

Are Skilled Birth Attendants Really Skilled?

A 4-country study of SBA competence

20th International Conference
The International Society for Quality in Healthcare

November 3, 2003



SBA Competency Study

Research team

Principal Investigator: Steven A. Harvey¹

Co-investigators:

Patricio Ayabaca,² Maina Boucar,¹ Maurice Bucagu,³ Bart Burkhalter,¹
Sabou Djibrina,¹ Wendy Edson,¹ Sourou Gbangbade,⁴ Erica Hedmann,⁵
Jorge Hermida,¹ Stephane Legros,¹ Affette McCaw-Binns,⁵ David Nicholas¹

Affiliation:

1. Quality Assurance Project,
2. Ecuador country coordinator
3. Rwanda country coordinator
4. Benin country coordinator
5. Jamaica country coordinators

Funded by USAID through the Quality Assurance Project

Maternal death & disability

- 500,000+ deaths annually
- >90% preventable
- Incalculable morbidity, disability
- 5 common complications:
 - Hemorrhage
 - Eclampsia
 - Sepsis
 - Obstructed labor
 - Post-abortion complications

Safe motherhood movement

- Skilled attendance at delivery
- Basic essential obstetric care
 - Parenteral antibiotics
 - Parenteral oxytocics
 - Parenteral anti-convulsants
 - Manual removal of placenta
 - Removal of retained products
 - Assisted vaginal delivery
- Comprehensive essential obstetric care
 - Cesarean section
 - Blood transfusion

Source: Maine, Deborah, Tessa M. Wardlaw, Victoria M Ward, James McCarthy, Amanda Birbaum, Murat Z. Akalin, and Jennifer E. Brown. 1997. *Guidelines for monitoring the availability and use of obstetric services*. 2nd ed. New York: UNICEF, WHO, UNFPA.

Research question

How competent are “Health Professionals”?

Or...

Are “Skilled Birth Attendants” Really Skilled?

Study objectives

- Develop valid method to measure competence
- Determine cost & logistics of measuring competence in low-resource settings
- Evaluate competence of health personnel in 4 different countries

Definitions

Skilled Birth Attendant

a person “with midwifery skills... trained to proficiency in the skills necessary to manage normal deliveries and diagnose, manage, or refer complications.”

- (WHO/UNFPA/UNICEF/World Bank)

- Focus on 1st line birth attendants
- Exclude TBAs, specialists



Definitions

Competence

“possession of the **knowledge** and **skills** sufficient to comply with **predefined clinical standards**”

- Benchmark: WHO IMPAC Guidelines
- National standards used *in addition to* rather than *in place of* international standards
- Competence ≠ Performance



Participant characteristics

Number of providers enrolled by place of work



* Jamaica includes community midwives from 4 regions. Rwanda includes 1 provider from each of 4 regional health centers.



Methods: Knowledge test

- 54 fill-in-the-blank & multiple choice questions

- Six subject areas

- | | |
|----------------------------|-----------------------------------|
| 1. Antiseptic procedure | 4. Hemorrhage |
| 2. Normal labor & delivery | 5. PIH (pre-eclampsia, eclampsia) |
| 3. Immediate newborn care | 6. Sepsis |

Sources:

MotherCare; Maternal & Neonatal Health Project; IMPAC Guidelines; Safe Motherhood Interagency Working Group standards; national standards of Benin, Ecuador & Rwanda; additional content experts



Methods: Skills tests

2 partograph case studies

(induced labor, CPD + acute fetal distress)

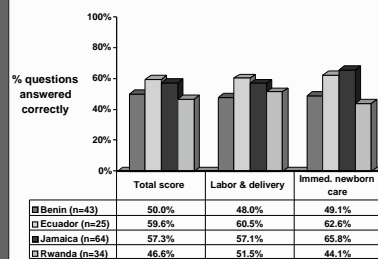
5 skill areas

- Neonatal resuscitation with ambu bag
- Neonatal resuscitation mouth-to-mouth & nose
- Manual removal of placenta
- Bimanual uterine compression
- IV insertion

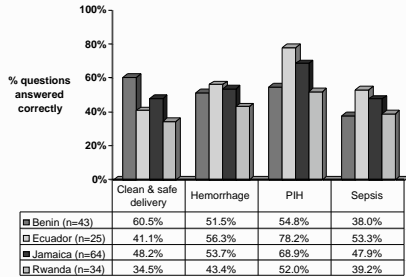


Sources: Maternal & Neonatal Health Project, Quality Assurance Project

Preliminary results: Knowledge

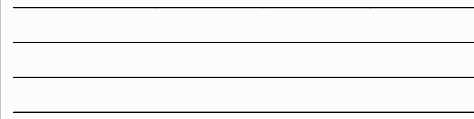


Preliminary results: Knowledge

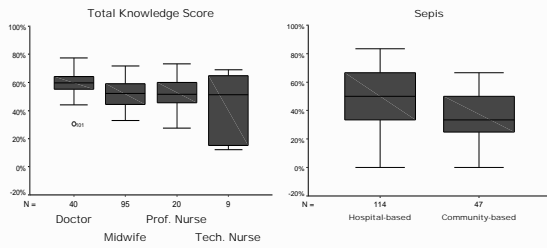


Knowledge: 3rd stage management

Active Management of 3rd Stage Labor (2 questions)% of

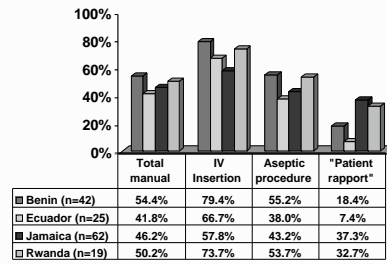


Knowledge by provider type, location



Preliminary results: Skills

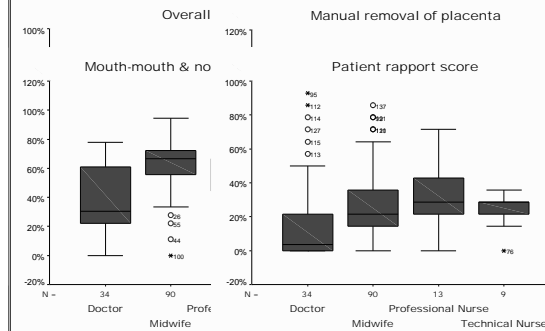
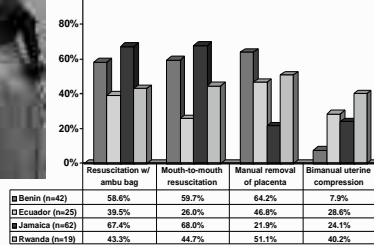
% steps completed correctly for each skill

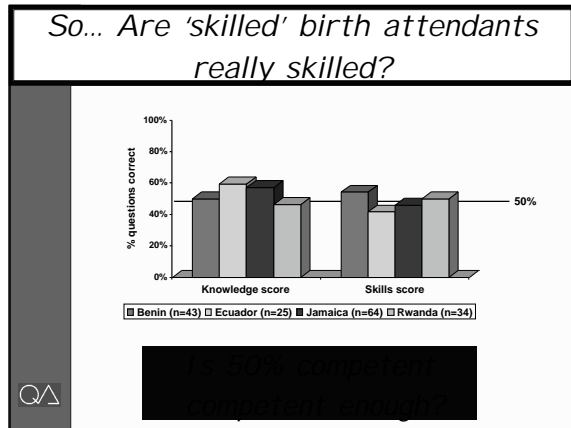
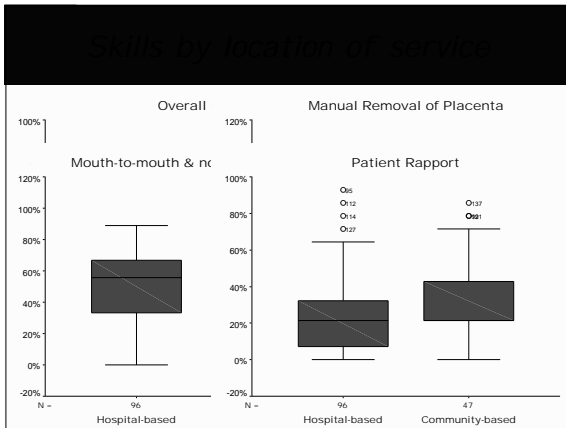


Preliminary results: Skills



% steps completed correctly for each skill





- **Current competency levels are low**
- **Two key skills are rarely taught & rarely practiced:**
 - Bimanual uterine compression
 - Active management of 3rd stage labor
- **Little difference in competency by professional level**
 - MDs do better with more complex skills
 - Professional level appears *inversely* related to interpersonal quality of care

- **Methods function well but need further refinement**
- **Can help focus scarce training, supervisory resources where most needed**
- **Good complement to continuous quality improvement efforts**

Contact information:
www.qaproject.org
sharvey@urc-chs.com