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MCHIP Maternal and Child Health Integrated Program

Results from the Qualitative Midline Assessment of the Community Kangaroo Mother Care Feasibility Study

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Background

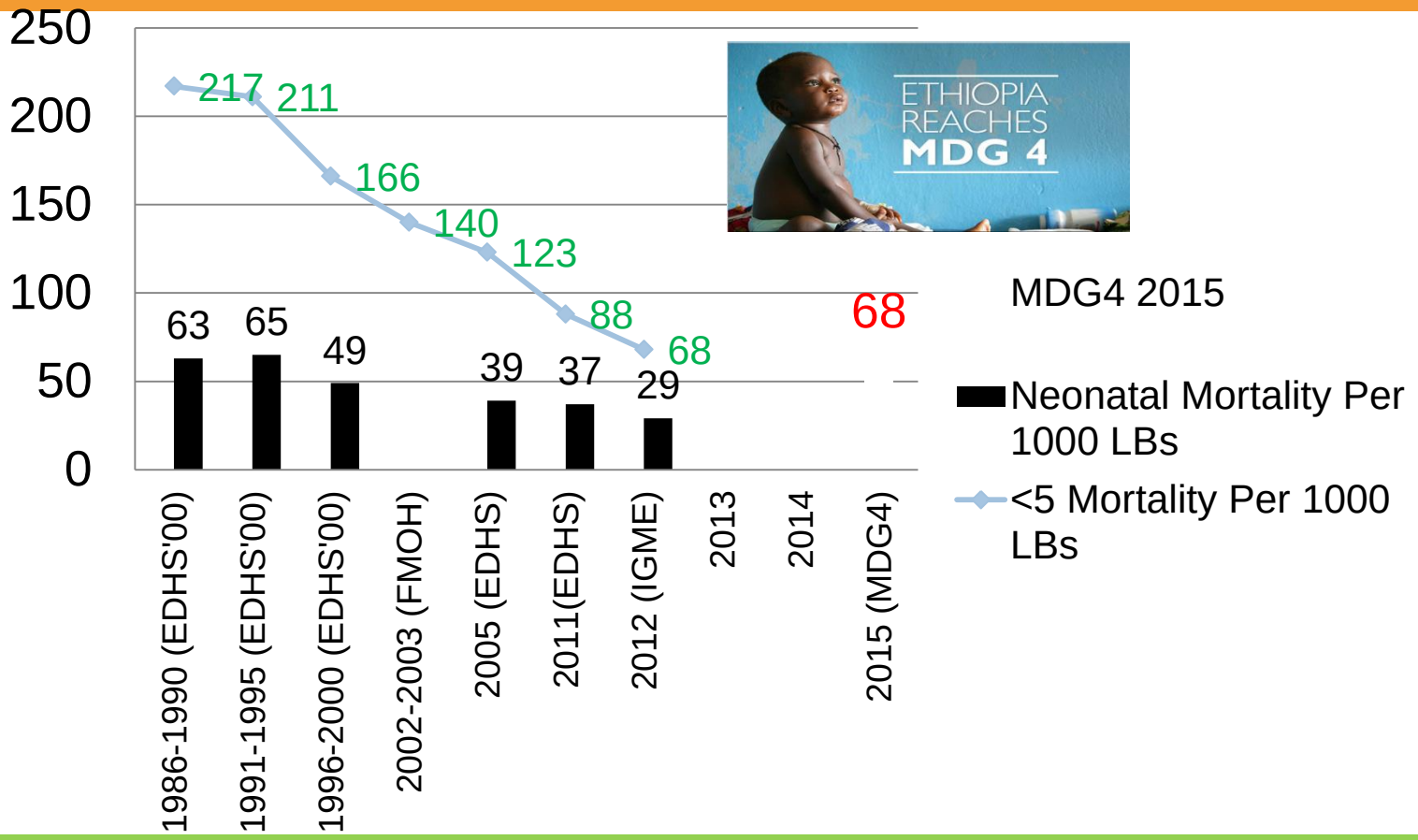
- In partnership with the Ethiopian Federal Ministry of Health, the USAID Maternal and Child Health Program (MCHIP) is piloting a package of community-based newborn health messages, including the promotion of Kangaroo Mother Care, in 4 Regions.

- MCHIP is evaluating this pilot, with a focus on assessing the strength of implementation of the pilot CKMC intervention in Ethiopia and the feasibility of scaling up CKMC nationally.

Background

- An estimated 3.1 million newborns die each year globally, and 99% of these deaths occur in low-income countries
- Low birth weight (LBW), which results from preterm birth and/or intrauterine growth restrictions, affects approximately 15% of newborns, but it is an underlying cause of 60–80% of all neonatal deaths

Neonatal and Under 5 Mortality: Trend Ethiopia



Ethiopia met the target for MDG4 three years ahead of the dealine (2015)! However, reduction in neonatal mortality is sluggish and unfair.

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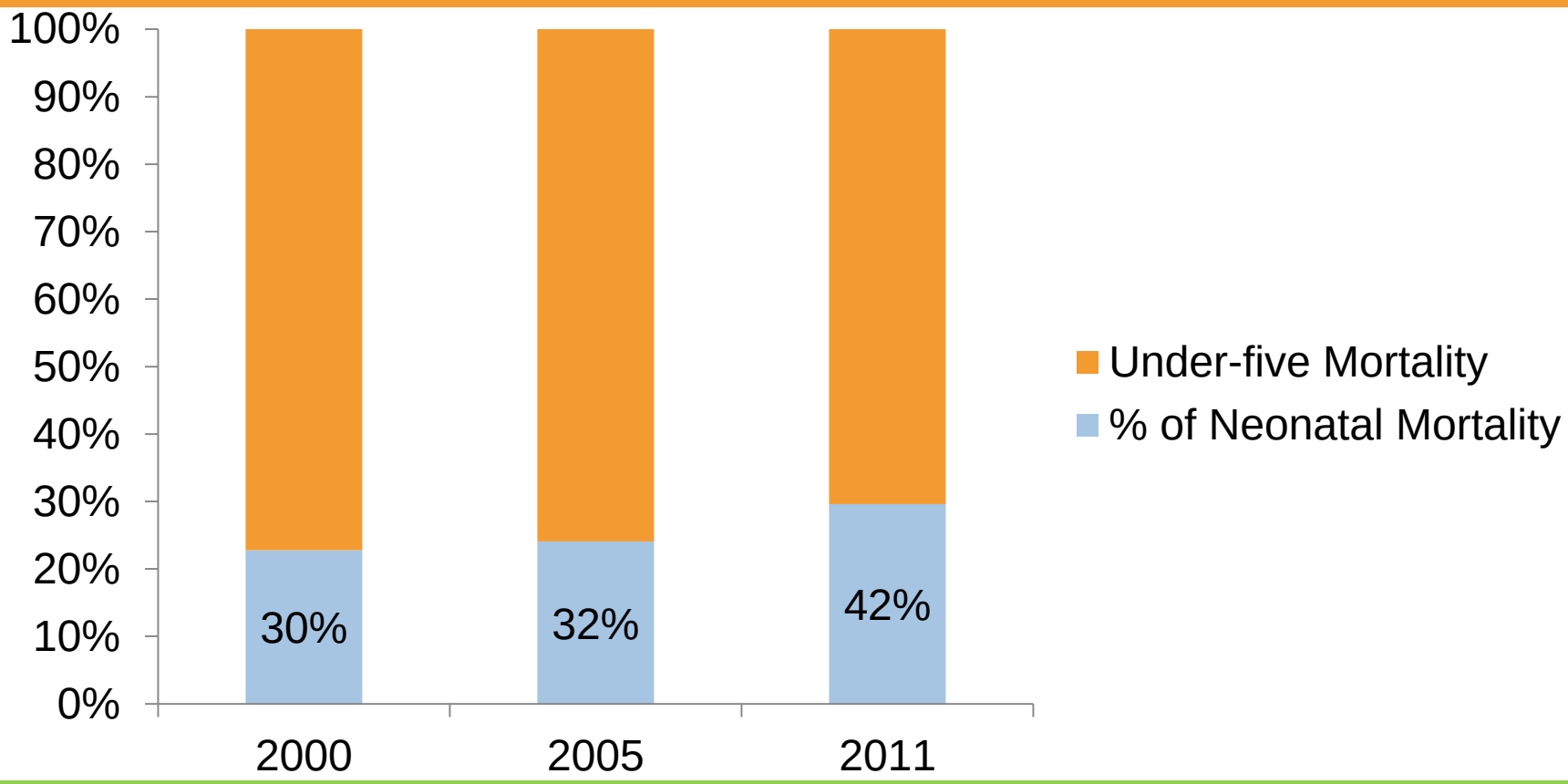
Background



Neonatal deaths now represent an increasing proportion of under-five child deaths, an estimated 42% in Ethiopia in 2011 compared to 30% in 2000

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Background

- Kangaroo mother care (KMC) is a strategy for caring LBW newborns that has been shown to be safe and effective at reducing mortality in facility-based studies

- KMC is traditionally practiced under supervision in a health facility, in resource-poor settings where utilization of health facilities is low, facility-based interventions do not reach the majority of LBW newborns

Background

Community KMC

- Potential strategy for improving use of KMC among LBW infants born at home:
  - EDHS 2005: only 5.3% of births were delivered in health facilities, EDHS 2011: 9.9%

- However, there is little evidence on community KMC
  - Darmstadt et al., 2006: Pilot of CKMC in Uttar Pradesh, India
  - Sloan et al., 2008: Cluster-randomized trial of CKMC in Bangladesh

Evaluation Components

Component	Timing
Baseline: • Household Survey • Immediate Post-Training HEW Skills Assessment	• January 2012 • May 2012
Midline: • Qualitative data on program implementation and barriers • HEW Skills Assessment	• September 2012
Endline: • Household survey	• December 2013

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Key findings from baseline survey

WHO Recommendation	Baseline Survey Result
• Recommended that women deliver babies at the health facility	• 29% of women delivered at a health facility
• Recommended that all babies be exclusively breastfed for first six months	• 88% of newborns exclusively breastfeed
• Recommended that babies be fed the first milk (colostrum)	• 50% of mothers squeezed out and threw away the first milk
• Recommended that a new/sterile razor be used to cut the cord	• 88% used a new razor to cut the cord
• Recommended that sterile string be used to tie cord	• 31% tied cord with string from the false banana
• Recommended that nothing be applied to the cord	• 23% applied butter or other substance to cord
• Recommended that newborns be dried and wrapped before delivery of placenta	• 58% of newborns dried and wrapped before delivery of placenta
• Recommended that small babies not be bathed for first 24 hours	• Only 18% of babies were not bathed in the first 24 hours

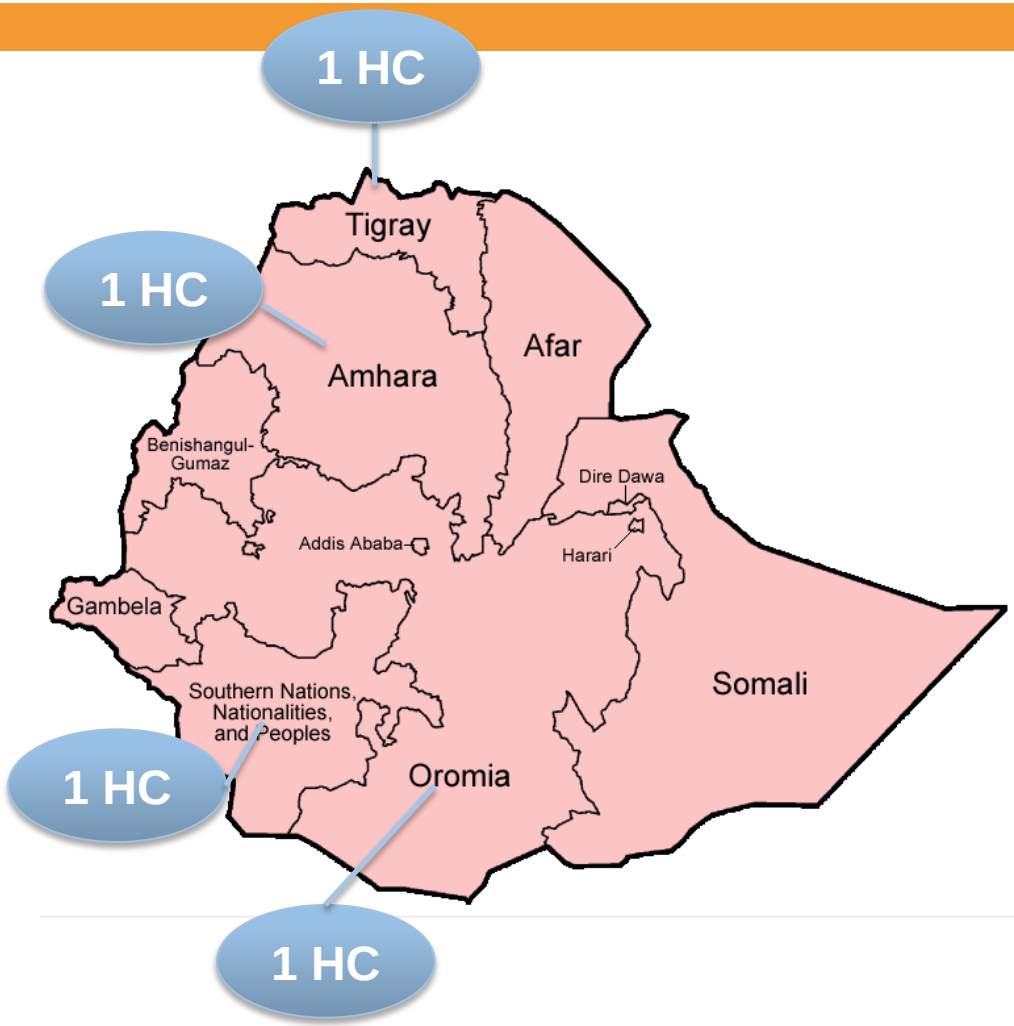
Objectives of the Qualitative Midline Assessment

- To better understand how mothers and newborns are usually cared for in the community, and why these practices are followed;
- To understand how low birth weight babies are cared for in the community and the likely acceptability of kangaroo mother care for low birth weight babies;
- To understand the relationship between communities and HEWs, and how this relationship may affect the uptake of community KMC;
- To identify implementation challenges and facilitating factors for the community KMC approach.

Study Design

- Part of a larger feasibility evaluation for community delivery of Kangaroo Mother Care by Health Extension workers

- Employed interview of managers in four regions and
- FGDs with HEWs, community members and recently delivered women in three of the most populous regions



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Data collection

- Data was collected between late August and late October, 2012
- 6 research assistants (qualitative interviewers) were hired and collected data under supervision of study coordinators
- In-depth Interview (IDI) and Focus Group Discussion (FGD) guides were developed and pilot tested
- IDIs and FGDs were conducted in a private room/place. Debriefing meetings were conducted with interviewers to identify emerging themes and areas where more information is lacking

Transcription, translation and analyses

- Each interview and FGD was recorded using a digital recording device, kept password protected and deleted from recording devices once transcription is complete.
- The recordings from each IDI and FGD were transcribed verbatim in the local language(s) used in the interview/FGD and translated into English.
- Analysis of IDI and FGD transcripts was conducted following an adapted "framework approach," which emphasizes approaches for applied qualitative research for program evaluations and policy decisions

Ethical considerations

- This study was approved by the Institutional Review Boards of Johns Hopkins Bloomberg School of Public Health Institutional Review Board and the Ethiopian Health and Nutrition Research Institute
- All participants in the IDIs and FGDs were consented individually in a private setting using approved consent forms and procedures.

Result: Summary of Interviewed Conducted

Data collection and respondent type	Amhara	Oromia	SNNPR	Tigray	Total
FGD with community members	2	2	2	-	6
FGD with recently delivered women	2	1	1	-	4
FGD with HEWS	1	1	1	-	3
IDIs with MCHIP managers	1	1	1	-	3
IDIs with MOH clinicians/managers	2	3	3	3	11

1. Community practices for cares of the newborn and mothers

- ***Birth preparedness***: While participants understood the need to make preparations for delivery, the uncertainty of child survival deterred mothers from making extensive preparations.

"HEW 1: Even there was a pregnant mother that came to me yesterday and I was educating her to buy socks, pants, etc. for the baby and she said: how can I buy socks for the baby before its birth? What if it is born dead? And I tried to convince her and she said ok I will."

- ***Place of Delivery***: Most deliveries take place at home, despite ongoing efforts to promote institutional delivery.

- ***Newborn Care***: In general, immediate newborn care practices varied depending on a number of factors: the presence of HEWs or skilled birth attendants, delivery location, and the decisions of relatives overseeing maternal and newborn care.

- ***Confinement period***: Mothers and babies are confined to the household for a minimum of ten days after delivery, while some participants mentioned confinement periods as long as two months.
- Cited reasons for confinement tended to involve fear of evil spirits and curses, fear of cold air, and weakness of mother. In general, the confinement period was perceived as a necessary step to protect the long-term health of a mother and baby. In one discussion in Amhara, participants explained:

Facilitator: One reason [that the mother needs to stay at home for 10 days] is not to be cursed. Is there any other reason?
Respondent 1: Yes, she will be left open.
Respondent 2: She won't be healthy ever again.
Respondent 3: Because we have too much fluid, we will be cursed. And if we move up and down, the fluid will be too much.
Respondent 4: Yes and cold air might get into us.

Thermal care and Bathing

- In all regions, respondents reported drying and wrapping of newborns, with common understanding of wrapping to prevent low body temperature. Despite widespread awareness of the need to regulate newborn temperature, bathing practices varied widely both among and within communities
- The influence of family members appeared to play a large role in decisions on newborn bathing. According to one HEW working in Amhara:

"They bathe the child within 24 hours even if we advise them not to… I told the mother not to bathe the child within 24 hours. She agreed and I told her that I will be back in the morning to check on her. When I visited the mother in the morning, they already bathed the child. Mostly other family members are the one that interfere in our work; in my case her mother is the one that bathe the child." **(FGD with HEWs, Amhara)**

Newborn Feeding

- In general, feeding is initiated immediately after delivery of the newborn. Participants also noted that feeding the colostrum was commonly practiced – and acknowledged a shift from previous practices of discarding the colostrum, due to increased HEW education and awareness of the associated health benefits.
- Some participants expressed concerns regarding work schedules and insufficient milk production as potential limiting factors for exclusive breastfeeding:

"It depends on the mother's lifestyle. If the mother is a government employee, as she can't feed the baby after being back to work, she may provide the baby other additional food items." **(FGD with community members, Amhara)**

2. Low birth weight babies: Community perceptions about causes and care practices

- Across all four regions, there was widespread perception of low burden of disease associated with low birth weight. Very few community members, HEWs, or managers reported ever seeing or hearing of low birth weight babies within the community.
- Reported methods of low birth weight identification by community members included measurement by health professional and, to a lesser extent, visual inspection by mothers and birth attendants.
- Discussions among community members and HEWs revealed a number of barriers to the identification of LBW babies.
  - In Oromia, HEWs reported that some mothers refused to remove the clothing of baby for fear of cold weather or the evil eye of health professionals.
  - Meanwhile, HEWs in Amhara also reported low levels of awareness, such that some community members believed that the act of weight measurement would lead to weight loss and other health problems for the child.

Perceived cause of LBW

- Perceptions vary from neutral to negative. Common causes of LBW cited included: heavy workload or poor health during pregnancy, lack of care and support during pregnancy, young age of mother, premature birth, and the birth of twins.
- Some of the participant in all three regions discussed traditional beliefs that LBW babies are a result of God's will, and in some areas is considered a curse or punishment on the family from God. In these families their shame can cause them to hide the LBW babies from others, not seek treatment for the baby.
- However, several participants indicated that the traditional negative perceptions are changing, and are becoming outdated.

"Previously people hide babies with low birth weight. Currently this culture was changed . . . [and] they are trying to support the growth of the babies." (FGD with HEWs, SNNPR)

Care for LBW babies

- Some community respondents indicated that there is no special care for LBW babies in the community, while others reported methods of care such as intensive breastfeeding and keeping the baby warm.
- Nearly all participants agreed that low birth weight babies were relatively weak compared to normal weight babies.
- However, participants did not perceive much increased health risk for LBW babies.
- In the Amhara region, participants also cited frequent washing with cold water as a method to induce weight gain:

"We believe that water makes chubby. We say that if we wash our babies again and again, they will gain weight. Truly, that baby of my friends became chubby sooner." (FGD with recently-delivered women, Amhara)

3. Kangaroo mother care

- Across all regions, there was high awareness among RDW and community members of KMC and its benefits on newborn health.
- In most community focus groups, participants reported learning of KMC through HEWs, but also mentioned 1-to-5 group members and health center staff.
- Although most community members and RDW spoke highly of KMC as a positive activity that is increasingly practiced, HEWs reported experiencing some reluctance from those that they counseled to practice KMC.

"When I counsel them some mothers have difficulty of accepting it [KMC]; especially in the town it is difficult because the mothers want to carry the child above their cloth. I explained them the purpose of skin-to-skin contact and after a long and tiresome discussion they agreed to practice it." (FGD with HEWs, Amharra)

3. Kangaroo mother care

- ***Barriers and facilitating factors to KMC practice in the community:***
  - Facilitating factors included family support, especially during the confinement period.
  - Barriers to practicing KMC include: work requirements of the mother, perceived discomfort, lack of family support, fear of stigma, social norms and culture, interference from family members and neighbors, and fear of suffocating the baby during sleep.

4. Other KMC Program Implementation Issues

- ***Identification of pregnant mothers***: The most commonly mentioned source for identification of pregnant and recently delivered women by HEWs and managers was the Health Development Army (HDA).
- HEWs also learn about pregnancies through the course of their routine work. However, urban HEWs do not have access to a HDA network and instead receive referrals of pregnancy from health centers and learn about deliveries from health workers at the facilities.

- ***Challenges for HEWs home visit***: Large coverage areas with difficult topography were considered an important challenge.
- Demanding workloads for HEWs and interruptions due to trainings or requests to participate in other activities (e.g. agriculture and education) work were other challenges for home visits.
- Despite the reported acceptance of HEWs by women in general, some participants mentioned the possibility that some women may refuse to receive HEW visits.

Conclusions

- The care given to newborns varied and are not in favor of the newborn when family members decide what type of care the newborn should get. The decision begins at preparation for newborn care during pregnancy.
- There is shift in terms of initiation of feeding of newborns immediately after birth and feeding of colostrum.
- There is still widespread misconceptions regarding causes of LBW in newborns, no special care is given for them and mothers do not feel comfortable to appear with their LBW babies at health facilities

Conclusions

- KMC is well understood by community members and recent mothers. HEWs and 1-to-5 network leaders are primary source of information on KMC. However, there is still reluctance in practicing KMC by some mothers.
- Family support during the confinement period is key facilitating factor to initiate or continue KMC practice
- However there are several barriers to practicing KMC (work requirements of the mother, perceived discomfort, lack of family support, fear of stigma, social norms and culture, interference from family members and neighbors, and fear of suffocating the baby during sleep)

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Thank you!

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Study sites

CKMC Intervention Areas and Catchment Populations

Region	Woreda	Health Center	Catchment Population
	K/ Tembien	Hagere Selam HC	29,900
Tigray	S/Samrie	Samre HC	38,815
	Kore	Kore HC	39,392
Oromiya	Arsi Neegele	Arsi Neegele HC	72,360
	Tehlodere	Haik HC	35,414
	Kombolcha	Kombolcha HC	31,648
	Yilemana Dinsa	Adet HC	57,323
Amhara	Mecha	Merawi HC	65,643
	Gibe	Homecho HC	53,032
	Misha	Morsito HC	34,283
	Arbaminch Zuria	Shele HC	49,684
SNNP	Meirab Abaya	Birbir HC	42,937