

doi:10.1093/eurheartj/ehz472

# The Uganda Heart Association

## Developing cardiovascular care for the 45 million population is the objective of the Uganda Heart Association



The Uganda Heart Association (UHA) was established in 2006 with the objective of bringing together clinicians caring for patients with heart diseases in Uganda. At the time, the country had limited cardiac specialists. Over years, the number of specialists has increased. The UHA emphasizes the prevention, promotion, and treatment of cardiovascular disease and aims to support the Uganda health system by addressing the looming non-communicable disease challenge. The UHA is committed to working with all stakeholders and is willing to offer its expertise and skills in improving access to healthcare.

The UHA is a member of the Pan African Society of Cardiology (PASCAR) and, since December 2018, of the World Heart Federation.

Uganda currently has 45.4 million inhabitants (2019 estimates), with an average life expectancy of 62.5 years (60.2 males; 64.8 females).<sup>1</sup> Forty-eight percent of the population is in the age range of 0–14 years, with just 2% of the population being older than 65 years. This age pyramid influences the current Uganda cardiovascular health challenges which include hypertension and coronary artery disease, particularly in urban areas. However, Rheumatic Heart Disease (RHD) and heart failure due to cardiomyopathies remain enormous challenges. Untreated

Maternal mortality is still very high with 336/100 000 live births. This is due to conditions such as gestational hypertension, pre-eclampsia, haemorrhage, and RHD which is a major contributor.<sup>4</sup> Uganda has a very low obesity rate of 8.6% in females and just 1.8% in males.

The UHA has unique challenges and opportunities to address issues influencing the management of cardiovascular disease—from prevention of lifestyle diseases to improving access to care of people living with RHD.

Due to a limited number of cardiac specialists in the country, the UHA conducts regional electrocardiogram (ECG) workshops to equip medical officers with the necessary knowledge to identify life-threatening conditions such as arrhythmias and myocardial infarction. The association often holds ECG and echocardiography workshops during their annual scientific conferences. Through its advocacy role, the UHA lobbies for government to avail affordable but effective drugs.

The UHA held its 4th Annual Congress on 21–22 February 2019 at the Imperial Royal Hotel in Kampala. The 2-day program had presentations by national and international speakers. Professor Karen Sliwa, President of the World Heart Federation, delivered the keynote note lecture on 'Unique challenges of cardiovascular disease in pregnancy'.

The executive committee consists of the President Dr Peter Lwabi, Past President Dr John Omagino, Vice-President Dr Michael Oketcho, Secretary Dr Sulaiman Lubega, and Treasurer Dr Judith Namuyonga. Committee members include Dr Twalib Aliku, Dr Elias Sebatta, and Dr Tom Mwambu.



RHD results in a mortality rate of 17.1% per annum.<sup>2</sup>

Congenital heart disease in children is still a great challenge in Uganda, as it is worldwide. It is estimated that 1.6 million babies are born each year, of which 8000 will have a congenital heart condition that is significant enough to warrant treatment.<sup>3</sup> The Uganda Heart Institute (UHI) is able to perform open heart operations but is constrained by inadequate funding, operating, and ICU space.

There were several presentations by physicians from Uganda, Kenya, India, and Qatar.

Children in Uganda have joined the battle against RHD. During the conference, a duo of primary school pupils, Israel Musinguzi and Rachel Twesiime recited a poem about the 'Giant Monster Group A Streptococcus', the bacterium that causes rheumatic fever and later RHD.

## The Uganda Heart Institute



The UHI is a public owned Cardiovascular Center of Excellence, under the Ugandan Ministry of Health. The UHI coordinates the management of cardiovascular diseases in Uganda. It focusses on prevention and also provides comprehensive cardiovascular diagnostic services and treatment. The core of its activities is cardiac surgery and cardiac catheterization including mitral balloon valvotomy (BMV) for rheumatic mitral stenosis, pacemaker implantation, and cardiac resynchronization therapy.

In the past year, over 400 procedures (both diagnostic and interventional) were carried out at the UHI. The main challenges faced include late presentation of patients with myocardial infarction and the availability of equipment and devices such as stents, pacemakers, and occluding devices for paediatric patients.

The UHI BMV program was started as a response to the high burden of advanced clinical RHD in the country. Started in 2017 the UHI BMV program, led by Dr Emmy Okello, uses the Inoue balloon technique. It avoids transoesophageal echocardiography by using transthoracic echocardiography during the procedure and has thus eliminated the need for general anaesthesia. This reduces the time patients have to spend in hospital to only 24 h—from admission to discharge. About two to three procedures are performed on a weekly basis. About 60 procedures have been performed since inception. The Inoue balloon is expensive and has remained a major challenge to obtain.

The cardiothoracic surgery division provides open and closed heart surgery, catering to both children and adults, performed by local surgeons. Last year, 100 open heart cases were done at the Institute, the majority of which (70%), were paediatric cases.

The major challenge for the surgical program is funding mechanisms for the necessary supplies, compounded by limited operating and ICU space.

Finally, the UHI provides supervision to Regional Referral hospitals to improve on early diagnosis and referral for intervention with the emphasis on preventive programs.

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**Conflict of interest:** none declared.

### References

References are available as [supplementary material](#) at *European Heart Journal* online.