

Stand for action! Eye care and Sustainable Development Goals

The global community declared ambitious developmental goals to be achieved by the year 2030. These United Nations 17 goals hoped to transform our world to a better place to live in. Sustainable Development Goals (SDGs) have 17 goals and 169 associated targets. SDG-3 that promotes good health and wellbeing was one of these fundamental agendas. SDGs aspires inclusive development hoping that no one will be left behind regardless of his/her status of economy, disability, gender, age, colour, ethnicity, or religion¹.

The College of Ophthalmology of Eastern, Central and Southern Africa region (COECSA) and its members promote and advocate for the implementations of SDGs. By so doing COECSA, considers the theme of the 2018 annual congress to correlate with SDGs entitled as 'Stand for action! Eye care and Sustainable Development Goals.'

It is known that eye health is strongly linked to the SDGs framework as it prioritizes and advocates the allocation of government resources and promote a global partnership for development. SDGs will have bigger impact on eye health by alleviating poverty and reducing inequality. People with unavoidable blindness and visual impairment (people with disability=PWD) are given due consideration on 11 of the 17 goals which need due attention of inclusive development^{1,2}.

Vision loss and eye disorders cost the US health care system US\$65.1 billion in 2013, the 6th leading causes of medical expenditures³. The total economic cost of vision loss in Australia is estimated to be US\$16.6 billion or US\$28,905 per person with vision loss aged over 40 years⁴. In 2015, the sub Saharan Africa prevalence of visual impairment (VA < 6/18) was about 4.5%. Based on most recent WHO estimates, in Africa 4.8 million people are blind and 16.6 million are visually impaired with respective huge economic impact and hindrance for sustainable development. Hence it is clear that billions of dollars could be saved annually if avoidable visual impairment was prevented or cured in Africa as well^{5,6}.

Goal 1: End poverty and all its forms everywhere: Visual impairment is both a cause and consequence of poverty. Blindness presents barriers to education and employment, and poverty makes it difficult to access eye health care services. Eye health care is an essential component of health system. The prevalence of visual impairment is much higher in Africa. Within Africa vulnerable communities are, the worst affected. Improving eye health and reducing visual impairment is achievable, cost effective and contribute significantly to poverty reduction. Despite significant rates of refractive error, cataract and diabetic retinopathy, eye health services in Africa remain

under-resourced⁷. COECSA considers that building workforce capacity is essential to fostering sustainable eye health systems and reducing avoidable blindness, which is a known driver of poverty. It is important to use the local knowledge, international experience, resources and networks of local, national and international stakeholders.

Goal 2: End hunger, achieve food security, improved nutrition and promote sustainable agriculture: Nutritional blindness or Vitamin A deficiency (VAD) disorder is a common eye disease in children of Africa. Vitamin A supplementation for children prevent VAD as a cause of blindness. Poverty and malnutrition need to be alleviated for the prevention of nutritional blindness⁸.

Goal 3: Ensure healthy lives and promote well-being for all at all ages: Many eye conditions are classified as Non-Communicable Diseases (NCDs) (Target 3.4) including cataract, glaucoma, Diabetic Retinopathy (DR), macular degeneration and even refractive error. NCDs exhibit early signs that can be detected by comprehensive eye examination. Primary eye care is therefore essential in the multi-disciplinary integrated approach to NCDs management. Screening of chronic eye condition is key component of integrated primary health care system⁹. For every US\$1 invested in scaling up actions to address NCDs in LMIC, there will be a return to society of at least US\$7 in increased employment, productivity and longer life¹⁰.

Cataract is the leading cause of blindness in the world (nearly 35%). The world's ageing population continues to grow so will the number of cataracts. Cataract surgery is one of the most cost-effective interventions. In Africa, there is a critical shortage and uneven distribution of human resource for health. Coordination and planning at local, provincial and national levels is essential to ensure existing resources in eye health are operating efficiently and effectively^{5,11}.

"Achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all (Target 3.8)" need to address cataract surgical services which is found to be the main surgical service in African eye care. Surgical outcome monitoring using WHO tool needs implementation to ensure quality of care.

Diabetic retinopathy affects over a third of all people with diabetes and is the leading cause of visual loss in working age adults. Early detection and timely treatment can prevent the majority of diabetes related complications or vision loss. The management of diabetes and its

complication begins in primary health care system by screening and referral accordingly¹².

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all: A child with a visual impairment has less opportunity for formal education. There are many reasons why children living with visual impairment and in poverty may miss education. Refractive errors constitutes the majority of visual problems in the children (12 million of the 19 million). Comprehensive school eye health programmes, primary eye care and spectacle dispensing can address these problems^{5,13}.

Goal 5: Achieve gender equality and empower all women and girls: Advocates prioritization of women in eye health, since huge burden of visual impairment is among women, accounting for 55% of all blind people globally and barriers to access services (Target 5.1)⁵. 'Ensure women's full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic and public life' (target 5.5) which will improve eye care service uptake and gender equality. COECSA advocates for that among ophthalmologists for leadership and on service delivery by prioritizing women and girls.

Goal 6: Ensure availability and sustainable management of water and sanitation for all: Access to adequate, affordable and safe drinking water, and equitable sanitation and hygiene is necessary to eliminate infectious causes of avoidable blindness like trachoma, particularly for women. Inadequate water supply, insufficient sanitation, crowded living conditions, and poor hygiene are prevalent in many African countries with 77% of global trachoma burden¹⁴. Trachoma, the leading infectious cause of preventable blindness, is a public health problem in 41 countries and responsible for the visual impairment of approximately 1.9 million people globally. Rates of trachoma are higher in women (75%). Global Elimination of Blinding Trachoma by 2020 (GET 2020) initiative, supported by the WHO and international partners, advocates for the implementation of the SAFE strategy¹⁴.

Onchocerciasis is the second most frequent infectious cause of blindness. More than 99% of infected people live in 31 African countries. Infection with a parasite *Onchocerca volvulus* causes inflammation within the eye and permanent blindness. Community directed treatment with ivermectin is core strategy in Africa¹⁵.

Goal 8: Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all: People with visual impairment have a number of barriers to find well-paid and productive employment. Health programs that develop eye health can reduce the burden of avoidable visual impairment, which empowers people by restoring sight to have greater access to employment¹⁶.

Goal 10: Reduce inequality within and among countries: Equal access to appropriate and effective health service is essential in Africa to ensure development. Most eye care personnel are based in cities, which create inequalities in quality of care. Outreach programs and integrated primary eye care approach can promote service delivery to remote places. COECSA is working towards integration of training programs and regional collaboration on eye health capacity development. COECSA, WHO Afro, ICO, different NGO's, Universities and partners needs to strengthen working towards ensuring equalities^{2,11}.

Goal 17: Strengthen the means of implementation and revitalize the global partnership for sustainable development: This commitment is crucial to improve the eye care development in Africa that can be seen with existing NGO supported successful programs. North South, South-South and triangular cooperation is essential for ensuring global development and reducing disease burden of avoidable cause. However, it is undeniable fact that government commitment and community ownership of its own country program is cornerstone for successful implementation of Universal Health Coverage or Universal Eye Health¹¹. "Enhance the global partnership for sustainable development, complemented by multi stakeholder partnerships that mobilize and share knowledge, expertise, technology and financial resources, to support the achievement of the SDG in all countries, in particular developing countries (Target 17.16)" is reflected in COECSA activities that expand the impact of blindness prevention work in the region. We believe that multisector collaboration and integrated health care service delivery has quadrupled financial return to eye health investment. All governments, communities and stakeholders need to work hard towards SDGs in order to reduce visual impairment and poverty¹⁰.

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