Improving the Quality of Maternal and Newborn Health: An evaluation of the Quality Improvement Initiative implemented in forty health care facilities in Northern Nigeria

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Outline

• Background
• Objective
• Methodology
• Results
• Emerging issues
Background - PRRINN-MNCH states

- Estimated population in four states (2012) = 18,870.805
- High MMR
- High Infant and Under 5 Mortality rates
- Low SBA

**Operates in four states**

- Zamfara
- Katsina
- Jigawa
- Yobe
  - and at Federal level in Abuja (decentralised management system)
  - Head office in Kano
  - Seven key outputs
  - Cluster approach
Background –Quality Improvement (QI) initiatives

- Baseline assessment of targeted HFs was undertaken (Oct 2008-2009).
  - Provision of “women and baby friendly” care,
  - Regular supportive supervision
  - Quality improvement activities.

- Overall, the findings revealed poor quality of care

- HFs were not regularly supervised, neither by staff from the LGA PHC office nor from the SMoH.

- Other quality improvement activities were not in place (i.e., no MDR, PNDR, etc)
Background: PRRINN-MNCH QI initiative

- Quality improvement training- Series of 4 workshops- (lasts between 2 and 4 days).
  - 1st Workshop- Introduction to QI
  - 2nd Workshop- Maternal Death Review
  - 3rd Workshop- Peri-natal Death Review
  - 4th Workshop- Criterion Based Clinical Audit

- Development of clinical protocols for management of major EmON complications.

- Supportive supervision to QI teams in EmONC facilities

- ToT and mentoring of 30 local trainers in 2012 and 2013.

- Cluster meetings to provide opportunities for health facilities to learn from other health facilities in their cluster.
PRRINN-MNCH QI initiative

- QI initiated in EmONC HF in clusters 2,3,4,5 from 2011.
- 60 health facilities from Katsina, Yobe and Zamfara states
- 12 CEmONCs and 48 BEmONCs
- A total of 180 HCPs and health administrators trained.
Objective of the QI evaluation

To determine the status of QI initiatives’ implementation and impact, including identifying enablers and challenges.
Methodology

- **Study design:** The evaluation study used both quantitative and qualitative approaches which involved:
  - In-depth Interviews (IDIs) QI teams, LGA and state officials and PRRINN-MNCH staff
  - Direct observations
  - Survey of health facility staff members
  - Exit interviews for MNCH clients
  - Review of relevant materials, including QI meeting minutes and action plans, MDR and PNDR forms, facility-level data, and patient charts

- **Study site:** Katsina and Zamfara states

- **Target population:** 40 health facilities (8 CEmONC and 32 BEmONC and a total of 120 HCPs and health administrators).
Data collection, management and analysis

• August – November 2013.
• All interviews were digitally recorded except on three occasions when LGA PHC staff did not give their consent.
• All interviews lasted between 30-45 minutes (KII & IDI) except for IDI for QI teams.
• All audio recordings were transcribed verbatim.
• Qualitative data were analysed using thematic framework.
Results

- **Response rates**
  - 62 QI Team members interviewed - response rate = 86%.
    - 34 (94%, 34/36) were from Katsina state
    - 28 (78%, 28/36) were from Zamfara state.
  - At the LGA level, response rate of 83% (n=20/24) in Katsina state and 79% in Zamfara (n=11/14).
  - 100% response rate at the state level.
  - PHC Kagara in Zamfara state was found closed during the data collection period

- **Themes and subthemes**
  - A total of nine themes and 18 sub-themes emerged.
<table>
<thead>
<tr>
<th>Category</th>
<th>Themes</th>
</tr>
</thead>
<tbody>
<tr>
<td>QI training</td>
<td>• Total number of participants who attended QI training</td>
</tr>
<tr>
<td></td>
<td>• Views on QI training</td>
</tr>
<tr>
<td>Establishment of QI team</td>
<td>• Membership</td>
</tr>
<tr>
<td></td>
<td>• Frequency of meeting</td>
</tr>
<tr>
<td></td>
<td>• QI Cluster meetings</td>
</tr>
<tr>
<td></td>
<td>• Identifying QI issues</td>
</tr>
<tr>
<td>Functionality of QI Teams</td>
<td>• Number of HF conducting MDA, PNDA and CBCA</td>
</tr>
<tr>
<td></td>
<td>• Total number of MDs and PNDs audited</td>
</tr>
<tr>
<td></td>
<td>• Submission of MDA and PNDA forms</td>
</tr>
<tr>
<td>Audits- Maternal Death Review (MDR), Perinatal Death Review (PNDR) and Criterion Based Clinical Audits (CBCA)</td>
<td>• Creation of &quot;QI culture&quot; in the health facilities</td>
</tr>
<tr>
<td></td>
<td>• Availability and use of protocols, standards and partographs</td>
</tr>
<tr>
<td></td>
<td>• Improved team work</td>
</tr>
<tr>
<td></td>
<td>• Increase in utilisation of services</td>
</tr>
<tr>
<td>Impact of QI in Health facilities</td>
<td>• Who provides supportive supervision</td>
</tr>
<tr>
<td></td>
<td>• Quality of supportive supervision- Content and feedback</td>
</tr>
<tr>
<td>Supportive supervision</td>
<td></td>
</tr>
<tr>
<td>Sustainability</td>
<td>• Inadequate number of staff</td>
</tr>
<tr>
<td></td>
<td>• Frequent staff transfers</td>
</tr>
<tr>
<td></td>
<td>• Punitive measure</td>
</tr>
<tr>
<td>Challenges faced by QI team</td>
<td></td>
</tr>
<tr>
<td>Lessons learnt</td>
<td></td>
</tr>
</tbody>
</table>
a. QI training

Total number of participants who attended QI training

QI team
- 55 (89%) attended all the QI workshops.
- Of the seven who did not attend any of the QI workshops, four (57%, n=4/7) were from Katsina and 3 (43%, n=3/7) from Zamfara state.

LGA and State
- Of the 31 respondents from the LGA, only 16 (52%, n=16/31) attended QI trainings.
- Of the 16 participants, six (37.5%) attended four QI workshop, four (25%) attended three workshop, three (19%) respondents attended two QI workshops and three (19%) attended only one workshop.

Reasons given for non-attendance of QI trainings include: being recently deployed to the LGA; and “other commitments”.
- At the state level, all respondents from the SMOH or SPHCMB had attended QI training.
- All seven PRRINN-MNCH staff attended QI trainings.
b. Establishment of QI Teams

- 92% facilities had established QI team (n=22/24). (No QI team in PHC Magami and PHC Kagara was closed).
- Timeline for establishment of QI teams vary by facility.
- Three facilities re-established their QI teams in 2013.

Reasons given for dormancy of the QI teams include:

- transfer of QI champion from the facility (GH Birnin Magaji and Dutsinma)
- lack of step down training on QI to other QI team members who did not attend PRRINN-MNCH QI training (GH Funtua).
C. Functionality of QI Teams

• **Membership of QI team**
  - Multidisciplinary.
  - Numbers vary depending on staff capacity

• **Frequency of meetings**
  - Monthly (82%, n=18)
  - Monthly meeting changed to quarterly (9%, n=2)
  - Meeting stopped (9%, n=2)

• **QI Cluster meetings**
  - Of the 8 clusters, three clusters (37.5%) reported holding a QI Cluster meeting in the last three months.

• **Identifying QI issues**
  - Participants described with enthusiasm some of the QI issues they have identified and solved as a team.

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**Sample composition of QI team in General Hospitals**

Medical director - chairman  
Hospital secretary – secretary  
Medical Officer, Maternity Ward - member  
CNO in-charge - member  
Head of Laboratory unit - member  
Head of Pharmacy unit - member  
Head of ANC unit - member  
Head of Paediatric ward - member  
Head of Maternity unit - member
d. MDR, PNDR and CBCA

MD = 88, MDR = 32 (39%); PND = 164, PNDR = 99 (60%); and CBCA = 1

- Factors affecting conduct of audits
  - inadequate number of staff;
  - inadequate knowledge and skills of some QI team members on MDR and PNDR;
  - lack of forms; and
  - general lack of understanding and capacity to conduct CBCAs by all QI teams.

“The challenge is due to shortage of manpower, when we have set time for the review, sometimes it will conflict. That is the major problem...” KTQIT_IDI_030

“I said we did not review any case ....we never sat to review the cases because we are overworked” ZMQIT_IDI_017
e. Impact of QI team in the facility

• General improvement in the care given to clients and in HF environment.
• Subthemes emerging here include:
  - creating a culture of quality
  - availability and use of protocols, standards and partographs
  - improved team work
  - increase in utilisation of services.
e. Impact of QI team in the facility

“Honestly speaking, this quality of care assists in many ways. We have job satisfaction, patients are happy and we are having more and more patients. We use to have 2000 but now they reach 3000. We have patients from the LGA and outside the state” KTQIT_IDI_001

“We have succeeded in having water available and electricity available. Staffs have improved in their attitude and in the whole of the health facility we have made progress….The attitude of staff has changed and nobody comes to scold any patient no more unlike before now. Since PRRINN-MNCH has fast track the installation of solar there is no more challenge of electricity and water supply. We have also improved on our general cleanliness” KTQIT_IDI_023
e. Impact of QI team in the facility contd.

• **Availability and use of protocols, standards and partographs**
  
  - Protocols on EmONC were available, displayed and used in all facilities.
  - Partographs were available in 21 (91%) facilities (11 (92%) facilities in Katsina and 10 (91%) in Zamfara),
    - used to monitor progress of labour in 15 (71%) health facilities (8 health facilities in Katsina and 7 in Zamfara).
  - Partographs were not used in six facilities (3 facilities each in Katsina and Zamfara) despite their availability.

  Reasons given for non-use of the partographs: shortage of staff; women being admitted in second stage of labour; and lack of knowledge and skills on how to use partographs.
f. Lessons learnt

“One of the main lessons we learnt is that you can still work with the available resources you have. You can still improve patient care with the little in your disposal. I learnt that your attitude to work and dedication goes a long way in improving patients care”

KTQIT_IDI_020

“With limited resources we can do quite a lot to improve the facility. We can tackle the low layer problem and solve them not waiting for government to do everything”

ZMQIT_IDI_011

“That you should only bite what you can chew. Identify few problems at a time, it’s easier to solve them that way than to identify so many problem and solve few. Secondly there is no problem that cannot be solved within our reach it may also just take sometimes. Thirdly, it is important to carry everybody along”

ZMQIT_IDI_001
g. Challenges

- **Inadequate number of staff**
- **Frequent staff transfers**
- **Punitive measure**

“QI is a very good programme but continuous transfer and staff attrition is a big issue. There is need for retraining and support to conduct in house and on the job capacity building, like my secretary (the QI secretary) has not been trained”  

“….our former PMO is very active and he keeps record of everything but he was transferred because he brought so much sanity into the facility and he insists on early reporting to duty and quality care. So people felt he was been harsh, so they reported him to the headquarters and they transferred him”
Emerging issues

- Active QI teams and largely effective QI activities in most facilities
- Improved staff attitude to clients/patients
- Cleaner environment and more women friendly services
- Strong linkage between QI and Health Facility Committee
- Low proportion of MDR, PNDR conducted
- Inadequate supervision of MNCH service delivery by LGA officials
- Shortage of professional health workers - midwives and doctors
- Frequent staff transfer
Thank you