



# **Midwives' Role in Overcoming the Maternal Mortality Equity Gap**

## **Introducing Community Communication Emergency Referral/Evacuation**

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# **Midwives are well-positioned to lead the reduction in the MM equity gap as advocates, supervisors and trainers.**

- Midwives in the developing world saved thousands of women and newborns over the last 20 years.
  - Sub-Saharan Africa MMR reduced by 38.4% <sup>(1)</sup>
  - from 878/100,000 to 542/100,000
- Nevertheless, the SSA MMR remains unconscionable.
  - Over 500/ vs. 10/100,000 in Europe
  - Lifetime risk of maternal death is more than 100 times greater in SSA than in Europe (See Commentary below.<sup>(4)</sup>)

# The Equity Challenge

**Continuing to improve the distribution and quality of facility births will not suffice to overcome the equity gap in low resource health systems.**

**The physical, social and institutional barriers are overwhelming.**

- Even in Nigeria which meets the WHO standards for the
  - number of midwives <sup>(2)</sup> &
  - distribution of EmONC facilities, <sup>(3)</sup>
  - the **MMR remained unconscionable at 917/100,000** in 2017

# **The Equity Challenge:**

**In low resource health districts,  
over half the women have been left behind.**

- Poor women
- Low and non-literate women
- Urban women in towns far from the EmONCs
- Rural women
- **They are still not benefiting from the EmONC signal functions even though signal functions are essential for averting maternal and neonatal deaths.**
- **These underserved women are still dying.**

# Maternal tragedies, every day and night

Someplace right now,  
a midwife is lamenting the primipara she lost last night  
—both the mother and the baby. Why?



**Inadequate  
quality supply &  
inadequate  
informed demand  
for life-saving  
EmONC care.**

# **1) Delayed decision to go to the EmONC hospital until she seemed to be dying.**

- In many cultures, people believe that a pregnant woman has “one foot on the ground and the other in heaven” so she will be blessed if she dies trying to give birth.
- Many people fear hospitals; they have never been inside.
  - Heard you don’t pay for the operation but you have to pay for tests, medicines, even blood and generator fuel
- Husband is responsible but most men are too poor.
- Moreover, everyone has heard about a “woman who died in the hospital.”

## 2) Delayed transport to the EmONC hospital

- Transport delays are much more serious than the GIS reports.
- For the rural women (the majority of women left behind), the only public transportation is the weekly market day lorry whereas maternal complications arise unexpectedly at any time 24/7.

- a) Took an ox cart to the main road
- b) Waited for a minivan passing by
- c) Swollen creek on a rickety raft
- d) An impassible river → long detour



### **3) Delayed expert care from the health system**

- At the SBA clinic: lacked skill for her complication & delayed referring her to the EmONC
- At the EmONC: 24/7 qualified staffing was not assured
  - overworked handling large numbers of normal deliveries
  - client volume was low so staff were assigned elsewhere

**In low resource health districts in the foreseeable future, there will not be sufficient, adequately skilled and supported Skilled Birth Attendants to provide safe facility births and save the lives of the estimated more than 13% of pregnant women who require signal function expertise.**

# International maternal health experts agree:

**“Targeted actions to make maternal information and services available to the most in-need, underserved communities are essential to meeting development goals”.**

(Wilson Center, UNFPA, Maternal Health Task Force) (4)



# Evidence forced us to recognize that facility births were not reducing the MMR; for SDG3, experts prioritize quality and equity of maternal care.

- “In many countries, **improved use of facility care for birth has not been linked with improved outcomes.**” (Global Health Science & Practice: Commentary)<sup>(5)</sup>
- The significant expansion of **skilled birth attendants has not resulted in measurable reduction** in the maternal and neonatal mortality ratios. (PLOS One Indian cash transfers)<sup>(6)</sup>
- In settings with low facility capability, **giving birth in a facility does not necessarily confer any survival benefit for women or babies.** (Lancet Ghana study)<sup>(7)</sup>
- “**Reducing the number of delivery sites is recommended to improve quality and equity of care.**” (BMJ Tanzanian study)<sup>(8)</sup>

# **We risk establishing Quality of Care in the EmONCs and major clinics without significantly reducing the MMR.**

- Most of the women still dying are dispersed in smaller towns and villages and even in vulnerable sections of urban communities in low resource health districts.
- **How are we going to evacuate the right women at the right time? How are we going to identify them and get them into the quality services?**
- **We need to establish a Quality Evacuation component of QC.**
- **Quality Evacuation = timely evacuation of all (or 80%) of the women who are expected to experience a life-threatening complication in each WHO catchment area.**
- **M&E is essential:** Our EmONCs need to establish Quality Evacuation baselines and be evaluated against their progress in increasing the percentage of women benefiting from signal functions.

**Quality Evacuation Must Become a  
Core Evaluated Component of Quality of Care**

# **Community Communication Emergency Referral/Evacuation (CCER): A demand solution to complement the equity and quality of care supply solution**

- Focuses on the underserved women
  - still dying from maternal emergencies every year. (9)
- Empowers all communities & especially underserved communities
  - to ensure that every woman with a maternal danger sign is evacuated to an EmONC in a timely manner.
- Thereby maximizing the % of women with maternal emergencies who receive timely, quality EmONC care

# **Community Communication Emergency Referral/Evacuation (CCER) saved thousands of lives (10)**

- Was the demand component of a UKaid health systems strengthening project, PRRINN-MNCH, that upgraded EmONCs and major clinics in Northern Nigeria
- **Contributed to a 16.8% MMR reduction within 4 years from 1,271/100,000**
- **Significantly increased demand and timely access to EmONCs**
- **1/3 of lives saved were women with life-threatening maternal danger signs, evacuated by their geographically marginalized communities.**
- The DfID follow-on PATHS2 project continued this work.

CC-Mali Pilot Project is being replicated in two other health districts

- Maternal emergency reference/evacuation rate increased from 16% to 81%. (11)

# Midwives Were Central to the Success of Community Communication Emergency Referral/Evacuation.

- As the Heads of District Maternal-Child Health Units
- Oversaw the programme
- Cared for all obstetric neonatal clients
- Provided client education
- Trained trainers in the methodology



# Innovative Community Communication Body Tools



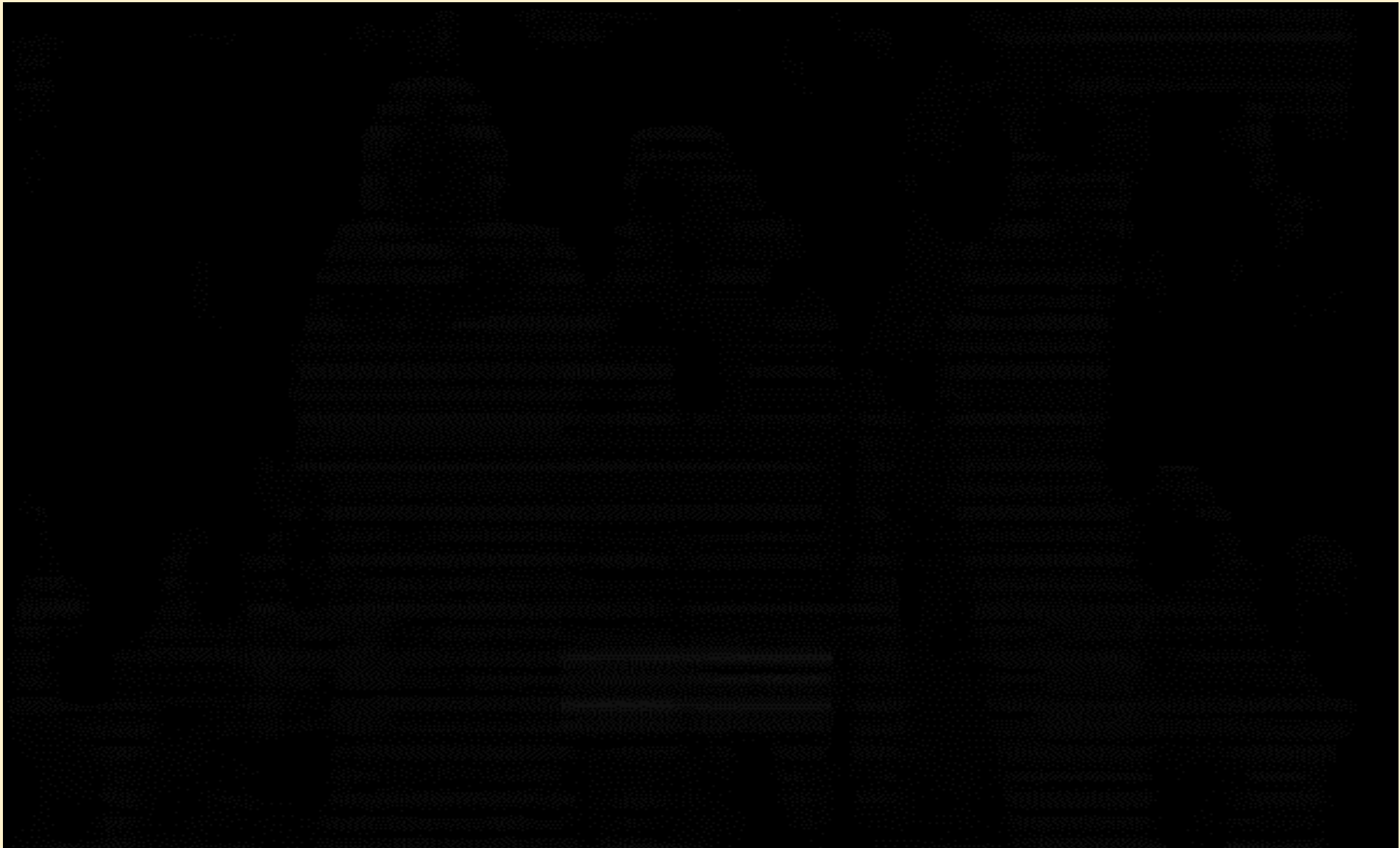
- Empowered low and non-literate volunteer leaders and their participants
  - to learn, recall, share and decide together how to respond to maternal danger signs.
- The tools are like body PowerPoint; they help the communicator and the listener recall info.
- You SAY the name of the danger sign (FEVER), while you DO something to help you remember the complication
  - SAY: “FEVER”
  - DO: Cross your hands over your chest, shivering

## Supportive Materials

CCER is part of the *Community Communication MNCH e-Manual* <sup>(12)</sup>

[http://www.thehealthcompass.org/sbcc-tools/  
community-communication-mnch-e-manual-participatory-health-promotion-sessions-1](http://www.thehealthcompass.org/sbcc-tools/community-communication-mnch-e-manual-participatory-health-promotion-sessions-1)

- See Annex 1 of this PowerPoint for the text of the **Job Aid #1 of the *MNCH e-Manual* on how to teach Communication Body Tools for Maternal Danger Signs.**
- Contact us for other supportive materials at [susanaradeon@gmail.com](mailto:susanaradeon@gmail.com) or [saradeon@yahoo.com](mailto:saradeon@yahoo.com)
- Next, a YouTube clip of Hausa women from N. Nigeria: Communication Body Tools for Safe Motherhood
- <http://www.youtube.com/watch?v=3lUcbHHMvWYW> <sup>(13)</sup>



# Midwives used this innovative approach to generate informed clients and communities



- They trained pre- & in-service staff as an add-on to their upgraded, lifesaving skills workshops.
- After seeing the results of the communication body tools, a national programme
  - trained midwives in each region
  - translated the danger signs song into the 3 major languages, making dissemination faster and fun.

# **This innovative community engagement approach relies on community members to evacuate women.**



4 lead community volunteers were trained at the district and then they

- Trained 20 low and non-literate volunteers
- Saturated their communities with key decision-making information
- Catalysed formation of community savings, volunteer transporters & blood donors
- Overcame the demand-side delays (decision and transport)

# **The Equity Gap Blocks Achievement of the SDG3 MMR Indicator (70/100,000 live births)**

- Midwives can lead in advocating for
- Community Communication Emergency Referral/Evacuation
  - to ensure that EmONC midwives save
  - the greatest possible number of women facing life-threatening complications.
- Midwives in leadership positions can ensure that communication body tools are incorporated into
  - pre- and in-service training
  - for midwives, nurses, auxiliaries, CHWs and health educators.



**Midwives are the lifeline for underserved women,  
but there can be no equity without demand.**

**Each woman experiencing a complication today  
can be saved today, but only if she is evacuated on time.**

# References

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- (2) *The State of the World's Midwifery 2014: A Universal Pathway. A Woman's Right to Health.* UNFPA, International Confederation of Midwives (ICM) & World Health Organization (WHO), pp. 150-151. <https://www.unfpa.org/sowmy> (accessed 29APR2019)
- (3) Paul O Ouma, et. al. Access to emergency hospital care provided by the public sector in sub-Saharan Africa in 2015: a geocoded inventory and spatial analysis, *Lancet Global Health* 2018; 6: e342–50. [http://dx.doi.org/10.1016/S2214-109X\(17\)30488-6](http://dx.doi.org/10.1016/S2214-109X(17)30488-6). Note: EmONC = Emergency Obstetric and Neonatal Care
- (4) Margaret E. Greene, Omar Z. Robles, Sandeep Bathala, and Lauren Herzer Risi, 2012 - 2013. *Delivering Success: Scaling Up Solutions for Maternal Health.* Wilson Center, UNFPA, Maternal Health Task Force. p.13. <https://www.wilsoncenter.org/publication/delivering-success-scaling-solutions-for-maternal-health>
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<https://www.sciencedirect.com/science/article/pii/S2214109X19301652>.

(8) Straneo M, Fogliati P, Azzimonti G, Mangi S, Kisika F (2014) Where Do the Rural Poor Deliver When High Coverage of Health Facility Delivery Is Achieved? Findings from a Community and Hospital Survey in Tanzania, December 2, 2014. PLoS ONE 9(12): e113995, p. 2. <https://doi.org/10.1371/journal.pone.0113995>

(9) Estimate based on the global estimates for the year 2017, 295 000 maternal deaths, cited on page 11 in

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(10) Susan B. Aradeon, Henry V. Doctor. Averting maternal mortality and overcoming the equity gap: the public health evidence base for the community communication emergency referral [evacuation] intervention. *International Journal of Women's Health*, 2016;8 77–92. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4803262/>

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(13) Aradeon. Producer & script writer, DVD short: *Communication body tools for safe motherhood* in Hausa with English subtitles, PATHS2, Abuja Nigeria, Sept. 2012. <https://www.youtube.com/watch?v=3IUcbHHMvWY>

(14) Aradeon and Soyoola, *Community Communication MNCH e-Manual*, Job Aid #1: Maternal Danger Signs.

# Annex 1a: COMMUNITY COMMUNICATION MNCH e-MANUAL, JOB AID #1: MATERNAL DANGER SIGNS <sup>(14)</sup>

- Every pregnancy can have a maternal emergency
  - During pregnancy
  - During delivery
  - Up to 6 weeks (42 days) after delivery.
- Most maternal emergencies occur suddenly and unexpectedly.  
A woman who gave birth without difficulty the first time or many times can have a serious maternal emergency with her next pregnancy.
- Facility delivery is safest because most maternal emergencies occur during delivery or soon after.
- If she has an emergency maternal danger sign, rush her immediately to

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*Insert the name of the nearest EmONC.*

# **Annex 1b: COMMUNITY COMMUNICATION MNCH e-MANUAL, JOB AID #1: MATERNAL DANGER SIGNS**

- An emergency danger sign means the life of the mother and/or baby can only be saved with expert medical care.
- Do not waste time with a TBA, traditional healer, chemist or pharmacist. They cannot save the life of the mother or baby.
- If you delay, you make it more difficult to save their lives.
- If a woman has a non-emergency maternal danger/warning sign, come to our facility within 24 hours.
- Sing the maternal danger signs song to help you remember the danger signs.

# Annex 1c: COMMUNITY COMMUNICATION MNCH e-MANUAL,

## JOB AID #1: MATERNAL DANGER SIGNS

### EMERGENCY MATERNAL DANGER SIGNS (1-3)

SAY the danger sign	DO a pose to remember the danger	EXPLAIN the danger
<b>1 - Severe abdominal pain during pregnancy</b>	<i>Move your hands back and forth across your abdomen while moaning.</i>	<p>--Don't delay. Rush to the hospital.</p> <p>--Can be the baby is growing outside of the womb and will cause loss of life.</p> <p>--With bleeding, it can mean she is losing the baby.</p>
<b>2 - Fitting</b>	<i>Hold your hands up in the air; let your head fall to one side while shaking your hands and whole body.</i>	<p>--Can only be stopped in a facility with an SBA or the General Hospital.</p> <p>--Can cause loss of life for mother and newborn</p>
<b>3 - Severe Bleeding</b>	<i>Hold your hands flat, face down above your lap and push away from your body to remind us that the blood flows away from the womb.</i>	<p>--Trained health workers with special medicines can prevent severe bleeding.</p> <p>--A major cause of death during and after delivery within 2-4 hours</p> <p>--Recognize severe bleeding</p> <ul style="list-style-type: none"> <li>• Any amount of continuous bleeding.</li> <li>• Large clots, the size of your fist</li> <li>• Weakness and fainting. The woman cannot stand up alone or she falls.</li> </ul> <p>--Any bleeding during pregnancy needs facility care</p>

# Annex 1d: COMMUNITY COMMUNICATION MNCH e-MANUAL,

## JOB AID #1: MATERNAL DANGER SIGNS

### EMERGENCY MATERNAL DANGER SIGNS (4-6)

SAY the danger sign	DO a pose to remember the danger	EXPLAIN the danger
<b>4 - Labour more than 12 hours (prolonged)</b>	<i>Pretend to be in the local birthing position and show severe pain.</i>	--Baby may be bigger than the birth canal (especially with girls who are too young) --Wrong part of the body may be presenting --Mother may be too weak
<b>5 - Hand, foot, cord or buttocks comes first</b>	<i>Push out your right hand, your foot, pull your hand from your belly button, then touch your buttocks</i>	--The baby will not come out without medical assistance.
<b>6 - Placenta does not come out within 30 minutes of childbirth</b>	<i>Hold your two hands in a receiving position near your knees and show worry on your face</i>	--Will cause prolonged and severe bleeding that can cause loss of life

# Annex 1e: COMMUNITY COMMUNICATION MNCH e-MANUAL, JOB AID #1: MATERNAL DANGER SIGNS

## EMERGENCY MATERNAL WARNING SIGNS (7-9)

The facility health worker can take care of you. Come to our facility within 24 hours.  
Don't wait longer.. These WARNING SIGNS can suddenly change to DANGER SIGNS.

SAY the danger sign	DO a pose to remember the danger	EXPLAIN the danger
<b>7 - Severe Headache</b>	<i>Hold the side of your hand on your forehead and grimace</i>	--A sign that she may start fitting. --May lead to the loss of her life or the baby's.
<b>8 - Anaemia: Pale palms (on hands) &amp; pale inner eyelids</b>	<i>Hold your hands out in front of you with your palms up to show the area that will be pale. Touch your eyelid and pull out the lower lid to show the area that will be pale.</i>	--Mother's blood is too weak (caused by poor nutrition, malaria and/or worms)  --Makes baby too small for good survival. --Mother can die during delivery from loss of a small amount of blood.
<b>9 - Severe Fever</b>	<i>Cross your arms on your shoulders and shiver,</i>	--Caused by infection that can result in sterility. Watch for foul smell discharge.  --Caused by malaria; may result in stillbirth, low birth weight or death newborn &/or mother.