
**International survey of the
management of the
3rd stage of labor**

**An introduction for
country coordinators who will be
responsible for the study**

Objectives of this presentation:

- Present the lessons learned from our work in several countries
 - Regarding sampling strategies, fieldwork, data entry, analysis and dissemination

Learning objective:

After working through the material included in this presentation, everyone should be able to develop a:

- Complete, *feasible* and *specific* **PLAN OF ACTION** from the start of the study through to dissemination

Review of issues to be covered

- Sampling strategies
- Ethical Review Board considerations
- Content of the questionnaires
- Country-level reports
- Plans for training (to allow for observation of deliveries and for data entry/analysis)
- Country level dissemination plans
- Budgets under varying scenarios
- Timeline for activities at the country level

A few basic
principles
about
“Sampling”



Notes on Sampling

- The plan is that sampling will be carried out:
 1. at the facility level and
 2. at the level of deliveries (all deliveries observed over 16 hour period for 2 days)
- *With the goal of selecting a nationally representative sample of deliveries among “facility-based” deliveries in each country*

The reality is that:

- Some facilities have a low volume of births.
- Ideally, we would want to include some of these facilities:
 - to make it truly nationally representative
 - AND
 - to see if use of AMTSL varies in these small facilities relative to the large ones

However, for practical reasons

1. It is too expensive to send teams to these facilities to sit and possibly not see any or very few deliveries.
2. SO, we suggest restricting the sample to larger facilities.
3. Our budgets restricted us to visiting about 20-30 facilities.

However, for practical reasons - *continued*

The plan for selecting the sample of facilities has varied in each country. See document: Sampling plan for AMTSL surveys

1. For example: In Ethiopia, the decision was to take ALL facilities with 90+ deliveries per month. That means, 3 per day, ie, *teams were likely to observe at least some deliveries on every visit*. In the end, we did not *sample* facilities. We took the universe of facilities with 90 deliveries per month or more.
2. In Tanzania, we took one District Hospital in each District.
3. In Honduras, we took all public maternity hospitals.
4. In Benin, we took facilities in every department of the country, including national referral hospitals, district hospitals and health centers

Sampling *at* the facility

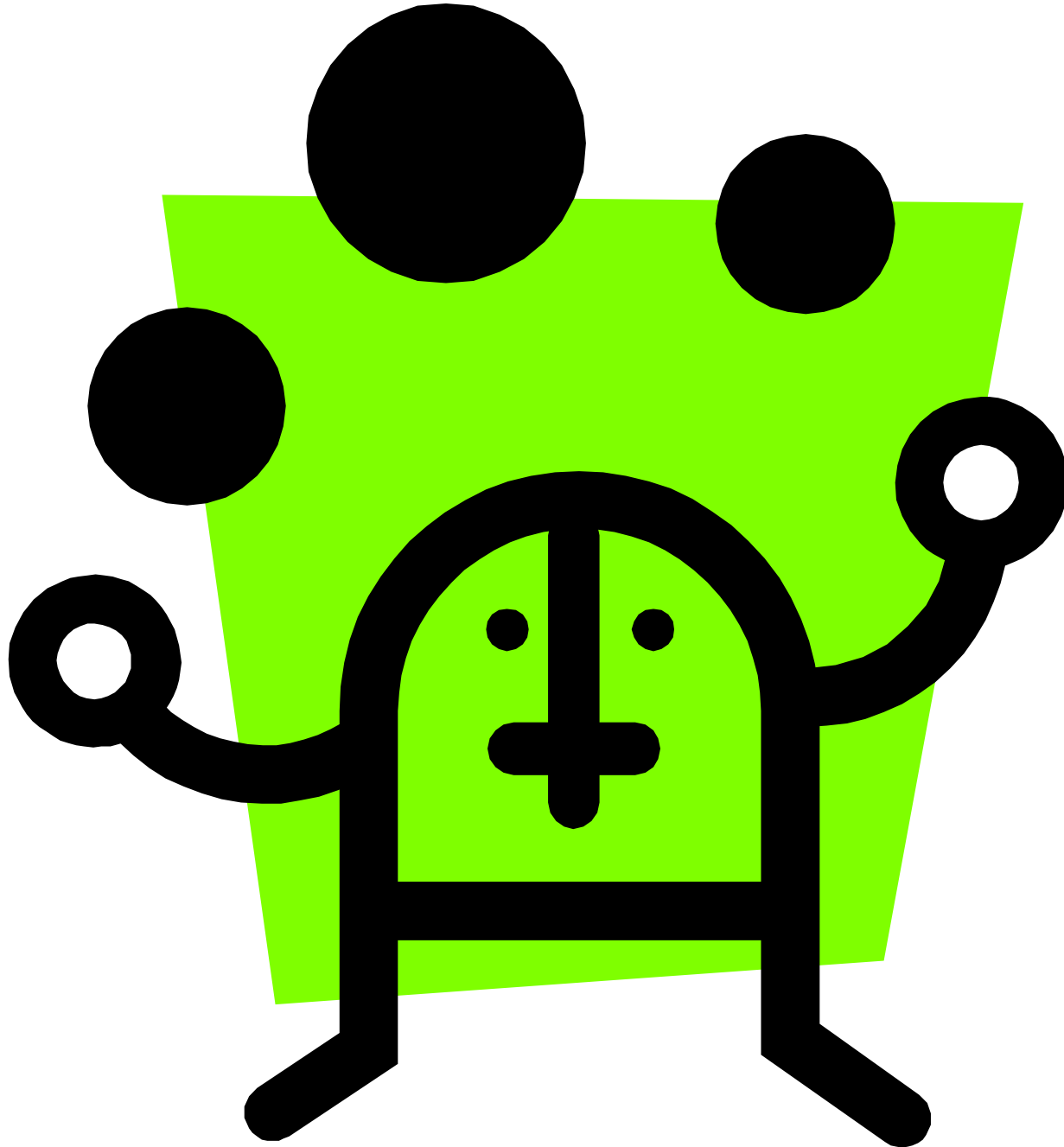
Our general principle has been:

- Once at a facility, all deliveries are observed over a 16 hour period for 2 days. Again, this is done for practical reasons (we do not want the teams to have to work all night, but we would hope that they observe at least some deliveries).
- For example, we know that “at least 3 deliveries per day” is an average, and that some days there will be more in some facilities and some days there will be fewer.

Keep in mind, the sample design must **BALANCE**:

- Your need for achieving our **target sample size** of deliveries (probably ~200 observations)
- Your need for **geographic representation**
- Your **number of deliveries** a 2 person team is likely to observe over 2 days, 16 hours
- Your **cost of transport** (20-30 facilities?)
- Your **timeline** (how long can you stay in the field is determined by the n of observers)
- And, of course, your **BUDGET!**

Basically, this is your job description:



Overview of Sample Size Requirements: POINT ESTIMATES

Precision (+/- %)	Prevalence (%)										
	10%	15%	20%	25%	30%	35%	40%	45%	50%	55%	60%
3%	854	1,209	1,518	1,779	1,992	2,158	2,277	2,348	2,371	2,348	2,277
5%	307	435	546	640	717	777	820	845	854	845	820
10%	77	109	137	160	179	194	205	211	213	211	205

Assumption: response rate = 90%

Overview of Sample Size Requirements:

BASELINE ESTIMATES:

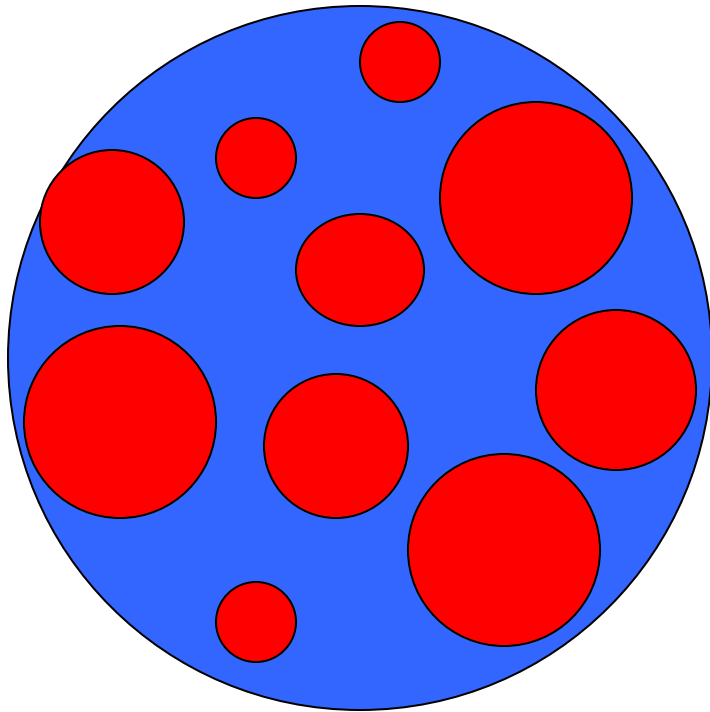
Change (%)	Prevalence (%)										
	10%	15%	20%	25%	30%	35%	40%	45%	50%	55%	60%
-10%	128	244	346	435	510	572	620	654	674	681	674
-5%	756	1,194	1,576	1,904	2,178	2,396	2,560	2,670	2,724	2,724	2,670
-3%	2,360	3,544	4,577	5,458	6,187	6,764	7,189	7,462	7,584	7,554	7,371
3%	3,089	4,182	5,124	5,913	6,551	7,037	7,371	7,554	7,584	7,462	7,189
5%	1,194	1,576	1,904	2,178	2,396	2,560	2,670	2,724	2,724	2,670	2,560
10%	346	435	510	572	620	654	674	681	674	654	620

Assumption: response rate = 90%

The data you need to provide in order to design and select the sample:

- Complete list of public health facilities where deliveries take place
- Complete list of n of deliveries in each facility
- The same data for private facilities, if possible
- See document: Sampling Plan for AMTSL study for further details

Blue: universe of facilities
w/90+deliveries per mo.
in a hypothetical country



Red: individual facilities;
some have a larger volume
of births than others

If you go and observe on any given day, you should see more deliveries at the facilities with higher volume.

If after data collection, you see that the larger facilities gave you more deliveries *and* that the increase was proportional to the contribution of that facility's deliveries to the entire universe of facility-based deliveries

Congratulations – you have a self-weighting sample!

If not, during analysis you may have to “weight” observations from some facilities that were under or over-represented. (Weighting just means multiply each observation by a factor)

Weighting the sample:

- **A Self-weighted sample** means that the number of observations in the data represent very well the contribution of that facilities' deliveries to the overall n of deliveries in facilities (proportionally)
- **A Weighted sample** corrects the representation, when needed. A weighted sample isn't bad – sampling in the field doesn't always work to produce representative results

Weighting:

- **A Self-weighted sample:** weights are just a hassle. Some people are suspicious of them (they give you n's with a decimal point.)
- They may change the results substantially for areas with very few observations (ie, the weight may be large).
- **Our goal:** self-weighting samples
- **Our reality:** probably weighted samples

How to define
AMTSL “Use”
with your data?

Components of AMTSL definition

1. **Drug:** specific drug used; quantity; timing (stage of labor and n of minutes for administration of uterotonic); mode of delivery;
2. **Controlled cord traction:** traction; uterine support;
3. **Uterine Massage:** immediate massage *and* palpation of uterus 2x @ 15 minutes for 30 minutes (ICM/FIGO recommend for 2 hours)

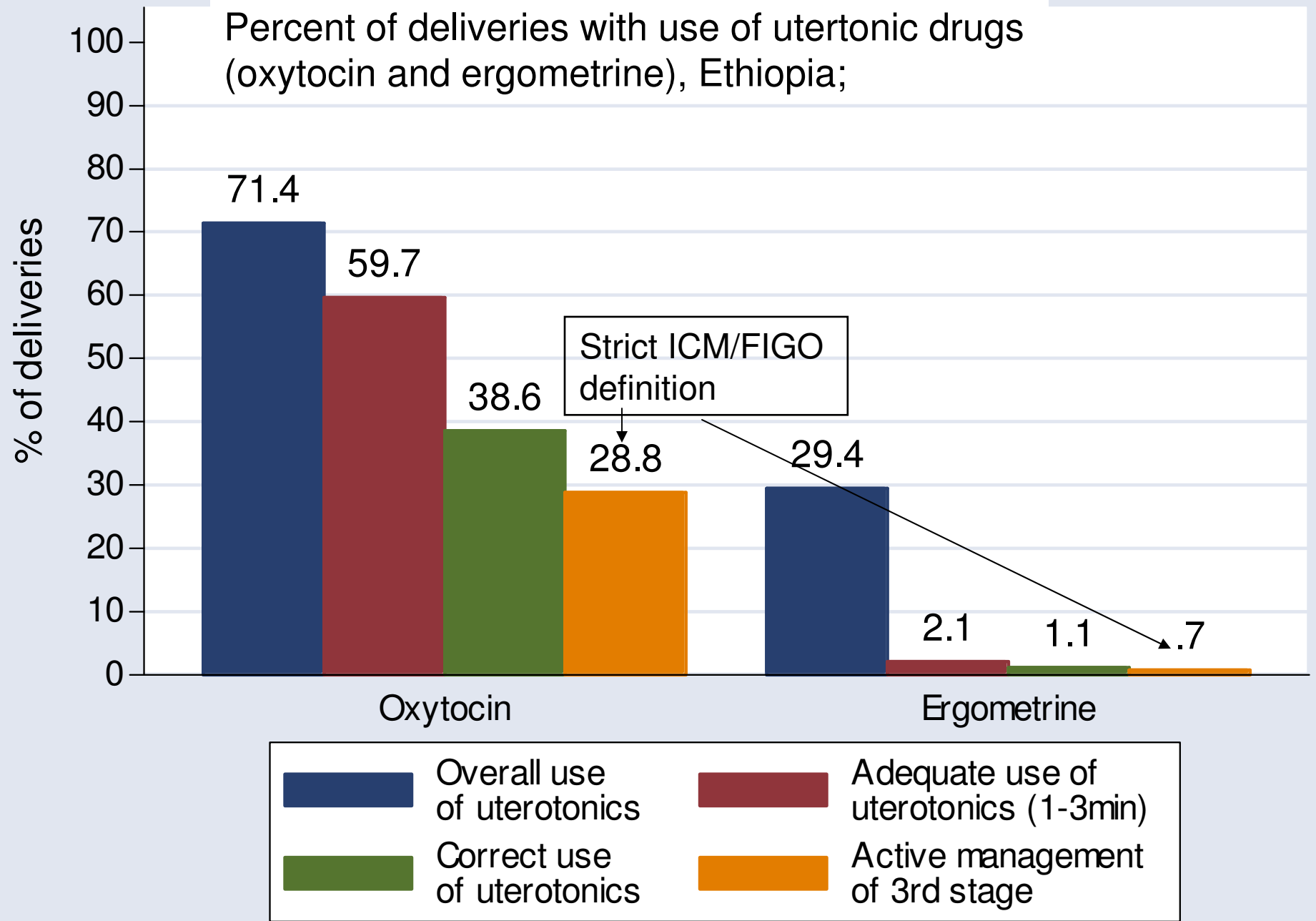
Excluded from the definition (for international reporting):

1. Drug storage: exists at 2 levels: **unit and pharmacy**
 - On unit, was it stored in a cooler?
 - Was there light in the unit? (Not mentioned in ICM/FIGO definition, but generally understood);
 - What was the storage temperature in pharmacy; Was there light in pharmacy?

We recommend reporting on TWO definitions of AMTSL for each recommended drug used:

- Strict ICM/FIGO definition based on use of oxytocin (drug of choice), plus timing within 1 minute of delivery of fetus
- Less strict ICM/FIGO definition based on use of oxytocin (drug of choice), plus timing within 3 minutes of delivery of fetus (ie, a slightly relaxed timing requirement)
- The same as above with use of ergometrine or other uterotonic listed in ICM/FIGO definition

FOR EXAMPLE:



Other questions for you to consider:

- Are there other issues that you would like to add to the questionnaire?
- Are there data you need re: AMTSL that cannot be well addressed by a quantitative survey?
 - If so, what is the subject?
- Is there need for qualitative data from providers re: AMTSL?
- Do you have someone who can be responsible for technical and administrative oversight (planning, fieldwork, analysis, write up) for the qualitative study?
- What are the budget implications?