



Allergies are the most common chronic childhood diseases.

They are also one of the most neglected.

BACKGROUND & CONTEXT

Allergic diseases affect an estimated 400 million children worldwide. Historically, most of this burden has fallen on high-income countries. But rapid urbanisation, changes in lifestyle and diet, and indications of a genetic predisposition in Black Africans, mean the number of children with allergies on our continent is set to rise. Fast.

The challenge is that until recently, child healthcare interventions have focused on infectious diseases. While awareness of non-communicable conditions is rising, aside from asthma, public and professional knowledge of childhood allergies is dangerously low. As a result, allergic conditions are missed and misdiagnosed — with care often focused on the management of individual symptoms, rather than treating the underlying cause.

Unmanaged, even the most common allergy can impact a child's health, education and quality of life. Severe cases lead to hospitalisation, long-term morbidities, and death.

Specialist paediatric allergists offer a holistic approach that makes sure children get a full diagnosis and comprehensive treatment plan that responds to their allergy as a whole. However, there are just 21 specialist paediatric allergists active in sub-Saharan Africa, 15 of whom practice in South Africa.

The African Paediatric Fellowship Programme (APFP) is a South African initiative committed to building a specialist child health workforce in Africa.

The University of Cape Town (UCT) is the only centre in sub-Saharan Africa offering sub-specialist training in paediatric allergies. By the end of 2023, five of the 192 fellows trained under the APFP at UCT were working as qualified allergists, with another mid-training.

Together they are breaking new ground in child health and working to establish and embed paediatric allergies as a new specialist area for the care of children in Africa.

“The experience of high-income countries has shown us how fast paediatric allergies can rise. By investing in a network of sub-specialist expertise, we have a chance to stay ahead of this curve, manage — and stop — the rise of paediatric allergies in its tracks.”

Professor Mike Levin,
Speciality lead, APFP

DR. OLATUNDE ODUSOTE

HEAD OF PAEDIATRIC ALLERGY, DERMATOLOGY
& PULMONARY MEDICINE
Lagos State University Teaching Hospital



2015-17

INTRODUCING DR. ODUSOTE

It was dermatology that brought Dr Odusote to the world of paediatric allergies. Based at the Lagos State University Teaching Hospital (LASUTH) in Nigeria, he noticed that many of his patients were presenting with atopic dermatitis (eczema) and linked co-morbidities — but that they were not receiving optimal care.

Determined to address the problem of inadequately managed allergic conditions, in 2015 he travelled to South Africa to complete a two-year fellowship with the APFP. Returning home as the country's first specialist paediatric allergist, he felt confident he had the foundations he needed to improve patient care and start building a network of allied health professionals.

■ A HOLISTIC TRAINING PACKAGE

With such an important mandate, Dr Odusote knew his time with the APFP would be about more than clinical skills. It was a chance for him to grow as an educator, build his research and leadership skills, and learn how to advocate and fundraise for children with allergies.

They were essential tools to have. Dr Odusote works in a country (and continent) where awareness as to the burden and impact of paediatric allergies is low. To move forward, he had to make sure that the surrounding environment was set to deliver.

“The APFP is the whole package. It helped me to get buy-in outside the hospital space, so that I can do exactly what I need to do.

■ THE FOUNDATIONS OF CHANGE

The first step was to set up a national allergy society. Recognised by the World Allergy Organization (WAO) in 2023, he knew that ACIS (the Allergy and Clinical Society of Nigeria) would give him the face and credibility he needed to bring paediatric allergy care home. It worked.

That June, the group secured funding to host Nigeria's first national Allergy Congress. Bringing together over 50 professionals from allied specialties, the event created an important opportunity to explore current trends in paediatric allergies, advocate for improved resources, and build professional skills and capacity.

■ A CRITICAL MASS OF EXPERTISE

In addition to his work with ACIS, Dr Odusote has been working hard to embed paediatric allergy into the undergraduate and post-graduate curriculums at LASUTH and the Lagos University Teaching Hospital. He is proud to have achieved both — with the evolution of these curriculums showing a new level of recognition for paediatric allergy care in Nigeria.

Building on this, and the success of the recent Congress, Dr Odusote has seen an increased level of interest in both short and long-term training. The perfect example of the APFP pan-African network in action, Dr Odusote is using this momentum to work with another APFP alumnus to develop a regional curriculum for a diploma in paediatric allergies. He has also joined forces with alumni from Kenya and Ghana to deliver the World Allergy Training School's first event in West Africa, held in September 2024. Affiliated with the Emerging Society Program (a unit of the WAO), this two-day workshop created space to close identified skills gaps and empower practitioners to support children and adults with allergies.

“It's a domino effect. When you do one thing credible, others come. With all this training and awareness, I know that when it comes to policymakers, we will get it done.”

■ DRIVING LOCAL AND REGIONAL ALLERGY CARE

Dr Odusote is also an active researcher. Diving deep into the Nigerian context, his studies reveal that 70% of children with asthma here also suffer from allergic rhinitis, a secondary condition that often goes untreated. His research has also led him to discover a new driver of paediatric asthma (a dust mite called *Blomia tropicalis*) found in the coastal regions of Africa.

Both findings highlight the importance of local research and have major implications for the management of paediatric allergies in Nigeria and across the continent. After all, change comes from within. By harnessing the power of local practitioners, networks and data, Dr Odusote and his colleagues are making sure paediatric allergies gets the recognition and resources they deserve.

ON TRAINING WITH THE APFP

“The APFP has helped me fulfil my passion. I'm grateful for the training, the empowerment and to have friends and networks across the continent. It's huge.”

DR. KASSIM MAPONDELA

SENIOR LECTURER & CONSULTANT ALLERGOLOGIST
Muhimbili University of Health and Allied Sciences



INTRODUCING DR. MAPONDELA

As an ear, nose and throat (ENT) specialist, 50-60% of the children referred to Dr Mapondela's care were being treated for allergies. Without an in-country specialist to refer to, he found that most of their treatment plans were based on the premise of "one-size-fits" all.

It doesn't. Paediatric allergies are caused by a number of factors — genetic, environmental, or both. Yet for many of his patients, the advice they had been given was incorrect: to cut essential proteins from their diet. Dr Mapondela knew it was why he saw so many children presenting with malnutrition. What he didn't know was how to offer an effective alternative, and it was his quest to find that answer that led him to the APFP.

■ PREPARING TO ESTABLISH A NEW SUB-SPECIALTY

Dr Mapondela trained in South Africa for two years. Using the same strategy as others before him, he knew he needed to use this time, not just to focus on clinical training, but to lay the foundations for establishing a new subspecialty back home.

Like Dr Odusote, Dr Mapondela started by setting up the Allergy Society of Tanzania (ASOT). A registered member of the World Allergy Organization (WAO), it is already proving an essential tool to bring allied health professionals together, raise awareness on paediatric allergies, and reinforce the role of different specialists in patient diagnosis, treatment and care.

With this foundation in place, Dr Mapondela and the ASOT team held Tanzania's first allergy symposium in November 2022. Supported by APFP alumni from East Africa, and attended by 69 allied professionals, it was the perfect introduction to this new sub-specialty – with a second event in Northern Tanzania (Arusha) in October 2023 putting Dr Mapondela and paediatric allergies firmly "on the map".

"At first, people didn't know there was an allergy specialist in Tanzania. Now they do! Today ASOT has 50 members (and counting). I know that together we can get things done."

■ DELIVERING ON PATIENT CARE

Demand is high. Already the new allergy clinic at Muhimbili National Hospital (Tanzania's first) is running three days a week and sees 20-25 patients every time. In addition to diagnostic and treatment services, it's an essential source of health education and is helping children and families learn how to live well with allergies.

It is an important gap to fill, and it's why Dr Mapondela and his colleagues are also working to train a network of Tanzanian pharmacists. A key pillar for community-based care, physicians depend on pharmacists to teach children and their families how to use prescribed products, like inhalers. This new training programme will help make sure they have the skills to share this information and support the delivery of paediatric allergy care in communities across Tanzania.

■ BUILDING A MULTI-DISCIPLINARY TEAM

For Dr Mapondela, success depends on people. As well as training pharmacists, he is proud to have integrated allergy training and rotations into undergraduate and post-graduate paediatric and ENT curriculums at the Muhimbili National Hospital. He has also created opportunity for a supporting nurse practitioner to train with the APFP, and is working to identify a second fellow for two years' of subspecialty training.

"It can be hard, when you're establishing a new practice. But the more people understand you, the field, and the patient... the more we can make an impact on child health."

It will take time, but Dr Mapondela knows that it is these professionals — and the multi-disciplinary potential they bring — that will take Tanzania's paediatric allergy services to the next level.

He isn't short of ambition. Dr Mapondela wants to see the Muhimbili National Hospital become a recognised World Allergy Organisation Centre of Excellence in paediatric care. As he continues his work – which also includes developing national guidelines for the treatment of asthma – we have no doubt that he will build the team, networks and links he needs to get there.

ON TRAINING WITH THE APFP

"I don't think there is any other training in the world where a doctor in Africa can practice in the way that APFP fellows practice. It's clinical experience 100%. It was amazing!"

DR. ELIZABETH W. KIRAGU

SENIOR INSTRUCTOR & PAEDIATRIC ALLERGIST
Aga Khan University Hospital



INTRODUCING DR. KIRAGU

For Dr Kiragu, the decision to become a paediatric allergist was an easy one. Before she trained with the APFP, there was only one comprehensive allergy service in the country, and it was only accessible in the private sector. The gap was clear to see. So when a colleague mentioned the chance to train with Professor Levin and the APFP in South Africa, Dr Kiragu was quick to accept.

From the moment she stepped into the allergy clinic at the Red Cross Children's Hospital in Cape Town (or 'S20' as it's informally known), Dr Kiragu knew it was where she was meant to be. She loved the holistic nature of the practice, and how it enabled her to "join the dots" and treat the whole condition, not just individual symptoms.

It was essential that she did. In Kenya, the control of infectious diseases has always been a necessary priority. But the number of children affected by allergies is rising. Dr Kiragu could see that misinformation and a lack of understanding as to the nature and management of allergic conditions was putting their health at risk.

■ RAISING AWARENESS

Even though Kenya already had an active allergy society, Dr Kiragu knew that awareness-raising was going to be an important part of her role — and that meant advocating for paediatric allergies in professional *and* public spaces.

The Aga Khan University Hospital was the perfect partner. Under the guidance of Dr Kiragu, services have evolved to include a range of consultative, testing and therapeutic treatments, such as skin pricks, specific serum IgE testing and provocation challenges. That's just the start.

As an emerging specialty, Dr Kiragu discovered that allergy tests and treatment weren't included as part of Kenya's standard health insurance packages. Determined to change this, she set about calling and meeting with

different providers — making her case, and helping companies understand why this essential area of child healthcare should be covered.

"I had to lobby, but companies are starting to see that it makes financial sense. We've covered the basics, but we still have a problem with more sophisticated treatments. Like biological therapies — we're working on that now!"

■ INTEGRATING PAEDIATRIC ALLERGY CARE

Dr Kiragu has also been working with the Aga Khan team to raise awareness amongst healthcare professionals, and integrate allergy training into the University's general paediatrics training programme.

A blueprint for similar initiatives, as a member of the Kenya Paediatric Association, Dr Kiragu is also part of a collective effort to expand this work and establish a specialist training curriculum under the East Central and Southern Africa College of Paediatrics and Child Health. It's taking time, but as professional practices start to evolve, she knows it's worth every second.

"My biggest joy is when I get calls from residents across the country (newly qualified or in training) and they've formulated a good treatment plan. It's amazing to know that you imparted knowledge that has made a difference to a child's life."

■ A FORCE FOR CHANGE

She isn't alone. Four years after she returned home, Dr Kiragu was joined by Dr Evelyn N'gang'a, an APFP trained specialist based at The Nairobi Hospital.

United by a common goal, they are committed to expanding allergy care across Kenya. This includes their work with the national allergy society — of which Dr Kiragu is now the sitting Chair. Once again part of a collective effort, they are working together to develop Kenya's first National Guidelines on the Management and of Testing of Allergic Conditions. The culmination of three years' work, this landmark document is set to standardise allergy care at every level of the health system and marks an important step forward in establishing this new subspecialty in Kenya and beyond.

"If we can get the word out, and the Guidelines out, it will help make sure that we're treating allergies as a whole. It will dispel the myths, and support people in understanding the science behind the conditions."

ON TRAINING WITH THE APFP

"S20 clinic was a safe haven. There was a lot of learning, and I really felt like I was part of something special."

OUR VISION | ESTABLISHING A NEW SUB-SPECIALITY

... to prevent and manage allergies in children

By investing in a network of paediatric allergists, the APFP is doing more than building a critical mass of expertise. We are working to introduce and embed a new sub-specialist area of child healthcare in Africa.

This doesn't just take time, it also requires a very focused and specific strategy. One that works to raise awareness and understanding through the establishment of national allergy societies, and empowers fellows and allied healthcare professionals to drive new developments in patient care, and surrounding health policy.

As we look to the future, the APFP is committed to continuing this programme of work and:

- Collaborating with partner centres to select and train additional specialist paediatric allergists for Africa.
- Facilitating the creation of national and regional allergy societies to advocate for individual and collective country needs.
- Supporting the development of multi-disciplinary teams, with fellows working alongside paediatric nurses, pulmonologists, otolaryngologists, dermatologists and other specialist fields.
- Guiding alumni in the creation of a Centre of Excellence in East and West Africa and associated training programmes, including online initiatives, in-person courses, and rotations at UCT.
- Providing ongoing mentoring and support to all alumni through a combination of telemedicine events, in-person visits, and international platforms.

The prevention and management of paediatric allergies is one of the best ways to effect large-scale change in child health. Donate today and join us on this transformational journey.

FOR MORE INFORMATION

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SUPPORT OUR WORK

It costs US\$30 000 a year to fully support the training of paediatric specialists like those profiled here. If you would like to be part of this work, please visit:

The Children's Hospital Trust
www.childrenshospitaltrust.org.za/donate
and choose the APFP.

Photos by Karin Shermbrucker throughout, except on p 5, photo by Jodi Bieber.

