

Eye care challenges and opportunities in developing countries

With every challenge comes opportunities for innovation, improvement and learning. At this year's COECSA Annual Congress we look forward to welcoming you to Arusha and challenging you with new ideas and research on the theme of *“Eye care challenges and opportunities in developing countries”*.

The challenge of providing optimal eye care in Africa is substantial. In 2010 it was estimated that 4.8 million people were blind and a further 16.6 million suffered moderate to severe visual impairment in Africa. Given that approximately 70 – 80% of global blindness is avoidable or preventable, there is an enormous burden of visual impairment caused by potentially curable causes, particularly cataract and refractive error. Relieving the burden of cataract and refractive error requires a focus on facilitating access to healthcare facilities and ensuring sufficient human and resource capacity to provide high-quality cataract surgery, refraction and spectacle dispensary. Outreach clinics, patient education and the training of more optometrists and ophthalmologists are going a long way to breaking down these barriers.

While long-established causes of blindness, such as cataract and refractive error, continue to be the major cause of blindness, Africa faces the challenge of a growing epidemic of non-communicable disease. Although most industrialised countries did not develop high rates of diabetes, obesity and Alzheimer's until a time when infectious causes of death were relatively rare, Africa's expanding, ageing and urbanising population sees stretched healthcare systems facing the dual challenges of communicable and non-communicable disease. It is here that technological solutions promise to greatly expand the productivity of African healthcare workers. Equipped with a smartphone and a short training course, it is envisaged that healthcare workers will efficiently screen large numbers of people in their communities for potentially

sight-threatening diseases, such as glaucoma, refractive error and diabetic retinopathy. Innovations that are proven in an African setting have a huge potential market as industrialised countries look to reduce their healthcare costs and increase productivity. Local innovations should therefore see their potential market as global, not just Africa-wide.

The unique combination of people and diseases means that Africa-specific evidence-based medicine needs to be developed. While some may argue that research is a luxury that many African countries cannot afford, a stronger argument can be made that research is a necessity that no African country can afford to go without. Well-directed research provides the knowledge to effectively plan and deliver optimal healthcare. The money spent on research will be recovered by more efficient spending of precious health dollars. Without research we are liable to continue ineffective or potentially dangerous healthcare behaviours; the knowledge from research facilitates continued improvement.

There are many reasons for optimism. Africans are better educated, wealthier, more informed and more globally conscious than ever. Given the right opportunities the challenges of eye healthcare will be met with a rigorous response from a well-trained workforce equipped with innovative solutions customised to an African setting. These changes will not happen without us all playing a part in recognising the challenges and facilitating research and innovation that brings optimal solutions to our patients, no matter where they are.

Frank Sandi, Chair, 4th COECSA Congress Organizing Committee

Heiko Philippin, Chair, 4th COECSA Congress Scientific Committee