WHO Global Position Paper and Implementation Strategy on kangaroo mother care call for fundamental reorganisation of maternal–infant care

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Preterm birth complications are the largest contributor to neonatal and child mortality globally,[1] and strategies to improve the care of premature or low birthweight (LBW) infants are vital. One important strategy is kangaroo mother care (KMC), which involves continuous and prolonged skin-to-skin contact (preferably for 24 h daily, with a minimum of 8 h) with support for exclusive breastfeeding or breastmilk feeding.[2] An additional feature of facility-based KMC is timely transition to lower levels of care within the health-care facility or home with continued skin-to-skin contact and close monitoring. On May 16, 2023, WHO launched the KMC Global Position Paper[3] and Implementation Strategy,[4] prepared by the KMC Working Group convened by WHO through its Strategic and Technical Advisory Group of Experts (STAGE) for maternal, newborn, child, and adolescent health and nutrition. This Working Group was assembled in recognition of the underuse of KMC globally, despite a strong evidence base for its effectiveness and scalability (panel),[2–14] and the need for concerted actions to ensure universal coverage of the 2022 WHO recommendations for KMC in the care of preterm or LBW infants.[2,15]

WHO now recommends that every preterm or LBW infant should receive continuous and prolonged KMC initiated as soon as possible after birth.[2] This recommendation applies to infants born at home who do not need medical care in a health-care facility and those born in a health-care facility, except if the infant is unable to breathe spontaneously after resuscitation, is in shock, or needs mechanical ventilation. WHO further highlighted the importance of family involvement in the routine care of preterm or LBW infants in health-care facilities; the need for extra support to families to care for their infants; and parental leave and entitlements to address the needs of primary caregivers.[2]

The KMC Global Position Paper[3] and Implementation Strategy[4] provide guidance and aim to generate consensus so that governments, programme managers, maternal and newborn health-care providers, parent organisations, and community stakeholders are informed of the changes required for the global implementation and scale-up of KMC in a harmonised way that leads to maximal global impact.

KMC is not a typical health intervention but an instinctual parental behaviour that is the foundation of care for all preterm or LBW infants, nested within comprehensive small and/or sick newborn care (SSNC). This understanding requires that the Every Newborn Action Plan (ENAP) target for scaling up functional level-2 inpatient SSNC units is achieved with full consideration of the care of preterm or LBW infants at lower level health-care facilities and in the community, alongside maternal care, family-centred care at all levels, and functional referral linkages between different levels of care.[16,17] The ENAP is a global agreement with ambitious newborn health targets for 2025, including a target for expanding district level SSNC coverage to at least 80%.[17] This coverage target was added in recognition of the need to provide quality care for preterm or LBW infants, involving population level coverage of level 2 neonatal care with interventions that include KMC and continuous positive airway pressure.

This is a crucial opportunity to incorporate the new guidelines for KMC, reorganise and integrate care for mothers and newborn babies, and catalyse this shift in maternal–newborn care delivery. Implementing WHO's new recommendations will require a change in the culture of health-care provision. Crucially, this reorganisation will involve moving away from obstetric and neonatal services that are typically organised in distinct departments with different treatment guidelines, providers, and locations towards obstetricians, midwives, paediatricians, and neonatal nurses working together to provide care for mothers and newborn infants together in one place, with families as key partners in the care of their newborn babies. A major challenge will be changing the layout of maternal and neonatal units to enable mothers to be with their sick preterm or LBW infants, who need to be cared for in special or intensive care units. This change can be more readily achieved for preterm or LBW infants who are otherwise healthy, since they are usually cared for in the postnatal wards or separate KMC wards. However,

Panel: Benefits, scalability, and SDG impacts of kangaroo mother care

What are the benefits of KMC?

- WHO recommendations for KMC are based on rich evidence from diverse settings on the benefits and affordability of KMC in helping preterm or LBW infants to survive and thrive.[2,5,6]
- 32% reduction in neonatal mortality; 25% reduction in mortality by age 6 months; 68% reduction in hypothermia by discharge or 28 days after birth; 15% reduction in severe infections or sepsis at latest follow-up; 48% increased duration of exclusive breastfeeding at discharge or 28 days after birth; and improvements in growth at latest follow-up.[6]
- Builds mothers' confidence and comfort in caring for their infants and reduces their risk of moderate to severe depressive symptoms and postpartum haemorrhage.[7,8]
- Reduces paternal depression and spouse relationship problems, improves father–infant interactions, positively impacts family structure and the home environment in which the child is raised; as fathers and other family members provide KMC, they experience increased bonding and attachment with their infant, empathy for the newborn baby, increased confidence as caregivers, and enhanced mental health and wellbeing.[9,10]
- Intergenerational, long-lasting social and behavioural benefits for the infants, including reduced school absenteeism, hyperactivity, aggressiveness, and externalisation disorders and improved brain maturation at 20 years of age.[11,12] Preterm or LBW infants who received KMC are more likely to be protective and nurturing parents and receive higher hourly wages.[11]

Is KMC scalable?

- Although global coverage remains low, multiple countries have shown national or subnational implementation of KMC.[13]
- Increased KMC coverage can be achieved when high-intensity interventions in support of KMC are made across multiple health system building blocks, including leadership, governance, policy, and advocacy; health workforce capacity building and motivation; health financing; service delivery, including dedicated space for KMC, protocols, and job aids; supplies; and health management information systems.[14]

Which SDG will be impacted by scaling up KMC?

- SDG 3.2 for ending preventive deaths of newborn babies and children younger than 5 years.
- KMC empowers mothers as primary caregivers and thus is fundamental to SDG target 5.1 for ending all forms of discrimination against all women everywhere to achieve gender equality and empower all women.
- KMC can contribute to SDG target 7.3 to improve global energy efficiency and ensure access to affordable, reliable, sustainable, and modern energy by catalysing the reorganisation of service delivery for maternal–infant care to be people-centred and central to primary health care rather than relying on energy-consuming technical solutions, such as incubators and radiant warmers.
- KMC promotes SDG target 9.1 to develop quality, reliable, sustainable, and resilient infrastructure to support equitable economic development and human wellbeing, as infrastructure modifications to enable combined care of mother–infant dyads are likely to be more efficient, sustainable, and resilient.
- Global scale-up of KMC will promote multi-stakeholder and "north–south" partnerships in support of SDG target 17.16.

KMC=kangaroo mother care. LBW-low birthweight. SDGs=Sustainable Development Goals.

even then, some reorganisation is likely to be needed to accommodate fathers and other family members who can also provide KMC and help ensure infants receive KMC for as close to 24 h per day as possible.

The KMC Implementation Strategy[4] is designed to guide the way forward for global scale-up, to facilitate advocacy by all stakeholders, and to be adaptable to different country contexts for use by country programme managers and health-care workers at all levels of health-care facilities and in the community. Operationalising the strategy will require national planning and coordination—for example, through a national technical advisory group to ensure broad stakeholder participation, a national centre of excellence for training staff, and a resource centre for clinical and operational guidelines and protocols. Policy changes at national and subnational levels are needed, such as allowing the mother to stay in special or intensive care units with her sick newborn infant, along with dedicated budgets funded under universal health coverage for implementing KMC as part of SSNC scale-up. KMC scale-up will also require widescale transformations in health systems, along with iterative data-driven learning, including redesigning maternal–newborn service delivery; increasing the availability, capacity, and motivation of health-care workers; monitoring the practice of keeping the mother and newborn together after birth and their combined care; and including KMC implementation indicators in routine health information systems. System changes for KMC implementation will differ according to country income settings and health systems.

With less than 8 years left to achieve the 2030 Sustainable Development Goals, the KMC Position Paper and Implementation Strategy aim to inspire a renewed vision with health systems transformed and maternal–newborn service delivery reorganised for implementing KMC at scale to enhance efficiency and improve survival,

health, wellbeing, and long-term human capital. In this renewed vision, mothers and infants are cared for together from birth, and parents and families have a central role in the care of their infants, thus humanising health care.[18] This reorganisation of care is also expected to yield a high return on investment and benefit the overall economy, improving the sustainable development of nations. Investments and systems must now be focused on the widespread implementation of KMC.

SG is a staff member of WHO. We all contributed to the WHO Global Position Paper[3] and Implementation Strategy[4] on kangaroo mother care that are discussed in this Comment. We declare no other competing interests.

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