AfricaSTEMI Live! is a vibrant annual conference focusing on systems of care for the management of acute coronary syndromes (ACS) in resource-constrained environments within Africa.

Initiated in 2016 as a regional response to the emerging African pandemic of coronary artery disease, physicians and cardiologists in the region constructed the meeting to review home-grown solutions to ACS care to meet the demands of this condition. The meeting encourages innovations in learning and clinical care. Unlike many scientific congresses that look purely at clinical care and science, the meeting recognizes the broad pathways that ACS sufferers must negotiate to access timely and appropriate care in their particular country, including emergency response systems, road infrastructure, emergency room resources, healthcare financing, in addition to clinical evidence for efficient care delivery. Since 2016, conference stakeholders have explored gaps within these processes and established solutions, which can be offered with limited resources.

The 2023 conference took place in Nairobi, Kenya

The meeting is hosted by the Pan-African Society of Cardiology (PASCAR) intervention working group, the Pan-African Association of Structural and Coronary Intervention (PASCI). This year’s meeting, which took place in April 2023, was the sixth annual event and welcomed 670 participants. The majority were doctors from a range of specialties. The meeting programme is deliberately designed to include content not just for cardiologists but also for emergency physicians, nurses, cath lab technicians, and residents-in-training. The attendees spanned 18 African countries including Angola, Egypt, Ethiopia, Gambia, Ghana, Kenya, Libya, Mauritius, Nigeria, Rwanda, South Africa, South Sudan, Sudan, Tunisia, Tanzania, Uganda, and Zambia.

The pre-congress programme included a workshop on Acute Cardiac Care led by Global FICCS, a Chicago-based group training medical students to lead certification workshops in Advanced Cardiac Life Support. The 3-day workshop employed an innovative open teaching methodology with emphasis on interpretation of clinical signs and symptoms, and the central role of electrocardiogram (ECG) and point of care ultrasound interpretation in acute cardiovascular care. Alongside this was an echocardiography in coronary artery disease workshop and a simulator-based cath lab skills workshop, focusing on pacemaker implant training.

The European Heart Journal session encouraged submissions from Africa

The European Heart Journal (EHJ) was invited to participate in a joint session. Prof. Elijah Ogola, PASCAR president, discussed the dearth of research output from Africa and encouraged the EHJ to continue its spotlight on underserved regions. The session included ‘best of EHJ 2022’ presentations from Thomas Luescher (Heart Failure) and Habib Gamra (Ischaemic Heart Disease). EHJ Editor-in-Chief Filippo Crea gave the final presentation advising African cardiologists what journal editors look for in a submitted manuscript.

An innovation at this year’s STEMI Live! consisted of a live transmission of a morning ward round from the Uganda Heart Institute. This outstanding session provided a real-life insight into the broad pathology that is presented in a public hospital in sub-Saharan Africa (SSA) and the resources available. Systems facilitating prompt interventions including bystander responses for out-of-hospital cardiac arrest were presented by Prof. Sanjay Sharma before cardiologists from different African countries presented memorable cardiac arrest cases. PASCAR has a major role to play in the development of African resuscitation registries and of guidelines for cardiac resuscitation in the African environment.

Keynote address from Dr Bernard Gersh

Many acute myocardial infarction (AMI) sufferers in Africa who do not die at presentation will develop ischaemic heart failure because of...
delayed reperfusion. How to respond to this, in the acute and chronic phases, was covered in a session, which included outcomes from the recently concluded STRONG-HF trial. The indications and techniques of rhythm and resynchronization devices in ischaemic cardiomyopathy were also covered. Dr Bernard Gersh gave a keynote address on the usefulness of myocardial revascularization in chronic ischaemic heart failure incorporating updates from the REVIVE-BCIS trial.

Hypertension remains the most prevalent major cardiovascular risk factor in SSA, and a dedicated discussion about barriers to control it culminated in a vision of a nucleotide or gene-based hypertension ‘vaccine’. Resistant hypertension and its various mechanisms were summarized within this module. Artificial intelligence and its new role in cardiovascular medicine, from ECG and echocardiography interpretation to telemedicine and diagnostic platforms, were the topics of an exciting futuristic session in which the diagnostic capabilities of ChatGPT technology were challenged live on stage.

Young researchers from the continent present abstracts

Young researchers from the continent were invited to present in the abstract competition. Of several hundred submissions, 70 abstracts were invited for presentation and formed the construct of a supplement of the Cardiovascular Journal of Africa. Of these, the winning abstract presentation was a passionately delivered appraisal of the medical school curricula in terms of cardiology teaching in East African medical schools; certainly, an opportunity for improving access and preparedness to the upcoming pandemic.

In recognition that this is the largest African meeting focused on ACS management, a wave of surveys was initiated during the conference to map out resource access and clinician knowledge, attitudes, and perceptions regarding the existing systems in the various pathways that AMI sufferers are recommended to participate in (e.g. cardiac rehabilitation, heart failure care, etc.).

A truly unique meeting characterized by the energy and enthusiasm of attendees

The final day of the programme was an advanced coronary intervention and echocardiography workshop hosted at the Aga Khan University Hospital, the first centre in SSA certified by the Joint Commission International for its AMI care programme. While AfricaSTEMI Live! 2023 was a great learning experience, what stands out about this meeting remains the very broad footprint of attendees from so many different disciplines, each with a story to tell, the diverse subject matter, and the energy and enthusiasm shown by these multiple players who form the chain of care needed to arrive at the best outcomes for heart attack sufferers. The emphasis is on overcoming many of the barriers to care and logistical issues in an African context and understanding the diversity between countries on the continent. The interaction between physicians from Africa and participants from abroad is a major strength and highlight of this rather unique meeting.

Declarations

Disclosure of Interest

The authors declare no disclosure of interest for this contribution.