Quality of Care in Maternal and Newborn Health

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www.mnhu.org
CMNH - model

Design

Measure

Implement
Identifying the gaps…. (?)

- MMRatio highest discrepancy between low and high income countries (10 vs 1000)
- 300,000 maternal deaths per year
- 3 million newborn deaths – now 47% of Under 5 Mortality
- 3 million still births

- Largely preventable
- Lots of evidence for each single intervention.
- Do we need evidence for combination of interventions?

- Need more and robust data.

- MNH ‘litmus test’ of the health system
(Some) Solutions.....

- Skilled Birth Attendance
- Basic Emergency Obstetric Care
- Comprehensive Emergency Obstetric Care
MiH Programme
Increase availability and uptake of quality Skilled Birth Attendance and Emergency Obstetric and Newborn Care
MiH Interventions

**EmONC training package**
- mannequins, skills labs
- TOT - FIF equipment
- pre-service, in-service.

**Quality Improvement package**
- QI teams
- Audit methodology

**Monitoring and Evaluation**
- Before after comparison
- baseline, 3, 6, 9, 12 month
- Training HCPs

Making it Happen
Health facilities functional for EmONC (%, n=378)
Availability EmONC signal functions (%)
MiH – does it work?

‘Health systems research is difficult, so what, just get over it, do it!’

MiH is an example of **implementation research**:

- Is there change?
- At what point in the theory of change model?
- Are the interventions effective, if so at which levels, to which extent?

- Is QI implementation package plus EmONC training more effective than EmONC training alone?
- Are ‘fire drills’ as good as saturation training?
Evaluation of effectiveness of EmONC training

5-level framework:

- Reaction
- Change in knowledge and skills
- Behaviour change – change in practice
- Societal change – (UN process indicators for MNH)
  - availability of signal functions
  - case fatality rate (maternal, stillbirth, newborn)
- Change in policy
Interim analysis - MiH

At health care provider level
• Score for reaction **4.6/5**, qualitative data

• **85%** increase knowledge, **95%** increase skills (n= 10,000)

• Improved motivation, team work, delegation, task shifting recognition of sick patient (qualitative – FGD, KII)

At health facility level  (n= 82 health care facilities with 80% trained at 6 months)

• Increased number of signal functions in place, increased number of fully functional health care facilities (**by 60%**, **by 20%**)

• Increased and decreased number of women recognised to need and receiving EmOC

• Decreased SB rate (**by 14%**), decreased maternal CFR (**by 27%**)
Other questions…

Embedded studies

- What is optimal % of hcp needed to train?
- ‘Fire drills’ alone better than ’saturation’ training?
- How often does training need to be repeated?
- Is it cost effective?
- SROI study
Improving Quality

- Defining Quality
- Improving Quality using Audit
- Measuring Quality
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Quality of care is the degree to which maternal health services for individuals and populations increase the likelihood of timely and appropriate treatment for the purpose of achieving desired outcomes that are both consistent with current professional knowledge and uphold basic reproductive rights.
QI Package

MODULE I
2 days
Introduction to QoC I
Introduction to QoC II

MODULE II
1-2 days
MDA I
MDA II
Near Miss Audit (opt)

MODULE III
2-3 days
PDA/ SBA* I
PDA / SBA* II (opt)

MODULE IV
2 days
Developing standards
Standards based audit

* PDA difficult in some facilities, SBA better option?
Types of audit

Maternal death audit

- Facility based maternal death review
- Confidential enquiry into maternal deaths: anonymous investigation of maternal deaths at regional or national level –
- linked to MDSR, application of ICDMM

Perinatal/Still birth Audit

‘Near miss’ Audit

Standards-based (or Clinical) audit

- Performance against agreed standards
MATERNAL MORTALITY IN ROCHDALE
AN ACHIEVEMENT IN A BLACK AREA

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The British Medical Journal 1935;304-307
Clinical or standards-based audit

AUDIT CYCLE

Select standards to audit

Measure current practice

Feedback and identify changes

Implement changes

Re-evaluate practice
Evidence for Audit

‘Shows a greater impact on health care practices and outcomes than other improvement strategies’

Gather information, review it, act up on it

Ivers N et al  The Cochrane Collaboration 2012
Measuring Quality

- New global indicators (WHO) – no ‘routine data’ QI indicator for MNH being collected
- Literature review: Frameworks of multiple indicators

In MiH programme:

- % deaths audited (>80% maternal deaths)
- % adherence to (SMART) standards with a mixture of structure, process and outcome indicators (increases)
- User and health care provider experiences of receiving and providing care
- Number of functional QI teams, number of actions taken
- CFR, SB Rates, (maternal morbidity)
Thank you!