

An update on the status of assisted vaginal delivery:

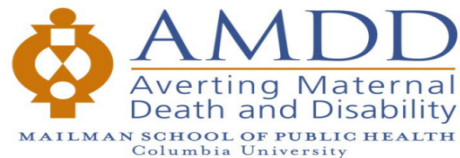
Should we drop AVD from the basic EmOC signal functions?

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Overview

- What is assisted/operative/instrumental vaginal delivery?
- Why is it important?
- EmOC signal function debate
- Frequency of use in HICs and LMICs
- Primary barriers to its use
- Reflections on the future of AVD



Outlet forceps

Photo source: Asceulap Surgical Instruments



Vacuum extractor

Photo source: Odeoni.com.mk

Why does AVD matter?

- AVD technologies are evidence-based with high success rates that can be used to reduce the incidence of cesarean deliveries.
 - Example from Guayaquil, Ecuador
- 2015 WHO consensus statement on cesarean deliveries:

“At population level, cesarean section rates higher than 10% are not associated with reductions in maternal and newborn mortality rates.”
- Where cesarean rates are low and access to services a problem, AVD can be used instead of a cesarean in selected cases.

Signal functions for basic EmOC

- 7 signal functions (life-saving drugs and procedures)
- To be fully functioning at B-EmOC level, all 7 have to have been performed in the last 3 months
- In 35 of 39 countries, AVD was the most frequently *missing* basic signal function
- Strengthening B-EmOC services is a major strategy that many countries adopt
- If AVD were dropped from the signal functions, B-EmOC performance would look much better

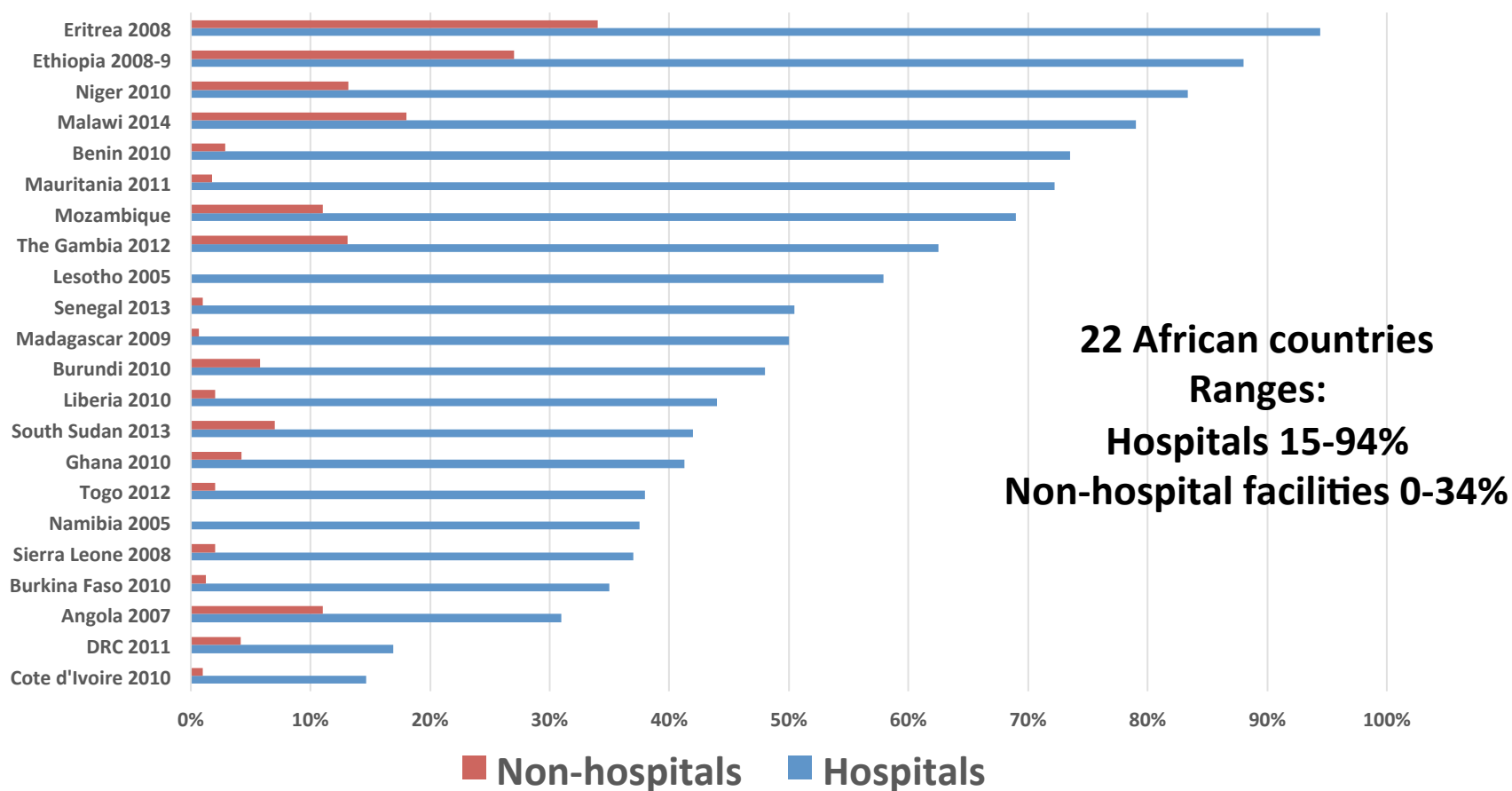
Practice of AVD in high income countries

- In England, Scotland, Ireland, Australia, and Canada, AVD rate is 10-16%; rates are stable (Gei, Prevention of first cesarean delivery: the role of operative vaginal delivery, *Seminars in Perinatology*, 2012)
- In the US, since 1990 rates declined from 9% to 3% (Martin et. al., Births: final data for 2012," National Vital Statistics Reports, 2013).
- In the Netherlands, high rates of AVD (20%) among certain groups of women help keep cesarean delivery rate low (15.7%) (Zhang et. al. Caesarean section rates in subgroups of women and perinatal outcomes, *BJOG*, 2015)

Practice of AVD in lower and middle income countries

- National EmONC assessments, 6 African countries, 593 hospitals, 3,274 non-hospital facilities, and 1.5 M deliveries: **0.2 – 1.2%**
- WHO global survey on maternal and perinatal health
 - Latin America: 8 countries, 120 facilities and 94,307 deliveries: **1.6%** (Villar et. al., *BMJ*, 2007)
 - Africa: 7 countries, 131 facilities and 83,439 deliveries: **3%** (Shah et. al., *IJGO*, 2009)
 - Asia: 9 countries, 122 facilities and 107,950 deliveries: **3.2%** (Lumbiganon et. al., *The Lancet*, 2010)

Where AVD is performed: hospitals and non-hospital facilities



Primary barriers to use in last 3 months

- Latin America (2 countries): policy issues and authorization to perform
- Asia (4 countries): no equipment
- Sub-Saharan Africa (17 countries):
 - Human resources training (7 countries)
 - No equipment (6 countries)
 - Policy/authorization issues (2 countries)
 - Financial issues (1 country)
 - No patients required AVD (1 country)

Reflections for the future of AVD

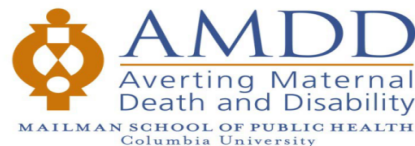
- Arguments in favor of AVD vary by cesarean delivery rate
 - Where CD rates are high, AVD can reduce those rates
 - Where CD rates are low, access to emergency care still a challenge, AVD is an option. The alternative is referral.
- How do we address the declining use of AVD?
 - Global endorsement / consensus to revitalize the use of AVD
 - Maintain and increase clinical training opportunities
 - Learn from successful pilots to reintroduce (Ecuador and Tanzania)
 - Support new device designs

Reflections on the EmOC signal function debate

- Removal of AVD as a signal function would communicate the opposite of what is needed
- Basic signal functions are targeted at health centers and yet the safety of AVD in a non-hospital environment is frequently questioned. Evidence on its use in a non-hospital environment could help shift policy.
- For monitoring purposes, we can promote use of BEmOC-1 where AVD is missing, or use a signal function gradient to measure EmOC functioning.



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