Improving surgical and medical outcomes, beyond maternal mortality

Significant progress has been made in reducing the number of women who die from complications of childbirth globally, but the lack of timely and safe essential surgery and medical care continues to impact the ability of women to participate fully in their economies and communities. The emerging discipline of global surgery provides an opportunity to establish an agenda for women's health that is comprehensive, addresses inequity and recognises the role of women in society.

As health systems attempt to address the estimated 28 million operations that have been cancelled or postponed globally owing to the COVID-19 pandemic,[1] we argue that non-obstetric surgical and adjuvant care and the outcomes of these interventions for women in Africa deserve consideration. This is a focus that is long overdue.

Women in Africa warrant special attention in the realm of global surgery because, firstly, as women, they are affected by both a high burden of sex-specific surgical diseases and gender-specific barriers in accessing care. Secondly, and equally important, women in Africa are part of a high-impact population group owing to their central roles in family and community wellbeing, healthcare provision and substantial – albeit under-recognised – contributions to macroeconomic development.[2] The *Lancet* Commission on Women and Health[2] argues that women's health is not only a goal in itself, but also a key strategy for sustainable societal advancement. This is particularly true in many low- and middle-income countries (LMICs), as urbanisation and shifts in family structure require women to take on responsibility as breadwinners while maintaining traditional household and caregiving responsibilities.[3,4]

Through global health initiatives, governments and multinational organisations, a global focus has been placed on obstetric outcomes. This focus has supported the significant work of the maternal health community in highlighting and addressing emergency obstetric surgical care in Africa, which is critical in its own regard and instrumental in bringing about broader change.[5,6] While there remains much work to be done, with the maternal mortality rate after caesarean delivery in Africa 50 times higher than that in high-income countries (HICs),[6] the focus on maternal mortality and the introduction of careful auditing processes have held leaders in the health system accountable for these outcomes. These measures have resulted in improved funding for the necessary interventions, as well as more rapid and effective policy change. These focal points should be catalysts for further focus on women's surgical and medical care for conditions such as breast and cervical cancer, which continue to affect women and their capacity to be caregivers and productive society members beyond 42 days after childbirth.

Each year, premature death from gynaecological and breast cancer is a largely preventable tragedy for >1 million women and families globally.[7] In HICs, there is significant advocacy and funding for research and treatment of such cancers, but in many African countries and other LMICs, these diseases receive far less attention.[8] The resulting substantial disability and death, often in the prime of a woman's life, and subsequent disruption of family life, loss to the national economy and exacerbation of the poverty cycle, have historically been ignored.[8]

In 2018, the World Health Organization (WHO) called for the worldwide elimination of cervical cancer.[9] Theoretically, this is possible, but we are a far cry from achieving it. Cervical cancer remains the leading cause of cancer-related death in women in Africa.[10] Over 311 000 deaths from the disease occurred in 2018.[10] More women therefore died from cervical cancer alone than from complications of pregnancy or childbirth (295 000 maternal deaths at the end of 2017).[8,11]

Around 87% of women who die from cervical cancer live in LMICs.[8] Although effective interventions exist to reduce this stark inequity, most women have limited opportunities to access these life-saving interventions.[8] In many resource-poor regions, implementation of human papillomavirus vaccination is limited, as is access to early detection programmes and treatment of premalignant lesions.

While an increase in cervical cancer screening is urgently needed, a matched increase in capacity for treatment is equally required.[8] Early-stage cervical cancer can be surgically managed, with a 5-year survival rate >80%.[12] Chemoradiation is the standard of care for locally advanced disease, whereas chemotherapy is used in the palliative setting. Surgery, radiotherapy and chemotherapy have been recognised by the WHO as cost-effective high-impact interventions for the treatment of early-stage cervical cancer, as well as for more advanced stages of the disease.[9] However, in some LMICs, <5% of cervical cancer patients have access to safe, effective and timely cancer surgery.[13] There is a dearth of data regarding access to radiotherapy and chemotherapy in LMICs, while access to such therapies are also believed to be similarly limited.[8] Improving access to these life-saving modalities and health intelligence systems therefore requires significant political action and investment. Given the high mortality rate in LMICs, palliative care also needs to be upscaled and integrated into treatment plans.

Just over half of all cases of breast cancer occur in LMICs.[14] Age-standardised mortality rates in parts of Africa are among the highest in the world owing to a younger average age at diagnosis, detection at later stages of the disease and difficulties in obtaining treatment.[15]

There are stark disparities in breast and cervical cancer survivorship between HICs and LMICs, with the 5-year net survival rate varying by up to 30% between regions.[8] This disparity should be of international concern. Where a woman lives, as well as her socioeconomic status, should not mean the difference between life and death.[8]

Alongside the burden of untreated cancer, the health landscape for women is still worrisome in many other ways.[16] Some 200 million women have no access to modern contraception.[16] An estimated 25 million women have unsafe abortions every year.[16] One in three women experience sexual violence.[16] These issues impact dramatically on the surgical burden of disease and disempowerment of women.

Up to 100 000 women develop obstetric fistulas every year,[17] with only 15 000 receiving surgical treatment.[18] This lack of surgery creates cohorts of women who are socially stigmatised to the point of isolation and simultaneously unable to live independently. Likewise, early pregnancy loss and infertility often have a long-

term emotional and social impact on women.[19] The maternal health community have emphasised that, while mortality is a major indicator used to monitor health, morbidity also has a significant effect on patients' lives and is often under-recorded and under-recognised.[20] The conceptual framework defined for including 'near miss' morbidities when considering obstetric outcomes needs to be carried over into non-obstetric surgical care.

Despite being neglected, the linkages between access to essential surgical and medical care and gender equity are clear. While surgery was once regarded as an expensive and advanced intervention, the global surgery and maternal health communities have led the charge in proving that surgery is a crucial and cost-effective component of a responsive and resilient health system.[21] As we mitigate the impact of the COVID-19 pandemic on maternal health and surgical care, special attention in the form of accurate auditing, accountability from governments and healthcare leaders, increased investment and effective policy change needs to be given to comprehensive surgical and medical care for women in Africa.

A Paterson, MB ChB
Division of Global Surgery, Department of Surgery, Faculty of Health Sciences, University of Cape Town and Groote Schuur Hospital, Cape Town, South Africa
amyfrancespaterson@gmail.com

L Cairncross, MB ChB, FCS (SA), MMed (Surg)
Division of Global Surgery, Department of Surgery, Faculty of Health Sciences, University of Cape Town and Groote Schuur Hospital, Cape Town, South Africa
lydia.cairncross@uct.ac.za

T Adams, FCOG (SA), Cert Gynaecological Oncology (SA)
Department of Obstetrics and Gynaecology, South African Medical Research Council Gynaecological Cancer Research Centre, University of Cape Town, and Division of Global Surgery, Department of Surgery, Faculty of Health Sciences, University of Cape Town and Groote Schuur Hospital, Cape Town, South Africa
tracey.adams@uct.ac.za

B M Biccard, MB ChB, PhD
Department of Anaesthesia and Perioperative Medicine, and Division of Global Surgery, Department of Surgery, Faculty of Health Sciences, University of Cape Town and Groote Schuur Hospital, Cape Town, South Africa
bruce.biccard@uct.ac.za

S Maswime, MB ChB, FCOG (SA), MMed (O&G), PhD
Division of Global Surgery, Department of Surgery, Faculty of Health Sciences, University of Cape Town and Groote Schuur Hospital, Cape Town, South Africa
salome.maswime@uct.ac.za

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