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Investing in surgery: a value proposition for African leaders

Globally, poor access to high-quality surgical, obstetric, and anaesthesia care remains a main contributor to global disease burden accounting for about a third of deaths worldwide.[1] The need for strengthening surgical care systems is especially urgent in sub-Saharan Africa, where access is strikingly limited, leading to the highest mortality and morbidity from surgically preventable and treatable conditions in the world.[2,3] Approximately 93% of the population of sub-Saharan Africa lacks access to safe, affordable, and timely surgical care, compared with less than 10% in high-income countries.[2] Despite the immense and growing need for surgical services in sub-Saharan Africa, investments by African public sector leaders to improve surgical systems on the subcontinent have been inadequate. The current COVID-19 pandemic has disrupted health care globally, with an estimation by the CovidSurg Collaborative showing that more than 28 million surgeries will be postponed or cancelled worldwide during the 12 weeks of peak disruption.[4] There is a basic ethical responsibility to provide surgical care as a fundamental human right, in keeping with the principles espoused in the Universal Declaration of Human Rights. Additionally, improved access to high-quality surgical care is an essential component of universal health coverage and will contribute to good health and wellbeing, leading to improved human capital—all of which are vital for poverty reduction and economic growth on the continent.

Human capital—the knowledge, skills, and health that people accumulate over their lifespan—is a primary driver of economic development.[5] Investing in people by developing their skills, knowledge, and health allows them to be more productive, adaptable, and innovative, enabling meaningful participation in social, political, and economic life. The benefits of better health as human capital are visible at the individual, societal, and national levels. Healthy children thrive physically and mentally, which enables them to acquire knowledge and skills needed for the labour market. People with greater human capital earn higher wages and further invest in the education and health of family members and their community. This relation is especially visible in women's health, where poor maternal health can lead to long-term health consequences in women and children, negatively affecting the wellbeing and economic productivity of future generations.[6,7] Ultimately, educated, skilled, and healthier individuals are better placed to productively contribute to national socioeconomic development, while maximising available human capital.

In 2015, an estimated 47% of all productivity losses in the WHO African region—approximately Int$1·4 trillion—were due to non-communicable diseases and injuries, which often require surgical systems for proper diagnosis, treatment, and management.[8] In the past, substantial investments targeting infectious diseases and nutrition

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have led to improvements in health outcomes in sub-Saharan Africa.[9] However, in view of changing disease epidemiology, it is likely that returns on these investments will only be partly realised unless substantial resources are invested in robust surgical systems to address the increasing burden of surgical conditions, which disproportionately affect the working-age population and children.[3,10] The demographic dividend in Africa will only be harnessed by reducing the dependency ratio and increasing the capacity of the working population to perform efficiently and effectively.

Studies suggest that investment in surgical care will contribute substantially to human capital in sub-Saharan Africa.[2,11,12] Caesarean delivery is the most widely performed surgical operation globally and is a critical intervention to reduce maternal mortality.[13] However, in sub-Saharan Africa, maternal mortality after caesarean delivery is estimated to be as high as 543 per 100 000 operations—50 times higher than in high-income countries.[14] Other conditions that require surgical care and severely affect human capital in sub-Saharan Africa are road traffic injuries. In 2016, the rate of these injuries in the WHO African region, at 26·6 road traffic deaths per 100 000 population, was the highest in the world—up from 26·1 per 100 000 population in 2013.[15] Addressing trauma resulting from the rise in road traffic injuries and other sources of injuries, as well as mortality and morbidity from surgical conditions such as obstructed labour during pregnancy, will require investments in surgical systems.

The 2015 *Lancet* Commission on global surgery estimated that up to $12·3 trillion in low-and-middle-income countries, or 2% of gross domestic product growth in middle-income countries, could be lost by 2030 without improved surgical systems.[2] Improving surgical care should be considered an urgent matter, as conditions amenable to surgical care account for more annual deaths than HIV/AIDS, malaria, and tuberculosis combined.[1,2] The delivery of surgical care can be complex, requiring all components of the health system and the governance and organisation of diverse actors within that system. Nonetheless, programmes such as Narayana Hrudayalaya in India show that complex cardiovascular surgical interventions can be safely delivered in resource-limited settings at affordable costs.[16] Using a combination of innovative processes and technologies, with a focus on efficiency and leveraging economies of scale, Narayana Hrudayalaya has been able to provide access to cardiac and other surgical care at low cost to thousands of Indians.[17] Similar models could be adapted and scaled up in Africa to deliver a wide range of essential and emergency surgical care. Progress is already underway in several African countries. For example, six African countries have adopted national surgical, obstetric, and anaesthesia plans as roadmaps to systematically scale up surgical systems as a component of their national health strategic plans. The Southern African Development Community passed a regional resolution in 2018 specifically to improve surgical care.[18] Several innovative affordable efforts to improve access to quality surgical care regionally, such as the East, Central and Southern Africa (ECSA) Collegiate training of surgeons, obstetricians, and anaesthesiologists, are showing early success.[19] Such efforts should be supported politically and financially by African leaders.

In 2015, the World Bank launched its Human Capital Project, which includes a human capital index that primarily aims to incentivise and support countries to invest in people for economic development and poverty reduction.[5] In view of the high burden of surgical conditions in sub-Saharan Africa, investment in health systems capacity to deliver surgical care must be included in all efforts to increase human capital necessary for technological innovation and long-term economic growth in this region.

Africa's most valuable resource is its people. Increased investment in the health of Africans will lead to economic growth in Africa. Millions of Africans who do not have access to surgical care, especially women and young adults, are prevented from achieving their maximum human capital, which is needed to compete in an increasingly technological and digital world. Therefore, African leaders have an ethical, social, and economic responsibility to invest in surgical care to increase the individual, societal, and national human capital needed to reap its demographic dividend.

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Sex workers must not be forgotten in the COVID-19 response

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As countries maintain or adjust public health measures, emergency legislation, and economic policies in response to the COVID-19 pandemic, there is an urgent need to protect the rights of, and to support, the most vulnerable members of society. Sex workers are among the most marginalised groups. Globally, most direct sex work has largely ceased as a result of physical distancing and lockdown measures put in place to halt transmission of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), potentially rendering a frequently marginalised and economically precarious population more vulnerable.[1] Most sex workers, even those who can move their work online, have been financially compromised and some are unable to stop in-person services.[2] It is imperative that sex workers are afforded access to social protection schemes as equal members of society.

As with all aspects of health, the ability of sex workers to protect themselves against COVID-19 depends on their individual and interpersonal behaviours, their work environment, the availability of community support, access to health and social services, and broader aspects of the legal and economic environment.[3,4] Stigma and criminalisation mean that sex workers might not seek, or be eligible for, government-led social protection or economic initiatives to support small businesses. Police arrests, fines, violence, disruption in aid by law enforcement, and compulsory deportation have been reported by sex workers across diverse settings, fuelling concerns that the pandemic is intensifying stigma, discrimination, and repressive policing.[1,2]

Sex workers who are homeless, use drugs, or are migrants with insecure legal or residency status face greater challenges in accessing health services or financial relief, which increases their vulnerability to poor health outcomes and longer-term negative economic impacts.[5,6] Increased prevalence of underlying health conditions among sex workers[7] might increase risk of COVID-19 progressing to severe illness.[8] Demand for shelter and supported housing has increased as sex work venues have been shut down or rental payments default through