupils included in the analysis. Therefore, of the eligible schools, 45 participated (25 intervention, 20 control), enrolling 2,300 pupils at baseline (mean age = 8.4 ± 1.8 years). The proportion of pupils with good handwashing practice increased from 32.0% to 40.7% in the intervention group, compared to 8.4% to 26.5% in the control group ($\chi^2 = 63.1$; $p < 0.001$). Reported barriers, such as a lack of soap or water, declined markedly in the intervention group (23.5% to 7.9%). Correlation between knowledge and practice strengthened post-intervention ($r = 0.51$; $p < 0.001$), indicating positive behavioural change.

Conclusion: The study showed that school-based interventions have a significant impact on shaping health behaviours and promoting child well-being. It unravels the importance of integrating structured WASH education into Nigeria's primary school curriculum as a scalable strategy to improve hygiene practices and reduce the burden of preventable diseases among school-aged children.

Active pharmacovigilance in medical care units of Paediatric University Hospital Centre (CHUP-CDG) improves Drug adverse events notification

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Abstract

Background: An effective pharmacovigilance system is essential for the safe use of medicines, particularly in paediatrics. The passive methods are known to yield underrecording of drug adverse events at the CHUP-CDG.

The objective was to review the passive method and assess the relevance of adding an active method.

Methodology: A cross-sectional study was conducted from 15 May to 15 July 2024. It involved hospitalised patients in paediatric medical units, whose legal guardians provided consent, with a total hospital stay exceeding 24 hours. A pharmacist monitored patients daily by analysing their medical records, paraclinical investigations results, and pharmaceutical interviews. The identification of an adverse drug event (ADE) was recorded on the national pharmacovigilance form. The study also covered all passive notifications made by staff in these units during the study period. The number of adverse drug events actively identified was compared with the number of passive notifications. The severity of the ADRs was assessed using the modified Hartwig and Siegel scale (1992), and avoidability using the Hallas et al. (1990) scale. Pre-imputability was calculated using the Naranjo method.

Results: A total of 151patients were monitored, and 75 (49.67%) developed 127 ADEs. At the same time, 8 passive notifications were recorded; the authors were pharmacy interns (4), nurses (3), and medical interns (1). The passive reported cases were also retrieved through active notification from a pharmacist. The majority of adverse drug events were of moderate severity (59.69%) and were unavoidable in 71% of cases. The Causality Assessment classifies the likelihood of a causal link as probable in 72% of cases.

Conclusion: Our study confirmed the substantial underreporting of ADEs with the passive method. As this method is routinely applied, awareness and training of medical staff at the CHUP-CDG are needed to improve ADEs notification.

Key words: Adverse drug events, pharmacovigilance, paediatrics

Barriers and Facilitators to implementation of the Central Chronic Medicines Dispensing and distribution programme in South Africa: A Scoping review.

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Abstract

Background: Ensuring safe, affordable and accessible medicines remains a cornerstone to achieve universal health coverage and the 2030 agenda. Therefore, it is important to take stock of the measures implemented to achieve access to chronic medicines, track their evolution and subsequently improve their offerings in South Africa.

Objectives: The main objective was to identify barriers and facilitators to implementation of the Central Chronic Medicines Dispensing and Distribution programme.

Methods: The Search was conducted using specific key phrases employing Boolean operators "OR" and "AND" in seven library databases namely Cochrane library, EBSCOhost, MEDLINE, PubMed, Science Direct, Scopus, and Springer Link, filtering primarily for duplicates, then title and abstract screening and finally a full-text screening was employed. A grey literature search was also conducted through Google Scholar and Sabinet. The investigation included all English language literature published in South Africa between 2014 and 2024.

Results: The review yielded 41 eligible articles. This scoping review identified various barriers and facilitators to implementation of the Central Chronic Medicines Dispensing and Distribution (CCMDD) programme. There was a variability as some elements were reported as a barrier in one context and a facilitator in another. Supposed reduction in patient waiting times, enhanced treatment adherence, long term cost benefits and improved access to medicines were cited as facilitators. Inadequate programme awareness, limited access to pick-up points in remote areas, miscommunication regarding pick up dates and poor staff services cited as some barriers. Stigma was reported as both a facilitator and a barrier to programme implementation.

Conclusions: The review revealed a gap between planned activities/policy design and implementation in the CCMDD programme. The study has significant implications for policy and practice. Strengthening implementation strategies through targeted policy interventions is crucial for optimizing programme outcomes and providing valuable insights for policymakers to enhance equitable access to chronic medicines.

Abstracts

Poster Sessions

Non-Prescription Antibiotics Dispensing in Nigerian Community Pharmacies: A pilot Study

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Abstract

Background. The inappropriate sale of antibiotics without prescription is a significant driver of antimicrobial resistance, particularly in low-and middle-income countries. In Nigeria, weak enforcement of pharmaceutical regulations has led to widespread antibiotics misuse. This study investigated the prevalence and patterns of non-prescription antibiotic dispensing in community pharmacies in Ikeja Local Government Area (LGA), Lagos State, using mystery shoppers.

Objectives. To determine the pattern and prevalence of antibiotics dispensed without prescription and assess factors influencing this practice.

Methods. A descriptive cross-sectional study conducted using trained mystery shoppers who visited 20 randomly selected community pharmacies in Ikeja LGA. Shoppers simulated symptoms of upper respiratory tract infection (URTI) and purchased all medications offered by the attending dispenser. Data collected included dispenser status, type and quantity of antibiotics supplied, and additional advice. Descriptive statistics were used to summarize the findings.

Results: Fourteen of the 20 pharmacies (70%) dispensed antibiotics without a prescription. Frequently supplied antibiotics for URTI included co-trimoxazole (35.6%), azithromycin (28.6%), and erythromycin (21.5%). Pharmacies in lower-income areas showed higher rates (80%) of non-prescription sales compared to higher-income areas (60%). In 65% of cases, antibiotics were dispensed by non-pharmacists.

Conclusion: The high prevalence of non-prescription antibiotic dispensing among community pharmacies in Ikeja LGA underscores regulatory gaps and the urgent need for interventions to curb inappropriate antibiotic use. Stricter enforcement of dispensing laws, public education campaigns, and improved healthcare access are essential to reduce misuse and mitigate antibiotic resistance.

Early Screen Exposure and Child Mental Health: Issues, Impacts, and Support Strategies

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Abstract
Screen use has become increasingly integrated into children's daily lives, often from the earliest stages of development. While digital tools may provide educational benefits, early and unregulated exposure raises concerns regarding their effects on mental health and overall development. This study aims to analyse the issues, developmental impacts, and potential support strategies related to early screen exposure among children.

A structured literature search was conducted in PubMed and Google Scholar following PRISMA guidelines, using keywords related to screen exposure, cognition, neurodevelopment, behaviour, and mental health. Inclusion criteria targeted original, full-text studies reporting quantitative data on children aged 0–18 years, while reviews, meta-analyses, and descriptive studies without numerical outcomes were excluded. From 125 articles initially identified, 18 met the eligibility criteria and were included for narrative synthesis.

The findings reveal consistent associations between early screen exposure and altered developmental or mental health outcomes across age groups. In children aged 0–2 years, exposure was commonly linked to cognitive delays, reduced communication skills, socio-emotional difficulties, and emerging attention problems, largely attributed to decreased parent–child interaction. Among children aged 3–6 years, prolonged screen use was associated with internalizing behaviours, anxiety, learning difficulties, sleep disturbances, and psychosocial challenges. Children aged 7–10 years showed increased behavioural problems, reduced concentration, and higher anxiety levels. For adolescents (11–18 years), excessive screen time correlated strongly with depression, anxiety, low self-esteem, and persistent sleep disorders.
Support strategies frequently highlighted in the literature include regulating screen time, promoting high-quality content, strengthening parental involvement, enhancing parent–child interactions, and maintaining a balanced integration of digital tools in learning environments.

Overall, early and excessive screen exposure represents a significant public health concern. Further research is needed to understand long-term implications, particularly regarding the adults and professionals' today's children may become.

Benefit-risk assessment of malaria vaccines approved by the WHO for sub-Saharan Africa.

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Abstract

Introduction: Malaria is a leading cause of morbidity and mortality among infants and children in sub-Saharan Africa (SSA). Two malaria vaccines (RTS,S and R21) have recently been approved by WHO, and it is hoped that in addition to existing treatment, malaria will be contained.

Objective: To compare benefit-risk profiles of RTS,S versus R21 among children aged 5 months to 17 months in SSA using the PhRMA BRAT Framework.

Methodology: A comprehensive search of scientific databases was conducted targeting summary of product characteristics (SmPC) and clinical trials involving the two vaccines used in SSA. The search targeted children aged between 5 months to 17 months with a follow up of at least 12 months after administration of three doses of the vaccines under study. Odds ratios and risk differences (RD)/1000 patients were calculated using per protocol data, and value tree was drawn using observed benefits and risks. These were followed by key benefit-risk summary table and corresponding Forest plot using the BRAT Framework Tool.

Results: Five publications met our selection criteria, including one SmPC for each vaccine. Concerning benefits, R21 vaccine was more beneficial for both clinical and severe malaria (RD per 1000 patients were 154(95% CI:137 to 170) and 420(95% CI:351 to 489) respectively). There was no significant differences in risks involving drowsiness/somnolence, decreased appetite and injection site pain between the two vaccines. Fever as an adverse event following immunization occurred less frequently with RTS,S (RD per 1000 patients was -122 (-138 to -106), but for injection site swelling, diarrhea and irritability R21 recorded significantly less frequent events.

Conclusion: The two vaccines look promising for the prevention of both clinical and severe malaria among infants and younger children, although benefits profile of R21 seems to be a little ahead of RTS,S.

Factors associated with the appropriate use of asthma medications among adult asthmatic patients attending asthma clinic in a teaching hospital in Ghana

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Abstract

Background: Asthma is a life-threatening disease that requires comprehensive management. Though the prevalence of asthma in sub-Saharan Africa is lower than in developed countries, the disease is known to be severe in the former due to poor asthma care, late diagnosis and initiation of treatment. Empirical evidence indicates that acute exacerbations of asthma intensify when patients do not take asthma treatment as recommended.

Objectives: This study attempted to identify patient and treatment-related factors which influenced appropriate use of asthma medication among adult asthmatic patients attending asthma clinic at the Korle-Bu Teaching Hospital.

Method: Asthmatic patients visiting the clinic were screened for eligibility and invited to provide information regarding the use of their asthma medication and factors potentially associated with appropriate use of asthma medication. A stepwise multivariate logistic regression analysis was used to evaluate the most important factor at a 0.05 level of significance.

Results: Of the 97 patients who took part in the study, 37.1% were found to be appropriately using their asthma medication. Respondents with better knowledge of their asthma medication were more likely to use their asthma medication appropriately (OR 5.82 [CI 95% 2.25-15.04]) as were those with positive attitudes and beliefs towards asthma and asthma medication (OR 3.88 [CI 95% 1.44-10.44]).

Conclusion: The most important factor identified in this study was patients' knowledge of their asthma medication. This indicates the need for health professionals to focus on innovative but cost effective educational interventions that would improve patients' knowledge of their medication and also help them understand the need to take their daily asthma medication even in the absence of overt symptoms in order to optimize patient care.

Abstracts

Poster Sessions

Potential medication errors and their predictors among hospitalized paediatric patients at a tertiary hospital in Tanzania.

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Abstract

Background: Medication errors caused by human error or system flaws pose a significant risk to the safety of paediatric patients. These errors can lead to adverse drug reactions, decreased treatment effectiveness, and even death. However, there is a scarcity of data related to the magnitude of medication errors in African countries, including Tanzania.

Objectives: To determine the prevalence of potential medication errors and their predictors among paediatric patients admitted at Muhimbili National Hospital, Tanzania.

Methods: A hospital-based cross-sectional study was conducted from April to June 2024, involving 365 consecutively recruited participants under 18 years. Data were collected through structured questionnaires, with appropriate assent and consent. Analysis was performed using SPSS version 27. A univariable analysis was conducted, and factors with a p-value < 0.2 were considered fit for a multivariable analysis. In the multivariable analysis, factors with a p-value < 0.05 were statistically significant.

Results: Medication errors were identified in 72.1% (263) of participants, predominantly duration (65.2%) and route errors (42.2%). Frequently prescribed medications comprised vitamins/minerals (35.6%), bronchodilators (23.6%), and antibiotics (21.1%). Significant predictors included shorter hospital stays (AOR: 4.886; 95% CI: 2.702–8.835), absence of previous medication errors (AOR: 2.558; 95% CI: 1.393–4.697), lack of medication error training among healthcare workers, especially dispensers (AOR: 11.4; 95% CI: 4.945–26.348), and absence of a dose reconciliation protocol (AOR: 2.097; 95% CI: 0.793–4.912).

Conclusion: A high prevalence of potential medication errors among paediatric patients was observed. Shorter hospital stays, lack of previous medication history, insufficient healthcare worker training, and absence of reconciliation protocols were significant predictors. Further

research and interventions to enhance training and protocols as well as improve hospital infrastructure regarding medication prescription, dispensing, and administration should be conducted.

Abstracts

Poster Sessions

Chronic Kidney Disease in Ghana: A Scoping Review of Burden, Management and Research Gaps

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Abstract

Introduction: Chronic kidney disease (CKD) is a growing public health concern in Ghana, yet available evidence remains fragmented. A synthesis of existing literature is needed to provide an overview of current knowledge, identify gaps, and inform research, policy, and practice.
Objective: This review aimed at synthesizing literature on CKD in Ghana, mapping prevalence, risk factors, management strategies, and evidence gaps.

Methods: A scoping review was conducted using the Joanna Briggs Institute framework and reported with PRISMA-ScR guidelines. PubMed, Scopus, ProQuest, ScienceDirect, CINAHL, and Google Scholar were searched, supplemented with manual reference screening. All study designs reporting on CKD in Ghana were eligible. Data was charted on study characteristics, CKD burden, risk factors, management approaches, and outcomes, and summarized descriptively.

Results: Fifty studies were included. CKD prevalence in the general population ranged from 10–13.5%, with higher rates among individuals with hypertension, diabetes, and HIV. The most consistent risk factors were hypertension, diabetes mellitus, chronic glomerulonephritis, and herbal medicine use. Reported management strategies included antihypertensive and antidiabetic therapy, dialysis services (predominantly haemodialysis, with limited peritoneal dialysis and transplantation), lifestyle modification, and patient education. Patients on conservative treatment generally had poorer outcomes than those on renal replacement therapy, while advanced CKD was linked to reduced quality of life. Barriers to care were primarily financial and logistical. A major development was the inclusion of dialysis in Ghana's National Health Insurance Scheme in December 2024. However, evidence on long-term outcomes, patient knowledge and practices, and pharmacist-led interventions remains scarce.

Conclusion: CKD presents a significant challenge in Ghana, particularly in prevention, management, and access to care. Policy advances such as dialysis coverage under NHIS mark progress, but substantial evidence gaps persist. Future research should focus on context-specific strategies for early detection, improved management, and better patient outcomes.

Knowledge, Attitudes, and Adherence to Insulin Therapy Among Patients with Type 2 Diabetes Mellitus

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Abstract

Insulin therapy remains a mainstay in type 2 diabetes mellitus (T2DM) management, yet adherence remains suboptimal due to knowledge gaps, misconceptions, and attitudes. Understanding these factors is essential to improving glycaemic control and outcomes.

The objective of this study was to assess knowledge, attitudes, and adherence to insulin therapy among patients with T2DM and identify factors associated with adherence.

A cross-sectional study was conducted among 176 insulin-treated adults (≥18 years) with T2DM at Cape Coast Teaching Hospital. Data was collected using a structured questionnaire: Bloom's taxonomy for knowledge classification, a 3-point Likert scale for attitudes, and an adapted Morisky scale for adherence. Descriptive statistics summarized patient characteristics, while chi-square and logistic regression identified predictors of adherence.

Overall, 51.1% had good knowledge, 44.3% moderate, and 4.5% poor. Attitudes were mostly neutral (87.5%), with 10.2% positive and 2.3% negative. Adherence was low in 45.5%, medium in 18.2%, and high in 36.4%. Sex was significantly associated with knowledge (χ^2=7.08, p=0.029). Knowledge was the strongest independent predictor of adherence: patients with moderate (OR=119.0, p<0.01) or good knowledge (OR=86.6, p<0.01) had markedly higher odds of high adherence than those with poor knowledge. Patients aged 40–59 (OR=0.36, p=0.037) and those diagnosed <5 years (OR=0.35, p=0.048) were significantly less adherent.

Although knowledge of insulin therapy was generally adequate, attitudes were neutral, and adherence was suboptimal. Knowledge was shown to be the strongest predictor of adherence, emphasizing the importance of patient education. Tailored educational and behavioural interventions, particularly for middle-aged and newly diagnosed patients, may enhance attitudes, improve adherence, and support better glycaemic outcomes.

Key words: Type 2 Diabetes Mellitus, Insulin Therapy, Knowledge, Attitudes, Adherence

Uncovering Gaps in Postoperative Pain Management: A Clinical Study of Health Professionals

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Abstract

Introduction: Effective postoperative pain (POP) management is vital for optimal recovery and improved surgical outcomes. However, many patients continue to experience inadequate pain relief despite advances in pain management strategies and clinical guidelines. Often, this is due to gaps in the knowledge, attitudes, and practices (KAP) of healthcare providers. This study assessed the KAP of health professionals toward POP management in a tertiary hospital in Ghana, to identify strengths, gaps and opportunities for improvement.

Methods: A descriptive cross-sectional study was conducted among doctors, pharmacists, nurses, and midwives involved in postoperative care. Data were collected using a validated, self-administered questionnaire covering domains such as pain assessment, pharmacologic and non-pharmacologic interventions, and interdisciplinary collaboration. Data were analyzed using SPSS version 27. Descriptive statistics summarized responses. Inferential statistics included one-way ANOVA, post-hoc tests, Pearson's correlation, and chi-square analysis, with significance set at $p < 0.05$.

Results: A total of 100 participants were included: 16% doctors, 31% pharmacists, 37% nurses, and 16% midwives. Participants overall knowledge of POP management was moderate (63.3%, Mean = 32.2), with significant variation across professions [$F(3, 96) = 16.50$, $p < .001$]. Attitudes were generally indifferent (63.9%, Mean = 38.4), and practices were poor (57.9%, Mean = 24.3). A strong positive correlation was found between knowledge and attitude ($r = .569$, $p < .001$), and a moderate correlation between attitude and practice ($r = .315$, $p = .001$). Sex negatively correlated with knowledge ($r = –.202$, $p = .044$) and attitude ($r = –.350$, $p < .001$).

Conclusion: Significant gaps exist in POP-related KAP among health professionals. Targeted training and multidisciplinary engagement, especially for nurses and midwives, are essential to improve postoperative pain outcomes.

Keywords: Postoperative pain, Pain management, Health professionals, Clinical study, Ghana

Vigilogos, a platform for networking Experts of causality assessment

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Abstract

Background: National experts committees often complain of receiving files too close to causality assessment meetings. Moreover, they have access to limited literature. Finally every speciality is represented once or twice in each committee, some countries lacking critical expertise like neurologist and pathologist.

Objectives: To set up a working environment where experts can be given access to cases while still under investigation and raise comments. To enable exchange of expertise and documents across countries.

Methods: With the input of many countries and consultants supporting countries, the needs were better shaped and success stories in addressing them documented. Then a concept was drafted describing what it is expected to offer. The platform was developed following the bidding process of WHO, assessed for cyber security and hosted in WHO Regional Office for Africa.

Results: The website is organized in a public space, country private spaces and community (multi-country) spaces. At country level, there are coordinators, national users and temporary users. The features available are: documents sharing, forum discussion, events, news and polls. In private spaces only, VigiLogos enables the upload of case details, for experts to have real-time access before the meeting and chat on additional details needed to inform differential diagnoses. As a result, all the data required by experts can be collated while the patient is still on admission.

To start with, a private space has been created for each country in Africa and for committees like the African Advisory Committee on Vaccine Safety (AACVS). Nine communities have been created. As of end of August 2025, 333 experts registered and 77 documents have been uploaded. The countries already using the platform have uploaded in total 22 cases, each one in his private space.

Conclusions: Networking should enhance the performance and reliance of African experts with timely access to resource.

Abstracts

Poster Sessions

A Retrospective study on Antimicrobial Prescription Patterns and Trends in the Outpatient Settings of a Tertiary Hospital in Ghana

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Abstract

Background: Inappropriate antimicrobial use contributes substantially to antimicrobial resistance (AMR), a major public health threat. Given that a significant proportion of antibiotics are dispensed in outpatient settings, understanding outpatient antimicrobial prescribing patterns is essential for strengthening antimicrobial stewardship.

Objective: To assess patterns and trends of antimicrobial prescriptions in the outpatient departments of Ho Teaching Hospital.

Methods: A one-year (January 2024 to December 2024) retrospective observational study was conducted using electronic pharmacy records from Ho Teaching Hospital. A structured tool was used to collect patient demographics and prescription data. WHO indicators were used to evaluate prescription appropriateness. Guideline adherence and seasonal variations were also analysed. Descriptive and Crosstab analyses were conducted using SPSS (version 27.0.1)

Results: 700 outpatient encounters were analysed using a 99% confidence interval. Adults aged 18–65 years constituted 63% of visits; 97% were insured and females represented 60%. Antimicrobials were prescribed in 15% of encounters, within WHO thresholds (<30%). Prescribing was predominantly empirical (85%), with 93% adherence to national and WHO guidelines. Watch antibiotics predominated across infection categories (61%), especially respiratory/ENT and UTI/genital diagnoses, although no significant association existed between infection category and AWaRe classification (p=0.106). The number of antimicrobials prescribed was significantly associated with AWaRe classification (p=0.017), with increasing Watch use as prescription counts increased. Monthly prescribing varied significantly (p=0.014), peaking in May and August (10.2%). Prescribing volumes were higher during the wet season (52.0% vs 25.5% dry), although antimicrobial class distributions did not differ significantly by season (p=0.076).

Conclusion: Outpatient antimicrobial prescribing practices were largely compliant with national and WHO treatment guidelines; however, the predominance of Watch antibiotics underscores the need for strengthened antimicrobial stewardship to optimize prescribing patterns and mitigate antimicrobial resistance.

Knowledge, Attitude, and Practice of Adverse Drug Reaction Reporting Among Final-Year PharmD Students in Ghana: A Pilot Study

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Abstract

Background: Adverse drug reactions (ADRs) pose a significant threat to patient safety globally, and under-reporting remains a major challenge in pharmacovigilance systems. Final-year PharmD students, as future pharmacists, represent a critical frontline workforce for ADR detection and reporting. However, their preparedness to contribute to pharmacovigilance in Ghana has not been adequately studied.

Objective: To assess the knowledge, attitude, and practice of final-year PharmD students in Ghana regarding ADR reporting and to identify the key barriers and motivators influencing their reporting behavior during clinical training.

Methods: A cross-sectional, questionnaire-based study was conducted among final-year Doctor of Pharmacy (PharmD) students from accredited schools of pharmacy in Ghana who had completed their mandatory clinical rotations at accredited hospitals. A structured online questionnaire adapted from validated instruments were used to collect data on socio-demographics, knowledge, attitude, practice, barriers, and motivators related to ADR reporting. Descriptive statistics were performed using SPSS.

Results: Of the Eighty-six (86) participants, 51.2% were male. The majority (61.6%) correctly defined pharmacovigilance, 80.2% correctly defined ADRs, and 82.6% were aware of a hospital-based ADR reporting system. Most participants (76.7%) had received ADR reporting training. Attitude toward ADR reporting was positive, with 81.4% strongly agreeing that reporting is necessary and 73.3% agreeing it increases patient safety. However, only 59.3% reported having identified a suspected ADR during training. The main barriers were not encountering ADRs (30.2%) and time constraints (20.9%). Key motivators included simplified reporting tools (58.1%) and feedback from regulatory bodies (23.3%).

Conclusion: Despite adequate knowledge and positive attitudes, ADR reporting practice among PharmD students in Ghana remains suboptimal. Bridging this gap requires stronger experiential pharmacovigilance training, curriculum integration of hands-on reporting activities and supportive systems that provide simplified reporting tools and timely feedback.

Abstracts

Poster Sessions

Suboptimal Knowledge and Practices are Obstacles to Promotion of Life-course Vaccination among South African Pharmacists

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Abstract

Background: Life-course vaccination, emphasising the need for vaccination during the different stages of life, benefits individuals and the community. Pharmacists, as accessible healthcare professionals, play an increasingly important role in vaccination programmes. However, little is known about their knowledge and practices, regarding life-course vaccination in South Africa.

Objective: To assess South African pharmacists' knowledge and practices towards life-course vaccination.

Methods: Quantitative descriptive survey was conducted among pharmacists in South Africa using a self-administered online questionnaire. Data collected included demographics, knowledge and practices about vaccines and life-course vaccination. Descriptive statistics using SPSS v29. were used to summarise data i.e. means (standard deviation) and frequencies (%). Ethical clearance was obtained from Sefako Makgatho University Research Ethics Committee, permission to access the database of pharmacists was obtained from the South African Pharmacy Council and informed consent from all respondents.

Results: Overall, 456 pharmacists responded: mean age of 41.2 (SD: 14.6) years; 51.3% Black African; 39.0% based in Gauteng; 53.9% working in the private sector. Only 15.8% were licensed vaccinators and 8.8% has never received a vaccine beyond childhood. While 91.2% had received at least one vaccine beyond childhood, only 7.2% could identify all 10 vaccines recommended for children 0-18 months, and 3.7% could identify the vaccines scheduled for healthy children (6-14 years). Likewise, only 13.8% could identify vaccines recommended for pregnant women, 7.7% for adults 50-64 years and 9.4% for adults ≥65 years. While 85.7% of the pharmacists routinely recommend vaccinations to others, 50.4% and 48.2% had never assessed patients' eligibility for vaccination, nor assessed patients vaccination history respectively.

Conclusion: Despite high awareness of life-course vaccination, significant knowledge and practice gaps were evident, which should be the focus of future training. Further research is needed to explore effective pharmacist involvement in vaccination advocacy and delivery, which would benefit life-course vaccination in South Africa.

Antimicrobial use-related perspectives of patients visiting primary healthcare facilities in a rural sub-district of a South African province

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Abstract

Background: Antimicrobial resistance (AMR) is one of the top 10 global public health concerns. Evidence has shown that patients self-medicate, persuade healthcare professionals to prescribe antibiotics and purchase antibiotics over-the-counter. Most antibiotics are prescribed at primary healthcare (PHC) level, making it necessary to address the problem in these settings. Understanding their perspectives regarding antimicrobial use is crucial for future intervention development.

Objective: To investigate the perspectives i.e., knowledge, attitudes, behaviours and expectations regarding antimicrobial use of patients visiting PHC facilities in a rural sub-district of a South African province.

Methods: A quantitative descriptive survey, using an interviewer-administered questionnaire, was conducted among English-speaking, adult patients (≥ 18 years) at 21 PHC facilities. Responses were recorded electronically on a tablet: three response options for 10 knowledge questions; Likert scale response options for 20 attitudes, behaviours and expectations statements. Descriptive statistics was used to summarise data with SPSS V26. Ethical clearance was obtained and all participants provided written informed consent.

Results: Participants included 400 patients, 71.8% female, 34.8% completed secondary education. Most (85.5%) used antibiotics before, while 13.0% obtained antibiotics without a prescription, mainly from private/community pharmacies. Only 51.0% reported completing the full course of antibiotics, 47.0% never kept leftover antibiotics for future use and 10.0% admitted to discontinuing antibiotics once feeling better. Misconceptions were common: 57.0% believed antibiotics could treat common colds, 48.0% believed they could kill viruses, and 37.5% thought antibiotics could treat all infections. Overall 63.5% were unaware of AMR, 52.3% consulted

HCPs before taking antibiotics and 63.3% expected explanations from HCPs.

Conclusions: Concerns include patients' lack of knowledge of antibiotics, their risks and confusion between bacterial and viral infections. Misconceptions about their appropriate use was common. Future efforts should focus on improving public knowledge of AMR and promoting responsible antibiotic use to help combat resistance.

Statin Utilization Among Patients with Chronic Kidney Disease and/or Type 2 Diabetes Mellitus

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Abstract

Background: Chronic kidney disease (CKD) and type 2 diabetes mellitus (T2DM) increase cardiovascular risk, making statin therapy central to prevention. While guidelines recommend statin use in these populations, evidence from routine practice in sub-Saharan Africa is limited. Real-world evidence on prescribing, adherence, and outcomes is essential for optimizing prevention.

Objectives: To evaluate statin prescribing patterns, assess patient adherence, and identify utilization determinants among patients with CKD and/or T2DM at Cape Coast Teaching Hospital (CCTH), Ghana.

Methods: A descriptive cross-sectional study enrolled 217 adult patients with CKD, T2DM, or both attending CCTH. Data were collected via structured questionnaire on socio-demographics, clinical variables, statin prescribing, adherence, access to medicines, and outcomes. Adherence was assessed with the MARS-8. Descriptive statistics were generated, associations were examined using chi-square, ANOVA, and logistic regression ($p < 0.05$).

Results: Of 217 participants, 191 (88.0%) had T2DM, 58 (26.7%) had CKD, and 32 (14.7%) had both. Overall statin utilization was high: 195 (89.9%) were prescribed statins. Atorvastatin was common (89.7%), mainly at 20 mg. Despite high utilization, adherence was suboptimal: 65.6% had low adherence, while 3.6% demonstrated high adherence. Reasons for missed doses included forgetfulness (69.6%), side effects (13.9%), and cost (6.3%). Furthermore, 55.9% were unaware of their lipid monitoring frequency. Cardiovascular events occurred in 10.3%; statin-related adverse effects were uncommon (9.2%). Being retired was associated with higher odds of prescription, marital status was associated with adherence.

Conclusion: Although statin utilization among patients with CKD and/or T2DM at CCTH was high, medication adherence and lipid monitoring were poor. Behavioural factors, limited education, and access challenges are key barriers. Interventions focused on adherence support, counselling, and routine monitoring are needed to maximize cardiovascular benefits.

Keywords: Real-world evidence; Statin utilization; Medication adherence; Chronic kidney disease; Type 2 diabetes mellitus

Abstracts

Poster Sessions

Temporal Trends and Regional Inequalities in Risperidone Use Among Children and Adolescents with Autism Spectrum Disorder in Brazil, 2014–2023

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Abstract

Background: Risperidone is the most commonly prescribed atypical antipsychotic for children and adolescents with Autism Spectrum Disorder (ASD) within Brazil's Unified Health System (SUS). Identifying disparities in antipsychotic consumption is essential for promoting equity in pediatric care.

Objectives: To assess temporal trends, spatial distribution, and socioeconomic inequalities in risperidone use among children and adolescents with ASD treated in the Brazilian public health system from 2014 to 2023.

Methods: We conducted a population-based ecological longitudinal study using national administrative databases from SUS, covering all 5,570 Brazilian municipalities. The study population included individuals aged 0–19 years with an ASD diagnosis receiving outpatient care. Exposure was defined as dispensing of risperidone, measured as (1) the proportion of ASD patients with ≥1 dispensing and (2) population-level consumption expressed as defined daily doses per 1,000 inhabitants per day (DDD/1,000 inhabitants/day). Temporal trends were assessed using Mann–Kendall tests and Prais–Winsten regression. Spatial autocorrelation and clustering were examined using global and local Moran's I (LISA). Associations with municipal socioeconomic indicators, including the Gini index, were evaluated using Spearman correlation. Results: From 2014 to 2023, risperidone was dispensed to 100,693 children and adolescents with ASD. Use increased markedly, from 1.6% in 2016 to 21.0% in 2023. The strongest upward trends were observed in the South ($\beta = 0.0485$; 95% CI: 0.0340–0.0630) and Southeast ($\beta = 0.0204$; 95% CI: 0.0181–0.0227) regions. High-use spatial clusters expanded from 44 municipalities in 2020 to 74 in 2023. Risperidone use was negatively associated with municipal income inequality (Gini index: $\rho = -0.18$; $p < 0.001$). Conclusions: Risperidone use among children and adolescents with ASD in Brazil increased markedly over time and showed regional and socioeconomic disparities.

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