

Implementing WHO Safe Childbirth Checklist for safer maternal and neonatal care - Experiences from Sudan



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What happened?



Overview



- ☐ Country Profile
- ☐ Global Burden
- ☐ Global efforts
- ☐ WHO Safe Childbirth Checklist
- ☐ Our Experience
- ☐ Lessons Learnt
- ☐ Steps to follow for success

Country Data Profile

Location	Area	No. of States	Population	Population growth rate	Health expenditure
North –East of Africa	1,886,068 Square Km	18	34,000,000	2.8%	8% from GDP

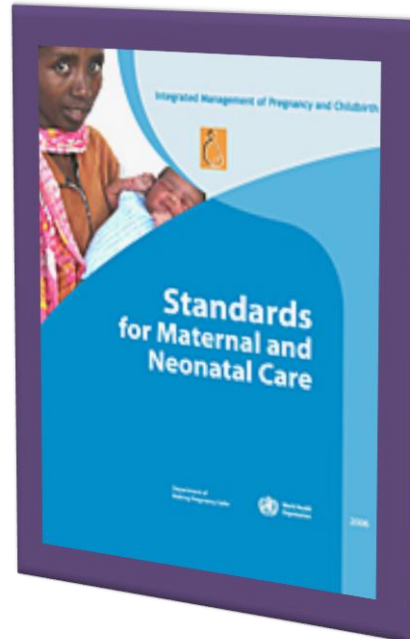
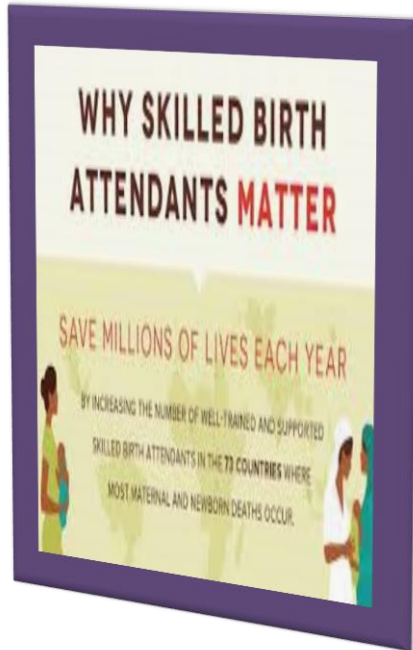
Global Burden



- ❑ According to WHO estimates, in 2010:
 - 287 000 women died during pregnancy and childbirth (WHO et al, 2012).
 - 2.6 million stillbirths(Cousens S et al, 2011).
 - 3 million newborns deaths within their first month of life (Rajaratnam JK et al, 2010).

- ❑ Greatest burden:
 - Within the first 24 hours after childbirth.
 - Low-resource settings
 - Preventable(WHO et al, 2012).

Global Efforts



Knowledge



Practice

WHO Safe Childbirth Checklist



➤ A list of evidence-based practices

➤ Organized into 4 pause points

1. On Admission
2. Just Before Pushing (before C/S)
3. Soon After Birth (within 1 hour)
4. Before discharge

➤ Field testing in Karnataka India
improvement from 10 to 25 out of 29

➤ BetterBirth Programme (RCT)

determine the effect of Checklist on maternal and neonatal health outcomes- end in 2017

After Birth | SAFE CHILDBIRTH CHECKLIST - PILOT EDITION

3. Soon after birth (within 1 hour)

Is Mother bleeding abnormally?

☐ No
☐ Yes: Shout for help

Antibiotics?

☐ No
☐ Yes, given

Does Mother need to start:

Antibiotics?

☐ No
☐ Yes, given

Magnesium sulfate?

☐ No
☐ Yes, given

Does Baby need:

Referral?

☐ No
☐ Yes, given

Antibiotics?

☐ No
☐ Yes, given

Special care/monitoring?

☐ No
☐ Yes, organized

Antiretrovirals?

☐ No
☐ Yes, organized

☐ **Start breastfeeding and skin-to-skin contact (if Mother and Baby well)**

☐ **Confirm Mother/Companion will call for help if danger signs present**

Completed by: _____

4. Before discharge

Is Mother's bleeding controlled?

☐ No: Treat and delay discharge
☐ Yes

Mother to start antibiotics?

☐ No
☐ Yes: Give and delay discharge

Baby to start antibiotics?

☐ No
☐ Yes: Give antibiotics, delay discharge, give special care

Is Baby feeding well?

☐ No: Establish good breastfeeding practices and delay discharge
☐ Yes

If Mother HIV positive, Mother and Baby have ARVs for 6 weeks?

☐ Yes

☐ **Discuss and offer family planning options to Mother**

☐ **Arrange follow-up and confirm Mother/Companion will seek help if danger signs are present after discharge**

Completed by: _____

ANGER SIGNS

Mother has any of:

- Bleeding
- Severe abdominal pain
- Severe headache or visual disturbance
- Breathing difficulty
- Fever or chills
- Difficulty emptying bladder

Baby has any of:

- Fast/difficult breathing
- Fever
- Unusually cold
- Stops feeding well
- Less activity than normal
- Whole body becomes yellow

Responsibility for the interpretation and use of the material in this checklist lies with the reader. In no event shall the World Health Organization be liable for damages arising from its use. This pilot edition is for research purposes and is under refinement by a WHO-led international collaborative. For more information visit www.who.int/patientsafety.

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**MMR 2013:
172/100000**

**MDG Target
MMR:
124/100000**

2012 Checklist was launched for global testing

Methodology



**Selection of
Maternity
Hospital**

**Leadership
Engagement**

**Selection
and training
of observers**

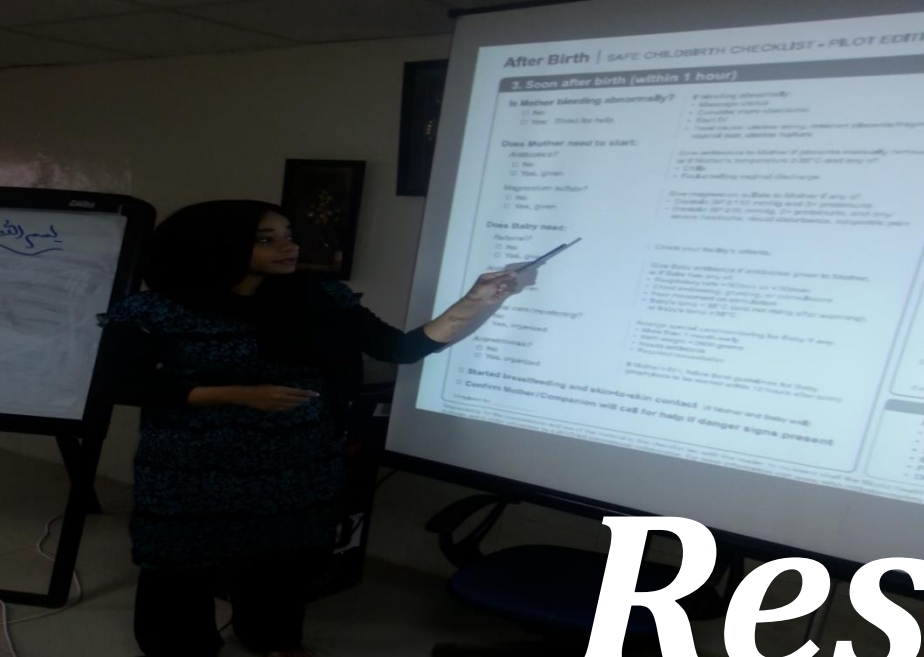
**Pre
introduction**

**Training of
trainers on
checklist**

**Post
introduction**

FGD





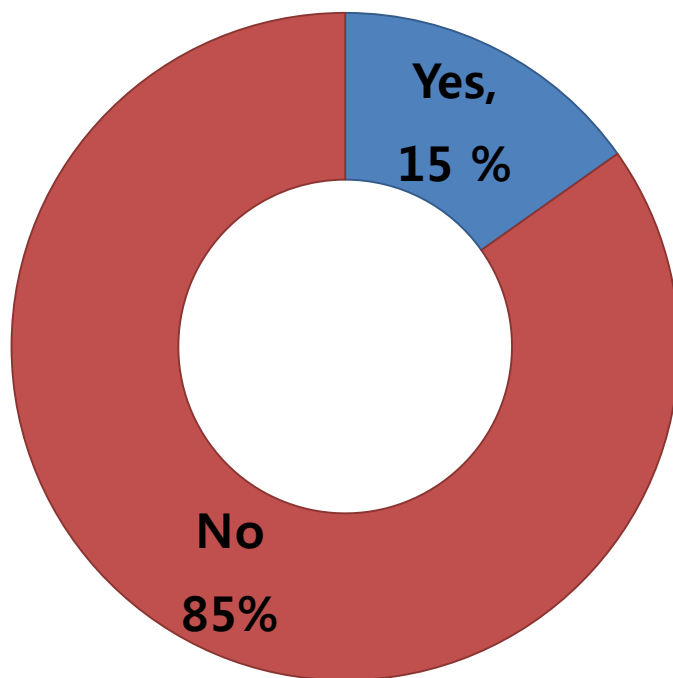
Results



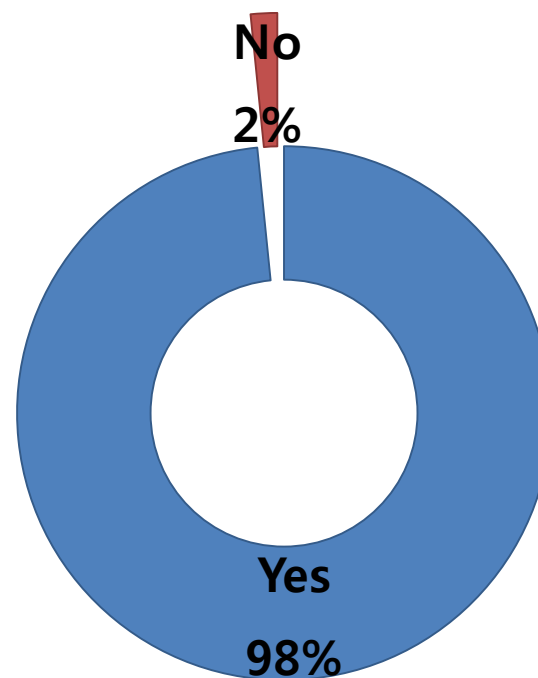
Adherence to Checklist



Doctors



Midwives





- Checklist significantly **improved** the delivery of best childbirth practices in 20 out of 25 practice ($P < 0.002$).
- The practice of the non adherers mostly didn't change from the pre-intervention phase (13 out of 18 practices in NVDs and 19 out of 23 practices in C-sections).

Healthcare providers response



Attitude

Facilitates
adherence to best
practice

Systematic

Good
reminder

Improved
communication

Waste of time
during rush hours

Adherence

Motivation and
follow up of
Head

Incentive

Medical
Record

Training

Simulation

Coaching

Video

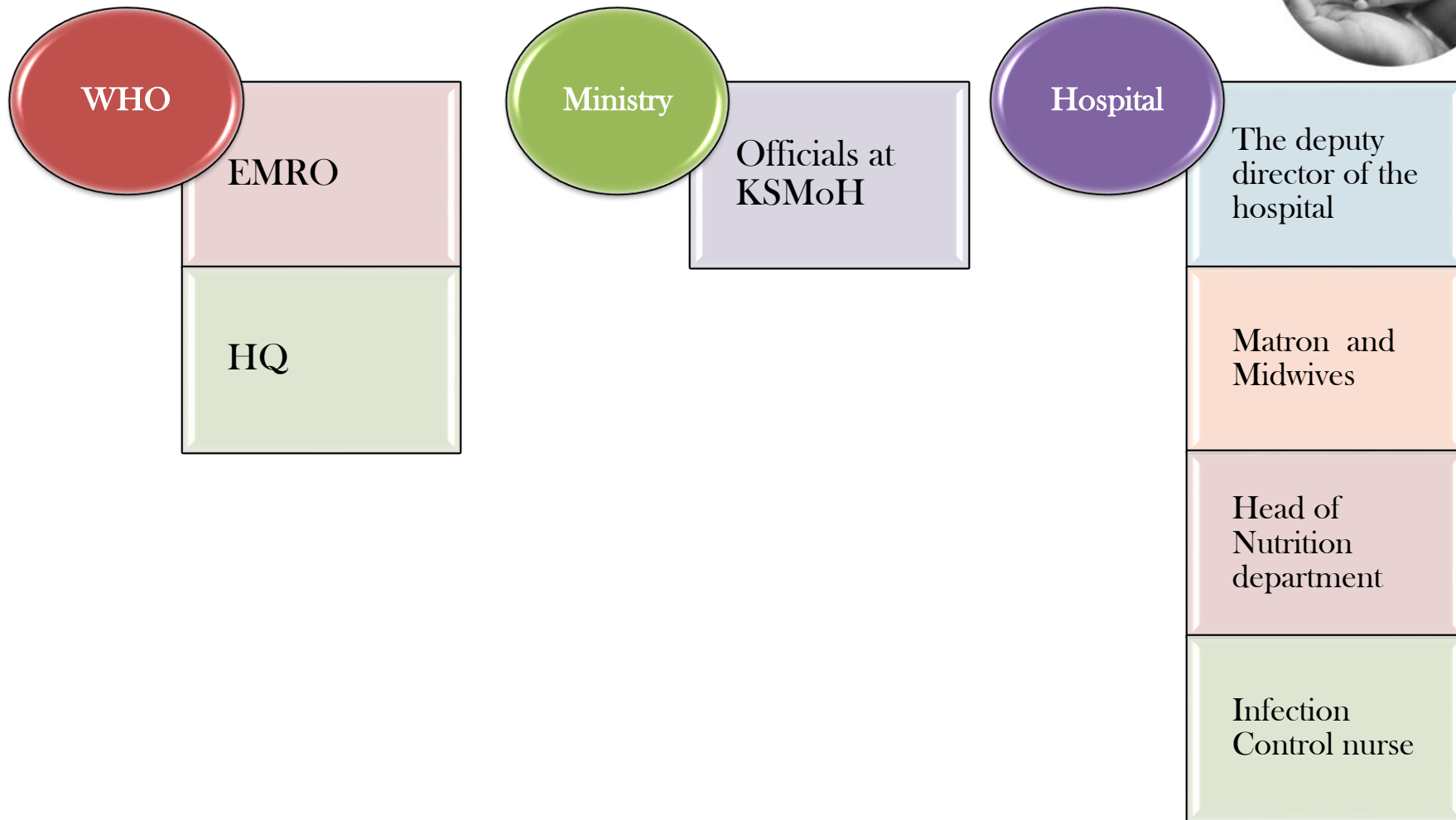
Suggestions

Oxygen

Vitamin K



Enablers



Barriers



☐ Staff related issues:

Residents: Poorly motivated, High turnover

Poor documentation in general

Resistant Consultants

☐ Limited time frame for implementation

☐ Quality managers lack of authority



Recommendations



1. To adopt the checklist.
2. To establish a Monitoring and Evaluation System.
3. To conduct regular induction courses and CPD.
4. To review and update the hospitals' guidelines and protocols.
5. To strengthen the leadership role of consultants .
6. To engage residents and junior staff in hospital initiatives.

Conclusion



Direct: Facilitate Delivery of Best Practices

Indirect: Reflection of hospitals system

Can be used to guide improvement

After Birth | SAFE CHILDBIRTH CHECKLIST - PILOT EDITION



3. Soon after birth (within 1 hour)

Is Mother bleeding abnormally?

- ☐ No
- ☐ Yes: Shout for help

Does Mother need to start:

- Antibiotics?
- ☐ No
 - ☐ Yes, given

Magnesium sulfate?

- ☐ No
- ☐ Yes, given

Does Baby need:

Referral?

- ☐ No
- ☐ Yes, given

Antibiotics?

- ☐ No
- ☐ Yes, given

Special care/monitoring?

- ☐ No
- ☐ Yes, organized

Antiretrovirals?

- ☐ No
- ☐ Yes, organized

If bleeding abnormally:

- Massage uterus
- Consider more uterotonics
- Start IV
- Treat cause: uterine atony, retained placenta/fragments, vaginal tear, uterine rupture

Give antibiotics to Mother if placenta manually removed or if Mother's temperature $\geq 38^{\circ}\text{C}$ and any of:

- Chills
- Foul-smelling vaginal discharge

Give magnesium sulfate to Mother if any of:

- Diastolic BP ≥ 110 mmHg and $\geq 3+$ proteinuria
- Diastolic BP ≥ 90 mmHg, $\geq 2+$ proteinuria, and any severe headache, visual disturbance, epigastric pain

Check your facility's criteria.

Give Baby antibiotics if antibiotics given to Mother, or if Baby has any of:

- Respiratory rate > 60 min or < 30 min
- Chest in-drawing, grunting, or convulsions
- Poor movement on stimulation
- Baby's temp $< 35^{\circ}\text{C}$ (and not rising after warming), or Baby's temp $\geq 38^{\circ}\text{C}$

Arrange special care/monitoring for Baby if any:

- More than 1 month early
- Birth weight < 2500 grams
- Needs antibiotics
- Required resuscitation

If Mother HIV+, follow local guidelines for Baby (prophylaxis to be started within 12 hours after birth)

- ☐ Started breastfeeding and skin-to-skin contact (if Mother and Baby well)
- ☐ Confirm Mother/Companion will call for help if danger signs present

Completed by: _____

4. Before discharge

Is Mother's bleeding controlled?

- ☐ No: Treat and delay discharge
- ☐ Yes

Mother to start antibiotics?

- ☐ No
- ☐ Yes: Give and delay discharge

Baby to start antibiotics?

- ☐ No
- ☐ Yes: Give antibiotics, delay discharge, give special care

Is Baby feeding well?

- ☐ No: Establish good breastfeeding practices and delay discharge
- ☐ Yes

If Mother HIV positive, Mother and Baby have ARVs for 6 weeks?

- ☐ Yes

Discuss and offer family planning options to Mother

- ☐ Arrange follow-up and confirm Mother/Companion will seek help if danger signs are present after discharge

Completed by: _____

DANGER SIGNS

Mother has any of:

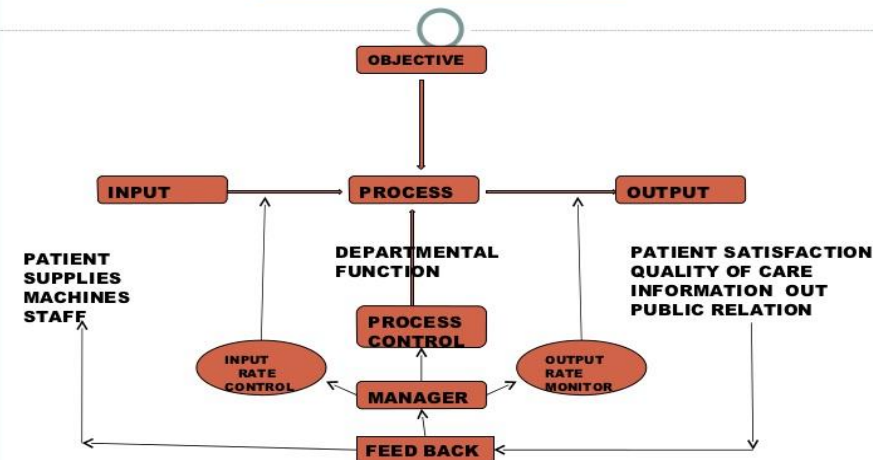
- Bleeding
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- Fast/difficult breathing
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HOSPITAL SYSTEM



Key messages



Useful resources



1. WHO Safe Childbirth Checklist Implementation Guide
2. Results of the The Better Birth Programme- large randomized control designed to determine the effect of a successful Checklist introduction on maternal and neonatal health outcomes.

Thank you

