

# Essential surgery as a key component of primary health care: reflections on the 40th anniversary of Alma-Ata

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## INTRODUCTION

Chinese philosopher Laozi wrote, 'Go to the people. Live among them. Learn from them. Start with what they know. Build on what they have'. This ancient counsel has modern-day application in the little-known development of primary healthcare (PHC) service delivery models and the integration of surgical care and anaesthesia into these models. Currently, five billion people lack access to safe, timely and affordable surgical and anaesthesia care; in low-resource settings, nine of ten people cannot access basic surgical services. Globally, 33 million individuals incur catastrophic expenditures resulting from surgical and anaesthesia care, and this number climbs to 81 million if indirect costs are included.<sup>1</sup> The 2030 Agenda for Sustainable Development, approved by the United Nations (UN) in 2015, includes the key health-related target (Sustainable Development Goal 3.8) of universal health coverage (UHC); surgical, anaesthesia and obstetric care are fundamental components to its achievement.<sup>2</sup>

The mid-20th century saw major global changes taking place as colonial powers were replaced by nascent emerging national governments, especially in Asia and Africa, some through prolonged conflict as occurred in Vietnam. Latin America was being influenced by Liberationists, and the West and the Union of Soviet Socialist Republics (USSR) were enjoying stable and growing economies.<sup>3</sup>

Up to this time, the emphasis from the donor countries towards the low-income and middle-income countries (LMICs) had been a 'top down' approach of providing full-scale hospital facilities with doctors and nurses, including some tertiary referral centres. By the early 1960s there were more than 1200 Christian hospitals in LMICs relating to member churches of the World Council of Churches (WCC), mostly operated under the Western model of top-end medical care using doctors

## Summary box

- ▶ Currently, five billion people lack access to safe, timely and affordable surgical and anaesthesia care; in low-resource settings, nine of ten people cannot access basic surgical services.
- ▶ Up until the mid-20th century the emphasis from the donor countries towards the low-income and middle-income countries (LMICs) had been a 'top down' approach of providing full-scale hospital facilities with doctors and nurses, including some tertiary referral centres.
- ▶ The 'bottom up' approach (which informed the Alma Ata Declaration) was developed from the experience of Feldshers in USSR, rural-based, minimally trained community healthcare workers, and from China's 'barefoot doctors' that included community participation in the rural health services.
- ▶ But even though the place of essential surgery in PHC was recognised by WHO DG Halfdan Mahler in 1980, the surgical speciality has largely been neglected by the global public health community, partly because of the false arguments that surgical care is too expensive.
- ▶ Surgical and anaesthesia care should be considered as investments rather than costs; they are integral to making universal health coverage a reality - 40 years after the Alma Ata Declaration, it is time to effectively integrate PHC and surgical care globally and locally.

and nurses. The cost of operating these hospitals was increasing at four times the increase in per capita income; these higher costs led to services becoming inaccessible to the poorest members of the community. Furthermore, 95% of the medical treatment provided by the hospitals focused on curative services, while at least half of the admissions were for preventable conditions.<sup>4</sup>

The 'bottom up' approach to healthcare provision in low-resource settings developed as reports emerged from the USSR of the successes of the Feldshers, rural-based, minimally trained community healthcare workers.

This in part influenced the development in China of community-based, ‘barefoot doctors’ in programmes called ‘rural cooperative medical systems’ that endeavoured to include community participation with the rural provision of health services. News of these successful practices began to filter up from the experience of faith-based healthcare professionals working in rural areas of LMICs.<sup>5,6</sup>

The WCC cosponsored a conference in 1963 to establish what the future role of ‘medical mission’ should be in a postcolonial world, given the emerging notion that healthcare needed to be more than that currently provided by mission hospitals, based more in the community and centred around that community’s specific needs. One participant summarised this as being “more concerned with the sick person than with the particular sickness and that the sick person was part of an environment and a community which also stood in need of healing.”<sup>4</sup> This, along with an additional conference in 1967, led to the establishment of the Christian Medical Commission (CMC) in 1968, with overarching aims to promote innovative approaches to healthcare and establish comprehensive, community-based healthcare.

At its first meeting in September 1968, the CMC advised that mission hospitals transform their services from a primarily curative approach to a community-driven local healthcare initiative focused on disease prevention and inequity mitigation, developing a set of core principles, that a minimum of health services should be equally available to all, with surplus resources being distributed according to need, and that when healthcare resources are uneven their distribution should be of advantage to the least favoured.<sup>7,8</sup>

On these principles, the Commission made foundational what it termed comprehensive healthcare, defined as ‘a planned effort for delivering health and medical care attempting to meet as many of the defined needs as possible with available resources and according to carefully established priorities’.<sup>9</sup> The Commission experimented ‘in broad-based community health programmes’, and evaluated other, outside community-based experiences for additional innovations, looking at programmes offering a full spectrum of services and incorporating a wide variety of providers, including lay personnel, nurses, physicians and nurse midwives.<sup>4</sup>

### BRIDGING THE GAP

By the mid-1970s WCC’s *Contact* magazine shared lessons learnt in the field of community healthcare delivery and contained recommendations on solving healthcare problems by leveraging community action. This caught the astute attention of WHO Director-General, Dr Halfdan T Mahler, who remarked to his staff, “Why are we not able to produce excellent things like this one done by that little outfit across the fields?” (WHO headquarters is situated very close to the WCC Ecumenical Centre). Much of Mahler’s experience both at country level and at WHO

was in the global effort against tuberculosis, and he had a strong impression that most physicians considered tuberculosis a clinical problem, not a public health problem; ‘he was far from satisfied with most medical doctors’ public health commitment and [this] experience fuelled his conviction that public health resources in developing countries were inadequately biased toward hospital-based medical care’.<sup>10</sup> From this experience, combined with the reports from the WCC, the seed of community-based practice fell on the fertile ground of Mahler’s mind and the awareness of global possibility emerged. On 22 March 1974 Mahler, along with the senior staff of the CMC, convened a joint committee to explore the possibilities of collaboration and cooperation in ‘matters of mutual concern’. The terms of reference of this joint committee constituted a Memorandum of Understanding between WHO and WCC that was signed on 27 May 1974.

Two months later, at the 27th World Health Assembly (WHA) in July 1974, Resolution WHA 27.44 was passed, calling on WHO ‘to assist governments to direct their health service programmes toward their major health objectives, with priority being given to the rapid and effective development of the health delivery system’.<sup>11</sup> Executive Board Document EB55/9, presented at this meeting, stated: ‘resources available to the community’ must align with ‘the resources available to the health services’. To accomplish this, ‘a radical departure from conventional health services approach is required’, building on novel services ‘out of a series of peripheral structures that are designed for the context they are to serve’. This led to the formulation of *The Principles of Primary Healthcare (PHC)*:

1. PHC should be shaped around the life patterns of the population it serves.
2. A local population should be actively involved in the formulation of healthcare activities so that healthcare can align with local needs and priorities.
3. Healthcare offered should place a maximum reliance on available community resources.
4. PHC should be an integrated approach of preventive, curative and promotive services for both the community and the individual.
5. All health interventions should be undertaken at the most peripheral practicable level of the health services by the worker most simply trained for this activity.
6. Other echelons of services should be designed to support the needs of the peripheral level.
7. PHC services should be fully integrated with other sector services involved in community development (agriculture, education, public works, housing and communication).<sup>12</sup>

### ALMA-ATA

At the 29th WHA in 1976, Dr Mahler stated that “the main social target of governments and WHO in the coming decades should be the attainment by all the citizens of the world by the year 2000 of a level of health that will permit them to lead a socially and economically productive

life.” He called for the development of holistic health policies and targets which would help national governments achieve this goal, and convened the International Conference on Primary Health Care, held in Alma-Ata, USSR (now Almaty, Kazakhstan) in September 1978.<sup>13</sup> The CMC was integral in its planning process, with many of its members delivering presentations. In 1979 the Alma-Ata Declaration was published, which defined the *Health for All by the Year 2000* agenda, underscoring the role of PHC as ‘essential health care based on practical, scientifically sound, and socially acceptable methods and technology made universally accessible to individuals and families in the community through their full participation and at a cost that the community and country can afford to maintain at every stage of their development in the spirit of self-reliance and self-determination.’<sup>14</sup> The original vision of PHC was one of liberation and empowerment through the promotion of community-centred healthcare, including financial risk protection.

### ESSENTIAL SURGERY

WHO is primarily a public health organisation. Its governing bodies, staff and delegations overwhelmingly represent the public health specialty. Surgery hardly appears in its objectives or activities. This has been seen as a weakness by some, including Dr Mahler, but has been neglected by the majority.<sup>15</sup>

Among its vast publication of books and reports, there is a dearth of surgical literature, and even in health issues, such as non-communicable diseases that concern surgery, the latter is usually left behind.

Shortly after the Alma-Ata Declaration, Dr Mahler delivered an address to the International College of Surgeons in 1980, titled *Surgery and Health for All*.<sup>16</sup> Surgery became an area of focus for Mahler simply because he was a visionary who recognised surgery as a critical component to achieving ‘Health for All’. Posing the question ‘What does health for all mean?’ Mahler replied, “It does mean that health begins at home ... it is there where people live and work that health is made or broken. ... It does mean that essential health care will be accessible to all individuals and families ... with their full involvement.” Referencing the Declaration, he affirmed that “surgery clearly has an important role to play in primary health care and in services supporting it,” and challenged the international surgical community to agree on a list of “essential surgical procedures in support of PHC that would help countries to decide on their own list and related training and equipment.” In addition, Mahler underscored the importance of maintaining a high level of social criterion, placing surgical care within the context of a social justice issue, concluding that “Social injustice is socially unjust in any field of endeavour, and the world will not tolerate it for much longer. So the distribution of surgical resources in countries and throughout the world must come under scrutiny in the same way as any other intellectual, scientific, technical, social or economic commodity. The era

of only the best for the few and nothing for the many is drawing to a close.”

The term ‘essential surgery’, so critical to the gravity of Mahler’s speech, was coined by S William A Gunn, a Canadian surgeon leading WHO’s Emergency Humanitarian Operations. Since his arrival in 1967, Gunn prioritised instilling within WHO the importance of surgery as an integral component of healthcare.<sup>17</sup> As a surgical consultant in British Columbia, Gunn’s interest and time spent with the indigenous Canadian First Nations were instrumental in his understanding of healthcare disparity, arguing with his government regarding the ‘essentiality of essential surgery’ for these people, as he puts it.<sup>18</sup> Dr Brock Chisholm, the first Director-General of WHO and a fellow Canadian, influenced Gunn as director for disaster relief given his experience with the First Nation people, his emergency responses to a major tsunami in British Columbia, earthquakes in Alaska and Yugoslavia, and a coal mine disaster in Nova Scotia, in addition to his own efforts in the creation of the new UN Disaster Relief Organization.

In 2008, for the first time, surgery was included within the hospital-based arm of ‘primary care as a hub of coordination: networking within the community served and with outside partners’ in WHO World Health Report.<sup>19</sup>

### HEALTH FOR ALL

Almost 40 years after Mahler’s address, essential surgery remains inaccessible for most people, especially in LMICs, far from Mahler’s vision of ‘Health for All’. For surgical conditions alone, 33 million people face catastrophic health expenditure, with an additional 48 million cases of catastrophic expenditure attributable to the non-medical costs of accessing surgical care, such as travel, food and out-of-pocket expenses.<sup>1</sup> The year 2018 sees the 70th anniversary of the founding of WHO and the 40th anniversary of the Alma-Ata Conference, and while noticeable progress has been made, the road ahead is challenging. With the turbulent geopolitical landscape, it is crucial that Member States remember Alma-Ata’s call to prioritise and develop stronger, integrated PHC systems, to reorient and expand current health services, and to leverage both existing and developing community activities that promote PHC.

Mahler and those involved with the Alma-Ata Conference redefined the relationships between communities and their health services, highlighting the all-embracing sense of UHC, including financial risk protection, while reducing systemic barriers preventing the delivery of essential healthcare to LMICs: poverty, infection, malnutrition, inadequate energy resources, lack of potable water and sanitation. Today, PHC is more defined in terms of merely providing the basic level of healthcare for the individual without necessarily accounting for ability to pay and resultant financial consequences.

The UN 2030 Agenda for Sustainable Development is a renewed commitment to UHC whereby all people



and communities have access to essential quality health services without risk of financial hardship. This is also reflected in resolution WHA 68.15 (2015) on strengthening emergency and essential surgical care and anaesthesia as a component of UHC.<sup>20</sup> The global health community should remember UHC's origin in Mahler's vision of 'Health for All', urging those convening at the WHA in 1976 that 'the main social target of governments and WHO in the coming decades should be the attainment by all the citizens of the world by the year 2000 of a level of health that will permit them to lead a socially and economically productive life'.

## CONCLUSION

While the world has greatly changed in the last 40 years, looking towards the goal of achieving UHC or 'Health for All' by 2030, it will be increasingly important to build resilient health systems and close service delivery gaps, including removal of all forms of inequity. We must ensure that positive steps are taken, in conjunction with other sectors, to deal with the primary drivers of inequity throughout the world. Whatever the level of economic development, the pursuit of universal and comprehensive healthcare requires a globally inclusive movement.

In opposition to false arguments that surgical care is too expensive, surgical care should be considered an investment rather than a cost. The *Lancet Commission on Global Surgery* underscores the fact that, 'Investing in surgical services in LMICs is affordable, saves lives, and promotes economic growth'. Without an investment in basic surgical scale-up of approximately US\$350–420 billion over 15 years, LMICs will incur cumulative losses estimated at US\$12.3 trillion.<sup>1</sup>

The time is now for urgent integration of PHC with surgical care to form a seamless collaborative global network of healthcare professionals, economists, policy makers, and most importantly the local community in which better surgical care and infrastructure is implemented. Dr Mahler would be delighted.

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