The WHF African Summit was held in Khartoum, Sudan on the 10 & 11 October. The Summit had more than 100 participants from Africa, Europe, Canada, Asia among other areas, with active involvement from the members of the Pan African Society of Cardiology, Sudanese and many other African Cardiac Societies, European Cardiac Society, International Hypertension Society, African Heart Network and other non-governmental groups. Representatives of WHO AFRO and WHO Sudan gave lectures and contributed to the discussions. Themes of policy implementation, access to essential medicine and integrative care in Africa were extensively discussed. The summary of discussions is as follows.

### Summary of discussions

#### Policy Implementation

38% of the epidemic of NCDs in Africa are CVDs, including hypertension, cardiomyopathies, rheumatic heart disease, ischemic heart disease, and stroke. NCD risk factors have increased throughout the region, which are not only the responsibility of the individual - including healthy food choices, physical activity, smoking and alcohol intake - but that of external uncontrolled factors. Unfortunately, CVD control has many challenges such as insufficient prevention; lack of feasible, cost-effective, and sustainable primary health care; access to affordable good quality CV care and to controlled medicines; scarce information; and political stability among others. Risk factors begin in childhood, and mother and child health together with reproductive health need to be focused on. Given that the CD programmes are quite advanced, there is a need for the integration of NCDs prevention and care into these. The only way that the WHO 25 x 25 target can be achieved is through a multi-sectoral approach urging leaders and regional stakeholders through advocacy to partner with organizations like us to commit to solutions, disseminate innovation, make substantial investment and take actions.

#### Tobacco

Tobacco use is growing in Africa. Prevalence amongst adult males is 21% (94M) while in women it is 3% (13M) and in youth 18% (21% boys; 13% girls). Half of the adolescents (48%) are exposed to second hand smoke.

More evidence and data is needed for governments to create policies to take action. Factors such as media/advertising and unit sales of cigarettes should not exist, while warning messages, higher taxation benefitting the health sector and more information on the negative effects of tobacco use should be promoted. Ministries and governments need to be aligned and cooperate regionally to create policies that will impact at a national level. They should be made accountable and should ensure that the major elements of a tobacco control enforcement program are at the core of and consistent with the comprehensive national tobacco control plan and policy.

#### Rheumatic Heart Disease (RHD)

Acute Rheumatic Fever (ARF) and Rheumatic Heart Disease (RHD) are still very large problems in Africa today. The good news is that they are preventable, as has been proven through comprehensive
strategies taken in different countries across some years such as Tunisia, Morocco, Costa Rica, Martinique, Cuba and New Zealand.

An action plan for the control of RHD in Africa named the ‘ASAP Programme’ has been developed and states 4 focus areas: Awareness raising, Surveillance, Advocacy, Prevention. To realize this, seven key actions to eliminate RHD were defined in what is called the ‘Addis Ababa communique’. They included to: establish registers, ensure adequate supplies of high-quality benzathine penicillin, guarantee universal access to reproductive health services for women with RHD and other NCDs, focus on primary care, establish centers of excellence for cardiac surgery, foster multi-sectoral and integrated national RHD control programmes, and cultivate partnership through relevant stakeholders to ensure the implementation of these key actions.

On 01 June 2017, the Executive Board of the WHO recommended a Resolution on ‘Rheumatic Fever and Rheumatic Heart Disease’ for adoption at the World Health Assembly in May 2018. This Resolution will become the first global policy on RHD endorsed by all governments to eliminate ARF and RHD. Civil society needs to work with closely with governments to make RHD elimination a reality.

**AHN contribution to policy implementation**

Actual assessment of the situation of health care centers in Africa has proven that the level of primary health care in the majority of the countries of the region is inadequate, especially those with a lower GDP. According to the research and programmes available, awareness and education of the population and governments, and government commitment to implement comprehensive programs is crucial if there is to be any kind of effective policy implementation.

**Hypertension**

High blood pressure is the single biggest killer in every country worldwide, and global prospects worsen. The International Society of Hypertension leads a global program on hypertension detection. Optimal CVD prevention consists of prevention of its development thus awareness is key – without it, hypertension will not be treated and much less controlled, which is what is happening in LMIC. Simple measures beginning with screening and detection is the key to success. National coalitions should be created to tackle the problem where situational analysis is conducted, and with its conclusions, policy dialogues and concrete plans of action can be developed. The CVD Roadmap of the WHF for raised blood pressure has been adapted to the African region to achieve 25% hypertension control by 2025.

**Access to Essential Cardiovascular Medicine & Care**

In high-income countries, CVD risk factors are higher than the LMIC and yet the incidence of CVD is about 7 fold higher in LIC due to lack of efficient health care. Acute care (ability to insert a pacemaker lead, availability of coronary care units and services with nurses able to conduct certain treatments), secondary prevention (smoking cessation, healthy diet, physical activity, blood pressure lowering and combination drugs such as the polypill) and primary prevention (population-wide and individualized strategies) should be organized and focused on. An African research agenda that has been created shows that it is crucial to build capacity for clinical, population and health systems research to greatly reduce CVD. Parallel to this, the organization of health care systems; increased use of NPHW for secondary prevention, tobacco cessation and hypertension control; widespread access to affordable,
proven and simple interventions; a few specialized centers in each region/country for different interventions would make a big difference. Government health care funding should increase to 5% of the GDP and Universal Health Care would greatly support all of these actions to decrease CVDs.

**Southern Sub-Saharan Africa**

Currently, African countries are 80% percent below the global average for pharmacological spending and 20 percent below the global average of behavioral risk factors for hypertension. Managing hypertension is challenging in Africa due to the lack of availability of drugs, high treatment costs, and inadequacy of health services for identification and management of CVD. Additionally, health systems in most LMICs are already stretched by the high burden of infectious diseases (HIV, TB and malaria). It is necessary that governments think long-term to improve public sector provision of care, increase health insurance coverage and expand medicine benefit policies in health insurance systems to increase access to essential CV quality medicines and care for everyone. Care for infectious and NCD need to be integrated into a joint system.

**Sudan**

In countries like Sudan where CVD has always been in the top ten causes of in-hospital mortality, primary health care is being given emphasis. Blood pressure, blood sugar and urine tests are effectuated, and benzathine penicillin is part of the primary care program. Tertiary care, mostly centered in the capital, is a co-payment system equal between the patient and government for those with private insurance, though it is not efficient for urgent interventions. Health care delivery is 70% private and 30% by the national health insurance.

**Niger**

There is a big need for CV care in Niger. Many primary care clinics are not well prepared to implement the guidelines for accurate diagnosis and management of hypertension and other cardiovascular risk factors (CVRF). Screening for blood pressure and diabetes is far below prevalence at the national level and basic equipment and quality essential medicines are inaccessible. Thus it is crucial that the government provides primary health care with basic equipment for monitoring of CVD and CVRF, as well as develop and encourage lifestyle change policies, emphasizing physical activity and a balanced diet, promote education and awareness programmes on CVD, and make people take responsibility for their health.

**Integrative Care**

**Nurse-led integrative care**

Nurses and allied health professionals can contribute to prevention and control of CVD, especially in cases like LMIC where care is not patient nor family centered and is delivered in siloes with a lack of access to essential CV medicines. Nurses are skilled in behavioral counselling and education, work closely together with physicians, are familiar with medicines and monitoring of signs and symptoms, can be trained to follow care protocols, deliver multidisciplinary interventions and manage medications, and promote self-management and patient and family centered care. Numerous studies have proven that nurses’ holistic ethos and role in education and counselling is important for patient
satisfaction. The way forward is to ensure that they are practicing to the full extent of their training with the option for specialization, have less dichotomy with doctors in autonomy and to involve them in health care redesign and leadership.

**Mozambique**

Task shifting among different health care professionals to reduce the burden of heart failure has been crucial in Mozambique. A study was done on ‘Integrated Care for Women with CVD’ where training of health care professionals on CVD, diagnosis and management, integrated CV and reproductive health services, and counselling were successful. The way forward is to learn from CD treatment where this approach has been taken, as well as engage in task shifting, unique training opportunities, investments in care provision and research, and investigate new approaches to integrated care.

**Tunisia and RHD**

The Tunisian experience in combatting ARF and RHD should be used as example for rest of Africa but much support is needed from the governments. Given the drastic situation in the 1970s, a national program made sense, and in 1978 ARF was declared a notifiable disease and in 1980 a standardization of treatment sore throats was implemented. Data showing the burden mobilized the government, and some success factors included monitoring, training documents for primary care and education of all health care professionals, patients and families, as well as the population. Additionally there was support from funding and prevention organizations, and global social and economic growth also helped.

**Integrating RHD into MoH programs**

In Sudan, the initiative ‘SUR I CAAN’ (Surveillance, Integration, Collaboration, Awareness, Advocacy, Training) has been implemented to treat RHD. Work is being done with the MoH by integrating RHD elimination to other programmes, since there are no funds for stand-alone programmes. Given this situation, training is being done through RHD modules included in medical/nursing school curricula, through NGOs and charity missions and local MoH in target states. Work is also being done with WHO Sudan such as funding of medical assistants and mapping the disease with echo screenings. PASCAR has made a grant on advocacy for RHD eradication to integrate RHD into MoH programmes (HIV, TB) in areas that are hotspots. Dialogues will take place in Nov 2017.
Conclusions for the Khartoum Action Plan

The following points were clear conclusions of crucial actions that need to be taken to improve CV health and care in Africa.

1. **Data collection** on CVD via simple surveys and scorecards to be able to convince policy makers should be obligatory
2. Promote legislation for **task sharing/shifting** and knowledge sharing for integrative care. There is a need to work together for improved training and collaboration, remove barriers for non-physicians and to break down silos.
3. Improve **access to essential medicines** and improve **quality of generic medicines**
   - i. Set up standards for generics and create an FDA type organization for Africa where there would be strict supervision, its ownership could rest with the nurses
   - ii. Polypill approach could be explored further
4. Empower **patients** and work with/support patient groups, let them have a voice like the treatment action campaigns for HIV
5. Form stronger policies and integrate policies, engage better with governments and other high-level organizations and involve them with **advocacy** work
   - i. Work with national health programs, launch new ones, invite governments to open symposiums, connect with MoH officials that understand the importance of health, support WHO with their strategies and by providing evidence
6. Adequate and continued **training** of health care providers at all levels. Medical education should study the problems and priorities of communities and focus education on these, and training should include data collection.
7. Improve **primary health care** and create a long-term plan
8. Focus on **RHD** to eliminate it – enforce surveillance, diagnosis, availability of penicillin and improved access to reproductive health. Learn from the examples of successful countries.
9. Prevention programs for **hypertension**
10. Rigid **tobacco** control and educate the population of adverse effects on health
11. Advocate for **universal health coverage** to the extent that it is possible for governments

Important remarks included that whatever the priorities for the Action Plan, it is necessary to effectively collaborate with government and decision-makers to create and drive the change we are looking for in the African region. It is crucial to engage and educate everyone in the CV health movement, from patients and communities to health care providers and policy makers.