

The Success and Impact of College of Surgeons of East Central and Southern Africa, (COSECSA) Surgical Training in the East, Central and Southern Africa

Background of COSECSA

COSECSA is the brainchild of the Association of Surgeons of East Africa (ASEA). One of the early objectives of the Association was to enhance surgical training. COSECSA was formally inaugurated at the historical meeting of the 50th Anniversary of ASEA in Nairobi on 1st December 1999. Although the College started in 1999, the reference to a Surgical College in the region is as early as the formation of ASEA.

COSECSA is a non-profit organization dedicated to improving surgical care in the region through education and training, research, and advocacy. COSECSA aims to strengthen the surgical field by providing opportunities for surgeons and other healthcare professionals to enhance their skills, knowledge, and expertise.

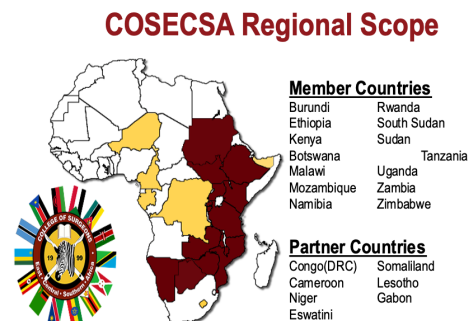
Sub-Saharan Africa has 3-4 percent of the health workforce, 24% of the global burden of disease with a shortage of 7.2 million health workers, this figure is likely rise to 12.9 million by 2035. COSECSA was established in response to the lack of access to safe, high-quality surgical care and training opportunities for surgeons in East, Central, and Southern Africa. The main aim of the College was to harmonize surgical training in the region of East, Central and Southern Africa, and to raise the standards of surgery by organising modular training programmes in Basic Surgical Training leading to the Membership (MCS-ECSA) and Higher Surgical Training leading to Fellowship (FCS-ECSA). With this objective achieved, COSECSA has become the largest surgical training institution in Africa. The College consists of 14 constituent member countries but trains in 21 countries in Sub-Saharan Africa. Membership in COSECSA is open to qualified surgeons who have completed their surgical training and passed the college's fellowship examination. COSECSA has so far been instrumental in improving surgical care in the region by providing training opportunities and promoting best practices in surgery.

Through its initiatives, COSECSA aims to improve surgical outcomes, increase access to quality surgical care, and reduce the burden of disease in East, Central, and Southern Africa. COSECSA's mission is to promote excellence in surgical care and to support the professional growth of surgeons, anesthesia providers, and other healthcare professionals in the region. COSECSA's main objective is to create a sustainable network of skilled and

competent surgical professionals who are capable of providing high-quality care across the region.

All the efforts are in line with Sustainable Development Goal 3 (SDG 3). Scaling up surgical care, particularly in LMICs, is imperative to accelerate progress towards attaining SDG 3. In particular, quality surgical care is required to address these targets: specifically, Target 3.c: *Substantially increase health financing and the recruitment, development, training and retention of the health workforce in developing countries, especially in least developed countries and small island developing States*

Fig 1: COSECSA Coverage:



COSECSA Key achievements to date are summarized in the facts and figures below; -

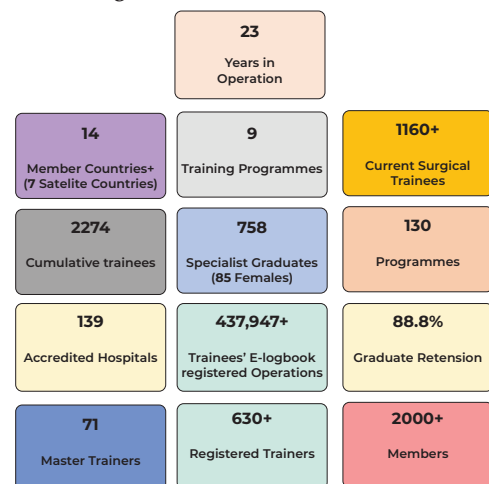


Fig 2: COSECSA Facts and Figures

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Promotion of excellence in surgical education and training to increase accessibility to Surgical care in the Sub-Saharan Africa;

5 billion people lack access to surgical care when needed. The situation is worse in Low and Low-Middle Income Countries where 90% of patients cannot access this care. Main factors to the inequity are a low specialist surgical workforce density and the skewed distribution of skilled providers. In 2004, the COSECSA region had a surgeon-to-population ratio of 0.53 per 100,000 population with 1,690 surgeons serving a population of more than 320 million. Against this background, COSECSA has grown in stature and currently boasts of having graduated 758 surgeons across 21 countries and spread in both rural and urban areas in the sub-Saharan region. In addition, COSECSA is currently training more than 1160 surgeons in 139 hospitals in the region.

Surgeon Retention following Specialist Training in the COSECSA Region;

Although the surgeon density has increased, COSECSA aims to graduate 1000 surgeons by 2025 as part of its strategic plan. This target is likely to be surpassed considering the current graduated number of 758 surgeons and the current COSECSA exponential annual growth of graduates. A COSECSA study (1973 to 2013) found retention rates of 85.1% in their country, 88.3% in their region and 93.4% in Africa. The collegiate model of training is an in-service, apprenticeship-style model. Training is undertaken in hospitals accredited by COSECSA, satisfying all prerequisites for training. These hospitals include public and private hospitals, located in urban, non-metropolitan, and rural areas. Of the eighty-seven accredited training sites 63% are public hospitals and 37% are private. Seventy-five are located in urban areas (54%) and 64 (46%) are in non-metropolitan or rural areas. This model of training and distribution of training sites has promoted the retention levels of the

Fig 3: Surgical Training Enrolment Trend (2002-2023)

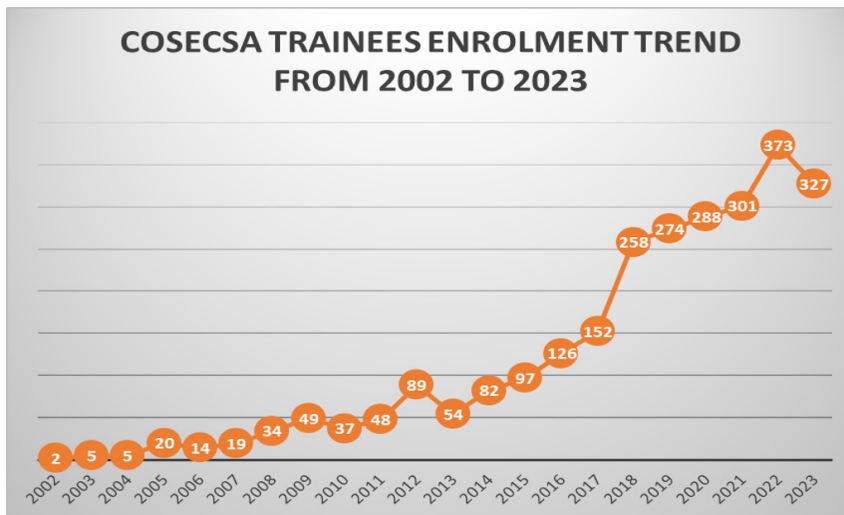
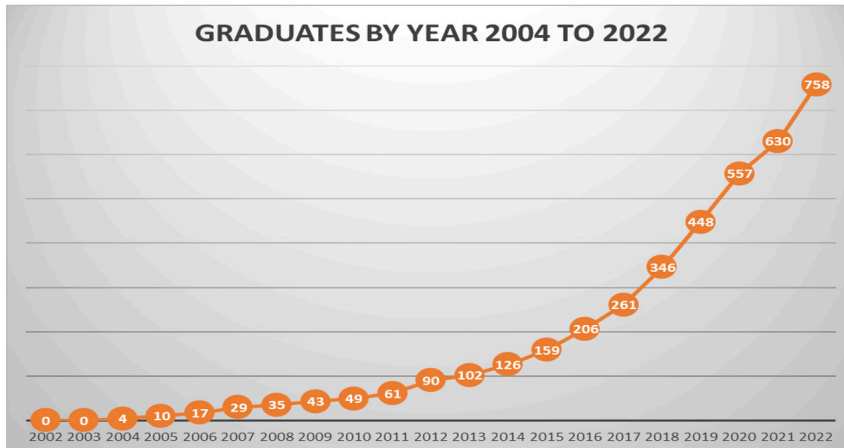
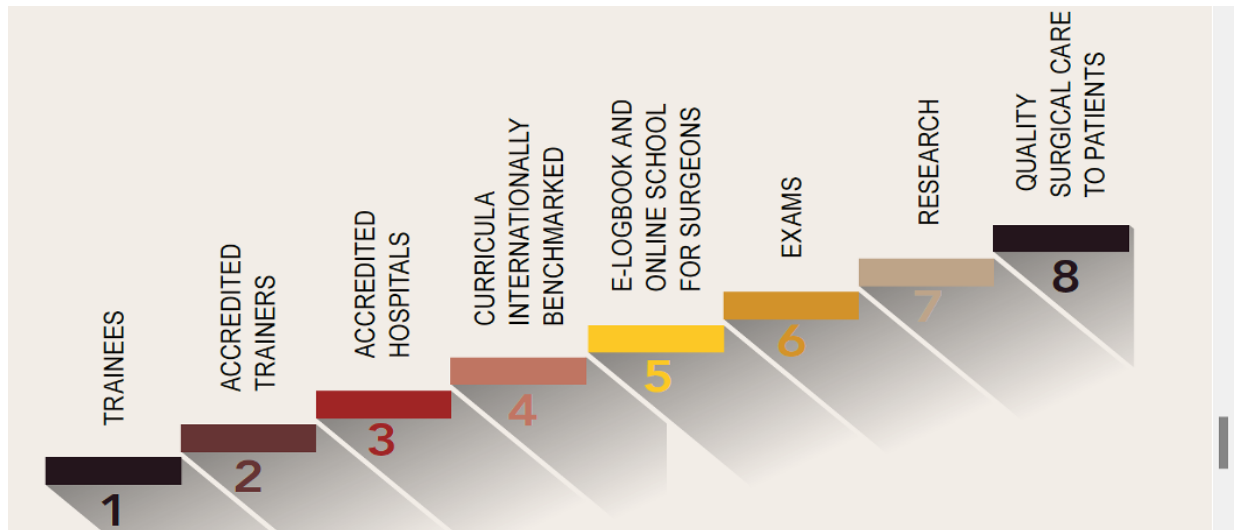


Fig 4: Exponential Growth of Graduates





COSECSA: From Training to Impact

COSECSA trained surgeons. It has also increased access to surgical care.

Strategic Partnerships and Collaborations; Collaboration between COSECSA and RCSI

The Royal College of Surgeons in Ireland (RCSI) & COSECSA entered into a Memorandum of Understanding in July 2007 to “improve the standards of surgical care, education, training and examinations in the East, Central and Southern Africa Region”. The two commenced the implementation of the collaboration programme in April 2008. The Irish Aid has since through the Collaboration Programme provided a Grant to cover essential programme costs ranging from Operational Costs to Surgical Education/ Training development costs and this has yielded tremendous achievements and strengthened the Collaboration between RCSI and COSECSA. The above-mentioned collaboration was as a result of the idea that was mooted by the then COSECSA President (Prof K.Erzingsian, an RCSI graduate & Fellow) and RCSI President (Prof G C O’Sullivan).

COSECSA has also established partnerships with various organizations and institutions to support surgical training programs, research, and advocacy initiatives aimed at improving the quality of surgical care and reducing the burden of surgical diseases in Africa. Since its inception, COSECSA has been actively involved in advancing surgical care in Africa through various programs. These include the development of surgical training curricula, accreditation and certification of training institutions, establishment of a robust network for continuing professional development, support for research in surgical care, and the promotion of collaborative partnerships within and outside Africa. Further, the College works closely with local governments,

healthcare institutions, and other stakeholders to develop and implement programs that address the unique challenges faced by surgical teams in the region. These programs include hands-on surgical skills training, professional development courses, and continuing

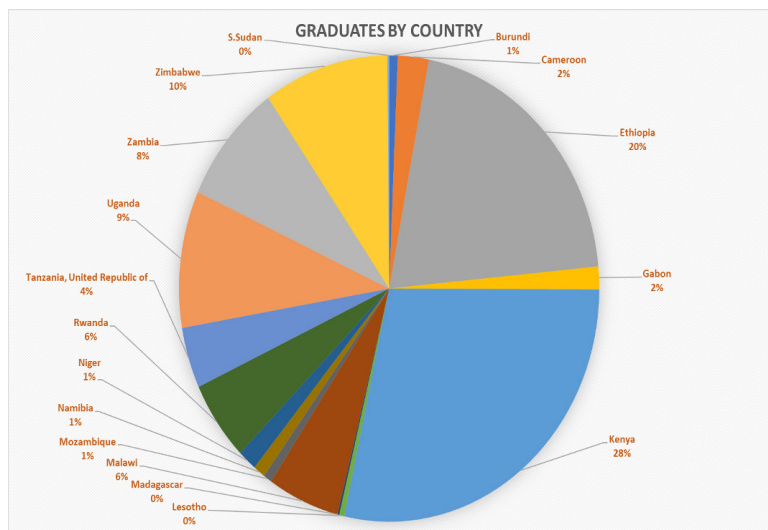


Fig 5: Distribution of Graduates across 21 Countries

education opportunities for practicing surgeons.

Some of COSECSA’s notable partnerships include collaborations with national surgical societies – these are affiliate bodies of COSECSA at National Level and in all Member Countries, international NGOs, academic institutions and government agencies to advance surgical education, research and clinical care, and to support capacity-building initiatives. These partnerships have played a critical role in promoting access to quality surgical care, improving patient outcomes and strengthening healthcare systems in East, Central and Southern Africa. Through these partnerships, COSECSA has been able to leverage the expertise and resources of a diverse range of stakeholders, including surgeons, academics, policymakers, and community leaders, to

make significant progress towards its goal of improving surgical care in the region. Overall, partnerships have been instrumental in advancing COSECSA's mission and enhancing the quality of surgical care in the region by promoting collaboration, resource sharing, and mutual learning among members of the surgical community.

The organization's efforts have made a significant impact on surgical care in the region, with over 1,000 surgeons and other healthcare professionals receiving training through COSECSA's programs, and over 700 surgeons completing the organization's rigorous fellowship exams. The organization's commitment to improving surgical care in East, Central, and Southern Africa through training and education programs has been crucial in supporting the professional growth of surgeons and other healthcare professionals in the region.

Establishment of Women in Surgery Africa (WiSA)

In a bid to increase the number of women surgeons, COSECSA established WiSA (Women in Surgery Africa). WiSA supports women who are pursuing careers in surgery through mentorship, networking and scholarship opportunities. COSECSA has purposed, through its Strategic Plan (2021-2025) to increase the number of COSECSA trainees who are women to 20% through training and in leadership roles in surgical practice. To date, WiSA has a full and independent governance structure with representatives of national chapters in each COSECSA Member Country. In the same regard, COSECSA has dedicated financial support through Scholarships from various partners, American Colleges of Surgeons, Association of Women Surgeons and AO Alliance that have enabled women to meet the cost of training and ultimately finish the programme by examination. COSECSA has also advanced gender equity by having the top Council position (President) occupied by a woman, Dr. Jane Fualal who is the current President of College and WiSA Patron.

The sustainability of the College of Surgeons of East, Central and Southern Africa (COSECSA) is crucial in ensuring the provision of quality surgical education and training across the region. To ensure the sustainability of COSECSA, it is important to establish strong partnerships with governments, educational institutions, and international organizations that share a common goal of improving surgical care in the region. Additionally, COSECSA also focuses on developing sustainable funding strategies that would enable it to continue providing quality surgical education and training programs in the region.

COSECSA endeavors to engage in fundraising activities, establishing collaborations with private and public sectors, and exploring alternative revenue generation streams. COSECSA also prioritizes the recruitment and retention of highly qualified and experienced faculty to ensure that its programs continue to meet the changing needs of surgical practice. Furthermore, COSECSA enhances its sustainability by investing in research to identify and address the challenges facing surgical practice in the region.

Challenges faced and measures taken to address them;

However, like any other institution, COSECSA faces a number of challenges. Some of the challenges that COSECSA faces include: limited resources for training, insufficient financial support from governments and development partners, inadequate infrastructure in some training institutions, shortage of experienced trainers and mentors, and difficulty in absorbing the trained surgeons in the region through respective country recruitments which may lead to brain-drain. Despite these challenges, COSECSA remains committed to its mission of improving surgical care in East, Central and Southern Africa.

The institution has implemented various strategies to address some of these challenges, including seeking alternative sources of funding, strengthening partnerships with stakeholders and investing in technology to enhance distance learning. Moreover, COSECSA continues to explore new avenues for training and educating surgeons, and is actively engaging with governments in the region to address key challenges such as retention of trained surgeons and improving the working conditions for surgical professionals. Through these efforts, COSECSA continues to make significant strides in improving the quality of surgical care and training across East, Central and Southern Africa.

In summary, sustainability of COSECSA has been achieved through strong partnerships with governments, educational institutions and international organizations that share a common goal of improving surgical care, developing sustainable funding strategies, prioritizing the recruitment and retention of highly qualified faculty members, investing in research to address surgical practice challenges in the region, and continuously adapting its programs to meet the evolving needs of surgical practice.

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