Appropriate use of caesarean section globally requires a different approach

See Series pages 1341, 1349, and 1358

Increasing global rates of caesarean section are debated because of evidence that medically unnecessary caesarean sections are associated with worse outcomes for mothers and their children.[1] There is consensus that caesarean sections are overused in some countries and underused in others. As Ties Boerma and colleagues[2] report in this *Lancet* Series on optimising caesarean section use,[1–3] there are unacceptable disparities: caesarean section rates of 44% in Latin America and the Caribbean compared with 4·1% in western and central Africa. Challenges have arisen as low-income and middle-income countries attempt to rectify insufficient access to caesarean sections. The investment in workforce training and facilities to increase access to caesarean sections can bring with it a culture of surgical intervention that leads to variation within countries between the urban wealthy giving birth in private facilities where there are high rates of caesarean section and the rural poor without access to the procedure.[2] This situation calls for country and regional specific strategies to address these inequalities.

Key issues are how economic and organisational drivers influence optimal use of caesarean section. Economic pressure on hospitals, private health insurance, fear of lawsuits, the ability to manage physician and surgical work schedules, and personal financial benefit are drivers of the increase in caesarean section rates, not just in the USA. A systematic review with data for 12·9 million women from the USA, Ireland, and Australia showed that caesarean sections were more likely to be done for privately insured women than for women with public health insurance coverage.[4] Conjecture that blames mothers for the high caesarean section rate, either because of their poor health (eg, obesity or hypertension) or because they are demanding medically unnecessary caesarean sections due to fear or disinterest in labour ignores the wider systems issues that drive the growing reliance on caesarean sections.

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Commitment to women-centred care is a key strategy to achieve equitable and optimal use of caesarean section.[5] Women-centred care calls for a different approach to how maternity services are organised, funded, and delivered, and how outcomes are researched.[6] In their Series paper, Ana Pilar Betrán and colleagues[3] outline ways to achieve this care, such as multidisciplinary teamwork, promotion of respectful and collaborative care that addresses professional beliefs and attitudes, implementation of evidence-based guidelines, and mandatory second opinion and timely feedback to staff.

In the light of growing evidence, however, this *Lancet* Series[1–3] does not give due attention to the impact of investing in midwives and midwife-led continuity of care. This model includes evidence on continuous labour support and approaches that prioritise positive human relationships such as addressing women's fear of labour pain.[7] Although there is some evidence that induction of labour in the right circumstances can reduce use of caesarean section,[8] the side-effects, costs, and the service user and provider acceptability of induction of birth with no medical indication have not been established.

The importance of midwives to the health and wellbeing of women and the newborn baby was highlighted in the *Lancet* midwifery Series.[9] Scaling up midwifery reduces adverse health outcomes in resource-constrained environments and could be implemented with successful outcomes at any stage of country development to reduce maternal and new-born mortality.[10] Midwifery practice combines respectful care, technical interventions, and family planning, and also provides a substantial return on investment.[11] The ability of midwives to effectively practise in urban and rural communities and

in health-care facilities is the bridge that reduces the need for emergency interventions during labour. The challenge is how to scale up midwifery education and practice in countries without full coverage.[12]

The International Confederation of Midwives (ICM) supports the scale-up of midwifery through the Midwifery Services Framework and Midwifery Education Accreditation programme. The ICM strengthens the unified voice of midwives to speak up for respectful quality care for women worldwide. This is an issue for all countries. Globally, there is evidence indicating that quality of care and outcomes are improved when midwives are integrated into the health system.[13] Integration of midwives into regional health systems in all countries is therefore a key determinant of optimal outcomes for mothers and babies.

The caesarean section rate in China is 34·9%.[14] In the hospital-based system, obstetricians generally do the work of midwives and midwives do the work of nurses or doulas. Midwives are not recognised in the Chinese health system in terms of their education or employment. Efforts by Chinese midwives to change this situation has not yet resulted in the necessary changes.[15] Many obstetricians and few midwives leads to overuse of caesarean section and other interventions. The development of midwifery in China faces challenges in terms of improving the professional status of midwives in the health system, midwifery education and accreditation, and reform of the maternity care system. In 2008, the first midwife-led normal birth unit opened up a new horizon for maternity care in China and led to similar developments in other parts of the country.[16]

In low-income countries such as Malawi, the rates of caesarean section are still very low. Malawi's caesarean section rate is 4% due to difficulties with access to care, particularly in rural settings, and poor quality care when women get to a facility because of inadequate numbers of midwives in rural settings who can provide quality care.[17,18]

Funding to further explore the perspectives of women concerning their expectations and experiences of vaginal birth and caesarean section, the culture of practice that drives physicians to perform unnecessary caesarean sections, and the systems that support or hinder the decision process will be crucial to develop health systems that balance the benefits of optimal use of caesarean section against the consequences of medically unnecessary major surgery.[19]

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