



KANGAROO MOTHER CARE IN NIGERIA

OVERVIEW

In Nigeria, kangaroo mother care (KMC) as a method for caring for small babies was systematically reintroduced through the US Agency for International Development’s ACCESS program in 2007. Since then, there have been efforts to integrate KMC as part of the standards for newborn care. The commitment of the Federal Ministry of Health (FMOH) to increase KMC coverage has been noticeable. In 2008, with the help of partners, the FMOH adapted the *KMC Training Manual*, and in 2013, it included two KMC indicators in the health management information system. The FMOH launched the Nigeria Every Newborn Action Plan, which included KMC as part of essential care for preterm/low-birthweight babies in 2016. Most recently, the FMOH has been working with partners to finalize guidelines for KMC.

The FMOH has committed to situating facility-based KMC services within the wider context of newborn health. As KMC is included in health policies, there is need for behavior change campaigns, KMC posters to be displayed in health care facilities, and awareness activities to engage health care providers and mothers. There is also need for data quality improvement, data use, and dissemination of findings, which could help propel KMC to become a widely practiced strategy in Nigeria.

Table 1. Status of kangaroo mother care in Nigeria by strategic area

Domain	Prior to and during 2014	2015–2017
Policy		
National Health Policy	There was no national kangaroo mother care (KMC) policy in Nigeria, but KMC was incorporated in the Integrated Maternal, Newborn, and Child Health Strategy of the Federal Ministry of Health (FMOH) in 2007 (Nigeria FMOH 2007). KMC was also included in the integrated Facility-Based Newborn Care package developed by the FMOH in 2014.	The Nigeria Every Newborn Action Plan (NiENAP), which covers KMC, was launched in 2016 by the FMOH. KMC was included in the NiENAP with coverage targets of 65% by 2020, 85% by 2025, and 95% by 2030 (Nigeria FMOH 2016).

Domain	Prior to and during 2014	2015–2017
National Guidelines	<ul style="list-style-type: none"> The FMOH included KMC in the Infant and Young Child Feeding Guidelines. KMC was covered in a newborn situational analysis document in 2009, <i>Saving Newborn Lives in Nigeria: Newborn Health in the Context of the Integrated Maternal, Newborn and Child Health Strategy</i>, as a feasible and low-cost approach to reduce mortality among preterm/low-birthweight babies (Nigeria FMOH et al. 2009). The analysis also called attention to the need for a national KMC policy and a routine data collection system. Another situational analysis conducted in 2011, the second edition of <i>Saving Newborn Lives in Nigeria: Newborn Health in the Context of the Integrated Maternal, Newborn and Child Health Strategy</i>, highlighted the progress of practicing KMC at various facility levels and reiterated the need for a national KMC policy, service guidelines, and routine data collection systems (Nigeria FMOH et al. 2011). 	<p>There is a plan to develop and finalize KMC guidelines in 2017, according to the national milestones listed in the NiENAP. Currently the FMOH, in collaboration with MCSP, is developing national KMC operational guidelines within the Maternal and Child Survival Program (MCSP).</p>
Country Support/Implementation		
Levels and types of facilities implementing KMC	<p>Lagos University Teaching Hospital started providing KMC services in 1990, although there might have been other teaching hospitals providing KMC services at the time. The US Agency for International Development's ACCESS program reintroduced KMC in the northern states of Kano and Zamfara in 2007.</p>	<ul style="list-style-type: none"> In an assessment led by Save the Children in 31 states, 202 facilities out of 757 (27%) reported availability of KMC services. However, differing definitions of what constitutes KMC might have caused the overestimation of this figure. According to the assessment, most facilities that provide KMC are general hospitals (61%), followed by tertiary and specialist hospitals (16%). Some secondary health facilities carry out KMC. Primary-level health facilities do not provide KMC services but instead refer preterm babies to higher-level facilities where babies are initiated on KMC (Save the Children et al. 2017). Through MCSP, 14 KMC spaces have been established in 14 facilities in Ebonyi and Kogi states (MCSP 2017).
Percentage of newborns initiated on immediate skin-to-skin contact after delivery		<ul style="list-style-type: none"> Skin-to-skin care has not been adopted as a policy in Nigeria. Less than 10% of babies are placed in skin-to-skin position with the mother right after birth, according to an assessment done at Lagos University Teaching Hospital. Babies are only placed in skin-to-skin contact when pediatricians are present and insist it. According to a quality-of-care assessment conducted in Kogi and Ebonyi states, 13% of babies are placed in skin-to-skin position right after birth.

Domain	Prior to and during 2014	2015–2017
Funding	The FMOH in <i>Saving Newborn Lives in Nigeria: Situation Analysis and Action Plan for Newborn Health in the Context of the Integrated Maternal, Newborn and Child Health Strategy</i> in 2011 committed to create a budget line that included the creation of six zonal KMC centers as part of the comprehensive newborn care strategy to achieve the Millennium Development Goals (Nigeria FMOH et al. 2011). However, as of 2017, this had not been achieved.	Though the FMOH has been engaged in the scale-up of KMC, most funding for KMC continues to come from donors.
Research		
Major or program-based studies being conducted related to KMC currently	The first Nigerian scientific study comparing KMC with conventional care was undertaken in three hospitals in Lagos in 2001 (Ibe et al. 2004).	Save the Children led an assessment of facility-based care of small newborns in 2017 (Save the Children et al. 2017).
Knowledge Management		
Centers of excellence or state-of-the-art facilities for KMC/care of low-birthweight babies	KMC was introduced in Nigeria in the late 1990s at Lagos University Teaching Hospital.	There are three centers of excellence for KMC: Lagos University Teaching Hospital, Obafemi Awolowo University Teaching Hospital (Ile Ife), and Federal Medical Center (Katsina).
KMC manuals, training, and campaigns	<ul style="list-style-type: none"> The FMOH, with the help of partners, adopted the <i>KMC Training Manual</i> in 2008 (Nigeria FMOH 2008). In 2010, there was a national KMC training for neonatologists/pediatricians in Lagos; the practicum sessions were conducted at the KMC ward of Lagos University Teaching Hospital. In 2011, there was a training of frontline health workers on KMC conducted by Save the Children and the FMOH in Kaduna state. 	The Essential Newborn Care Course training package, which includes KMC, was launched in 2016. Also, through MCSP, 949 people have been trained in maternal and newborn health practices, including KMC, since March 2014 (MCSP 2017). MCSP also established KMC centers in Kaduna State with Johnson & Johnson funds, and other partners supported the establishment of KMC centers.

Domain	Prior to and during 2014	2015–2017
Monitoring and Evaluation		
KMC indicators included in the national health management information system (HMIS)	<p>In 2013, two KMC indicators were included in the HMIS:</p> <ul style="list-style-type: none"> Percentage of newborns initiated on facility-based KMC Percentage of newborns initiated on facility-based KMC who were discharged according to criteria, left against medical advice, referred out, or who died before discharge. 	<p>The FMOH is reviewing a proposal to include new indicators and to modify existing indicators in the HMIS. For KMC, the new indicators and modifications are as follows:</p> <ul style="list-style-type: none"> Percentage of newborns identified as < 2,000 g (new indicator) Percentage of facilities with inpatient maternity services with operational KMC (new indicator) Include the number of live births < 2,000 g as a denominator to calculate the percentage of newborns initiated on facility-based KMC (modification) <p>The new indicators include the number of live births initiated on facility-based KMC as a denominator to calculate the percentage of newborns initiated on facility-based KMC. Currently, only the numerator of number of babies discharged from KMC, number left against medical advice, number referred out after initiation, and those who died after initiation are recorded.</p>
KMC data recorded at health facilities	KMC was introduced in the facility post register in 2013. It collected information about the number of babies who were initiated on KMC. The recording of data was done manually.	<ul style="list-style-type: none"> Data for the KMC indicators are collected and summarized by health facilities. Summarized information is entered electronically into the DHIS2. Regarding KMC services, there is no tracking process to monitor whether KMC services are operational at the national level, but facilities that provide KMC services under specific programs use paper-based KMC registries. It was proposed to the FMOH to include an indicator in the HMIS about the percentage of facilities with inpatient maternity services with operational KMC. The FMOH is reviewing the proposal for new and modified indicators.
Advocacy		
Professional organizations that endorse KMC	<ul style="list-style-type: none"> The Paediatric Association of Nigeria (PAN) provided KMC training sessions at the PAN conference in 2010. The Nigerian Society of Neonatal Medicine (NISONM) has been incorporating KMC in its annual general and scientific meeting preconference workshops and community linkage programs. 	<ul style="list-style-type: none"> PAN and NISONM conduct training at the state level using the Essential Newborn Care package, which includes KMC. The Neonatal Subcommittee of the National Child Health Working Group, with members from PAN and NISONM, advocates for KMC. NISONM recently developed the <i>Newborn Discharge Guide: Help Your Baby Survive</i>, which includes KMC guidance (NISONM 2016). KMC mentorship is provided through the Voluntary Paediatric Services Scheme. NISONM endorsed the global recommendations of KMC at its 10th Annual General and Scientific Meeting in July 2017.

Domain	Prior to and during 2014	2015–2017
Champions	<ul style="list-style-type: none"> Professor Angela Okolo has been practicing KMC at the University of Benin Teaching Hospital using special KMC reclining chairs. Dr. Abimbola Williams, senior newborn advisor for Save the Children Nigeria, has been supporting KMC activities among pediatricians and neonatologists. Professor Chinyere Ezeaka was co-director of the frontline health workers' KMC trainings conducted by Save the Children and the FMOH in Kaduna State in 2011. 	<ul style="list-style-type: none"> There are many local champions with a track record of promoting KMC. Professor Ezeaka is supporting the development of the KMC operational guidelines. She continues to advocate for KMC as the head of the neonatal unit at Lagos University Teaching Hospital and as the president of NISONM. Catherine Oluwatoyin Ojo, a chief nursing officer for the Special Baby Care Unit of Ahmadu Bello University Teaching Hospital, received the International Confederation of Midwives/Save the Children EVERY ONE Midwife Award in 2011 for her work in maternal and newborn health, which includes teaching families about KMC. Professor Egun Adejuyigbe established a standard KMC center in Ile-Ife. Dr. Suleiman Bello of Federal Medical Center Keffi led the care of a small-baby study by Save the Children and established a KMC center in Katsina.

Table 2. Demographic and Health Survey (DHS) proxy indicators for kangaroo mother care (Nigeria DHS 2013)

Identification of Low-Birthweight Babies	Characteristic	Percentage
Percentage of live births in the 3 years preceding the survey by mother's estimate of baby's size at birth, according to background characteristics	<i>Very small</i>	4.4
	<i>Smaller than average</i>	10.5
Percentage of births that have a reported birthweight		16.4
Percentage of babies weighing less than 2.5 kg among births with a reported birthweight		8.1
Initial Breastfeeding		Percentage
Percentage of children born in the past 2 years who started breastfeeding within 1 hour of birth		33.2
Percentage of children born in the past 2 years who started breastfeeding within 1 day of birth		73.7
Skin-to-Skin Contact		Percentage
Percentage of births that have skin-to-skin contact among most recent live births in the 3 years preceding the survey		N/A

CHALLENGES

- One of the major challenges to accelerate the uptake of KMC in Nigeria is that many health providers are not aware of policies and guidelines that include KMC.
- There are funding needs for the training of community health workers, the designation of KMC spaces in health facilities, and dissemination of KMC information through media outlets.
- While hospitals collect information about KMC services, the data collected are not used. There is a need to use KMC data for decision-making and for finding a more formal way to disseminate lessons learned.

LESSONS LEARNED

- Collaboration among the FMOH, partners, and local KMC champions has been important for integrating KMC into national policies.
- The formation of a Neonatal Subcommittee has been critical to the acceleration of KMC.

FUTURE ACTIONS

- Ensure harmonization of KMC indicators and inclusion of the indicators in DHIS2.
- Advocate for free maternal and child health services to increase access nationally.
- Scale up the national health insurance program to include mothers in the states and communities.
- Establish the six zonal centers of excellence.
- Operationalize the Newborn Health Committee (a subcommittee of the Child Health Working Group of the FMOH) to support KMC scale-up.

DOCUMENTS AND RESOURCES

Document Title	Link to Document
<i>Saving Newborn Lives in Nigeria: Newborn Health in the Context of the Integrated Maternal, Newborn and Child Health Strategy</i> (2009)	www.healthynewbornnetwork.org/hnn-content/uploads/situation-action-plan-nigeria.pdf
<i>Saving Newborn Lives in Nigeria: Newborn Health in the Context of the Integrated Maternal, Newborn and Child Health Strategy</i> (2011)	http://countdown2030.org/documents/countdown-news/nigeria-full-report.pdf
<i>Nigeria Every Newborn Action Plan: A Plan to End Preventable Newborn Deaths in Nigeria</i> (2016)	www.healthynewbornnetwork.org/hnn-content/uploads/2033-Nigeria-Every-Child-Action-Plan-151216.pdf
<i>Kangaroo Mother Care Training Manual</i> (2008)	https://www.healthynewbornnetwork.org/resource/kangaroo-mother-care-training-manual/
“Implementation of Kangaroo Mother Care by Health Workers in Nigeria” (2016)	http://dx.doi.org/10.4314/njp.v43i4.4
“An Assessment of Maternal, Newborn and Child Health Implementation Studies in Nigeria: Implications for Evidence Informed Policymaking and Practice” (2016)	https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5002878/

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