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COMMENTARTY

REACHING EVERY NEWBORN: DELIVERING AN INTEGRATED MATERNAL AND NEWBORN HEALTH CARE PACKAGE

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Child mortality in Ethiopia has substantially declined since 2000 due to significant change in mortality in the post-neonatal period. The reduction in neonatal mortality has been much slower and in 2016 neonatal mortality contributed to 43% of under-five deaths (1). Ethiopia endorsed the commitment to end preventable newborn deaths by 2035 whereby every pregnancy is wanted, every birth is celebrated, and women, babies and children survive and thrive to reach their full potential (2).

Reaching every newborn is a global strategy to end preventable newborn deaths. Every newborn is to be reached with good quality, effective interventions without financial hardship for their families. The knowledge and tools to end preventable newborn deaths exist (3). The main challenge is to implement these life-saving interventions at scale and to change newborn health care practices and care seeking behaviours.

Ethiopia has strong policies and plans to guide country-wide implementation of newborn and child health interventions at scale as part of its five-year health sector plan. The Health Sector Transformation Plan 2015-2020 (HSTP) prioritizes maternal, newborn and child health (4). In addition, Ethiopia has made commitments to various global initiatives. To meet the commitment to the Sustainable Development Goals (SDGs), the HSTP has set ambitious targets to reduce under-five, infant and neonatal mortality to 30, 20 and 10 per 1000 live births respectively, by 2030. To support achievement of these targets, Ethiopia approved the National Strategy for Newborn and Child Survival in Ethiopia (2016-2020) in 2015 (5). The strategy defines various integrated, high-impact intervention packages for community and facility level implementation. Significant investment has also been made in infrastructure and human resource development (Figure 1) (6).

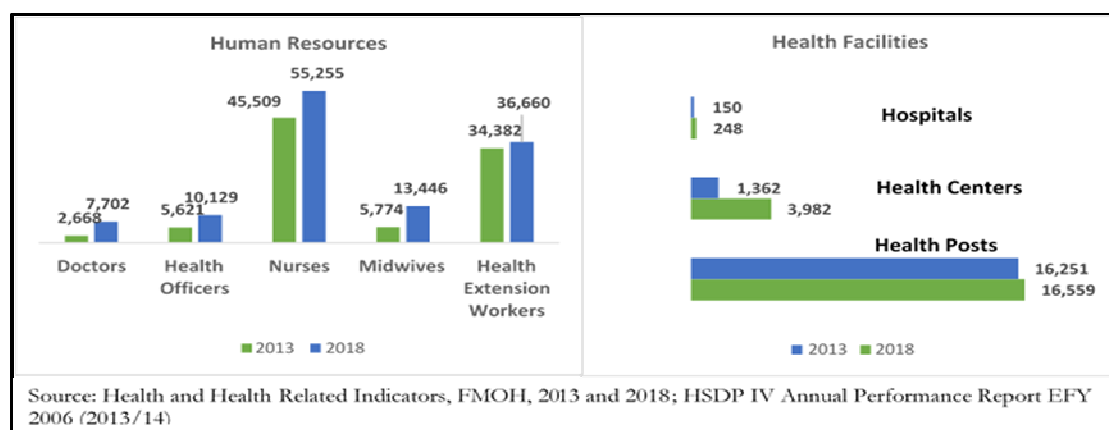


Figure 1: Trend in health facilities and human resources development in Ethiopia, 2013 and 2018.

The Health Extension Program (HEP) is the main platform for newborn and child health at the community level. Initially, Health Extension Workers (HEWs) increased access to basic preventive and promotive health services in rural communities at scale. Curative services that required more skills were added gradually through on the job training and supervisory support. The integrated community case management (iCCM) package was integrated into the HEP in 2010 (7).

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Under iCCM, HEWs were enabled to manage child pneumonia, diarrhea, malaria and severe acute malnutrition. Based on the lessons learned from the iCCM program (8) and evidence from a newborn research trial in Ethiopia (9), community management of sick young infants 0-2 months was added to HEW services when referral is not possible or acceptable (10). The Community Based Newborn Care (CBNC) Program was formally launched in 2013 and provides a package of interventions from pregnancy through the postnatal period (Box 1) (10). By 2016, 94% of health posts in Amhara, Oromia, SNNPR and Tigray regions were providing CBNC and iCCM services (11).

Table 1: Components of newborn care at the community and facility level

Community based newborn care	Facility based newborn care
Early identification of pregnancy at the community level	Provision of FANC including laboratory tests
Provision of Focused Antenatal Care (FANC) at Health Posts	Skilled attendance at birth
Promotion of institutional delivery	Provision of immediate and essential newborn care, including cord care and application of Chlorhexidine
Provision of immediate and essential newborn care, including cord care and application of Chlorhexidine	Recognition of asphyxia, initial stimulation and resuscitation using bag and mask
Recognition of asphyxia, initial stimulation and resuscitation of newborn babies	Management of pre-term and/or low-birth weight neonates, including use of corticosteroids and KMC
Management of pre-term and/or low-birth weight neonates and promotion of Kangaroo Mother Care (KMC)	Management of PSBI, including in-patient care
Management of Possible Serious Bacterial Infection (PSBI) when referral is not possible	Early postnatal care
Early postnatal home visits, counseling and identification and care for sick neonates	Integrated Management of Neonatal and Childhood Illnesses (IMNCI)
	Neonatal intensive care at hospitals

A large number of health workers were trained to provide critical newborn care services. By 2018, a total of 30,787 HEWs were trained on CBNC; and at least two health workers per health center were trained on IMNCI. Along with the training, health facilities were provided with essential equipment. The Emergency Obstetric and Neonatal Care (EmONC) assessment done in 2016 identified EmONC gaps in majority of the facilities (12) with the most readiness observed for newborn resuscitation at both hospitals (86%) and health centers (69%), indicating the need for ongoing strengthening of facility based newborn care.

As community care for newborns improves, referral services need to be available and delivered well. The guidelines for implementation of patient referral system developed by the FMOH (13) isn't fully operational at the primary health care units. The referral system for neonates that cannot be safely managed at primary health care units using existing protocols remains poorly functioning (14). Alongside establishing a well-functioning referral system, there is a need to strengthen newborn care at health facilities to manage the increasing demand for newborn services. The fact that the FMOH has come up with Emergency Newborn Care (EmNeC) signal functions to be included in the national assessments (12, 15) designed to measure readiness of facilities to manage major neonatal problems for the first time in 2016 indicates government commitment to improving neonatal care in the country. In addition to contributing to the development and implementation of tailored strategies to improve neonatal care, the findings will serve as benchmark to measure progress in addressing key drivers of newborn mortality in Ethiopia in the coming years.

Informed by lessons from implementing iCCM and research evidence on barriers for neonatal care seeking (16-18), the national CBNC implementation plan highlighted the need for strategies to improve care seeking behav-

iours and practices alongside improving service delivery. Among the major barriers reported were various cultural beliefs considered beneficial for neonatal survival (seclusion of neonates to protect from evil eyes and harmful spirits; immediate bathing with cold water to make the baby awake and active; applying substances on the cord to speed up drying; feeding butter and herbal drinks to cleanse the stomach; etc.), lack of knowledge on the availability of health care services for neonates, poor decision making power of mothers, poor support system, lack of money, and lack of transport compounded by difficult terrain.

The national HEW and Health Development Army (HDA) platform, using various approaches (including interpersonal communication, pregnant women conferences, use of media, and the Family Health Guide), served as the major system for improving community awareness on newborn issues and care (10). The CBNC implementing partners used additional community empowerment approaches that went beyond awareness creation and engaged communities for action. The conceptual framework in figure 1 provides an example of a community empowerment strategy implemented in over 240 woredas (19).

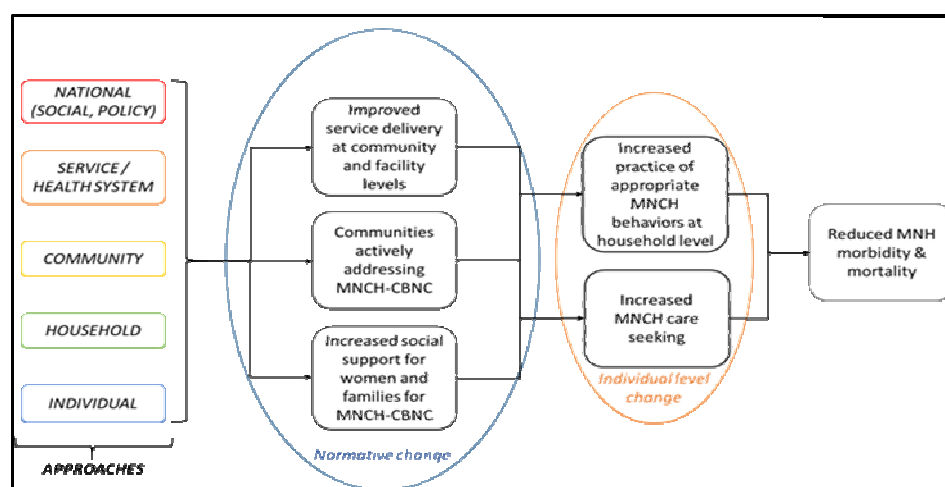


Figure 1: Conceptual framework for MNCH-CBNC demand creation strategy, Save the Children, 2014

The Community Based Data for Decision Making (CBDDM) strategy is another example for mobilizing families and kebeles to improve MNCH (20). CBDDM activities foster partnerships among public administrators, HEWs, local institutions, and HDAs to gather information to identify maternal and neonatal health service utilization gaps and facilitate community solutions to problems. It enables HDAs and their community to analyze the data, identify barriers to access maternal and newborn health services, and implement solutions; and promotes community participation in the planning and monitoring.

The CBNC package was layered upon the iCCM implementation platform and mainly implemented in the agrarian regions of the country. While developing the CBNC Implementation Plan, the MOH made a conscious decision to follow a phased roll out of the package to ensure lessons from initial phases were incorporated into subsequent phases (10). They also adapted implementation models for pastoralist areas (21). However, effective implementation of adapted packages in the pastoralist areas are yet to be done at scale.

Although the initial introduction of the CBNC package into the HEP platform was externally financed, the costed HSTP has already integrated high impact interventions that directly and indirectly contribute to neonatal survival (4), paving the way for sustaining the interventions. Moreover, strategies to address the financial barriers to maternal and newborn health services have been put in place more recently in the form of free service provision or formal and informal waiver systems (4, 13). Eventually, services are expected to be covered through a national community health insurance system that is in early stages.

In conclusion, the integration of CBNC on existing community and facility platforms facilitated at scale implemen-

tation of the interventions, reaching a considerable proportion of Ethiopia's newborns. Its ongoing effectiveness will be dependent on how well the platforms continue to function and how well they expand community demand and utilization. Current health system strengthening efforts are critical to building and sustaining the gains begun with iCCM, CBNC, and newborn referral systems. We believe the HSTP's focus on quality improvement, equity, information revolution and financing, combined with the priority given to newborn health provides huge opportunity to further expanding and sustaining the efforts to reach every newborn in the country with essential health care.

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