IMPROVING CARE FOR WOMEN WITH PRE-ECLAMPSIA/ECLAMPSIA (PE/E) IN NIGERIA: FOCUS SHOULD GO BEYOND PROVIDERS’ CERTIFICATIONS

Salisu Ishaku
Oginni Ayodeji Babatunde
Gloria Adoyi

ISSHP World Congress, Sao Paulo, Brazil
23 – 26 October, 2016
Introduction

- Access to skilled antenatal care (ANC) services is considered a panacea to reducing maternal mortality and morbidity, and recommended.
- In Nigeria, skilled health care is defined as those provided by doctors, nurses/midwives and community health extension workers (CHEWs) with varying levels of expertise.
- Available evidence shows that quality of care pregnant women receive varies widely with no correlation to providers’ educational certification.
- We surveyed providers knowledge and practice around prevention, early detection and timely management of PE across health care cadres.
- We attempt to correlate their knowledge and practice with their medical qualification.
Hierarchy of Health Cadres in Nigeria

- **Specialists (including OB/GYN):**
  - Typically operate at tertiary level
- **General practitioners:**
  - Operate at secondary level of health care
- **Nurses/Midwives:**
  - Tertiary and secondary levels of health care
- **CHEW/CHO:**
  - Primary level of care (PHCs)
Hierarchy of Health system in Nigeria

Tertiary
- Teaching hospitals, Federal Medicals Centers, (specialists, OB/GYN)

Secondary
- General Hospital Medical officers, nurses/midwives
- State specialist Medical officers, nurses, midwives

Primary
- PHCs (CHEWs/CHOs)
- Health posts CHEWs/CHOs
- Comprehensive clinics CHEWs/CHOs
Methods

- In 2015, Ending Eclampsia conducted interviews with 379 maternity health care providers from 96 facilities (primary and secondary)
- We used a combination of self-administered questionnaires to determine knowledge and practice of providers around prevention, early detection and management of PE/E
- Data collection methods: providers’ interview, observation of provider-client interaction, client exit interview & facility inventory
- Descriptive (frequencies and percentages) and inferential (Chi-square test) analyses were conducted to identify factors associated with outcomes of interest.
Findings
## Summary of quantitative data

<table>
<thead>
<tr>
<th>States</th>
<th>Health provider interview</th>
<th>Facility inventory</th>
<th>ANC Client-Provider interaction</th>
<th>ANC Client Exit Interview</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross River</td>
<td>59</td>
<td>11</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>Ebonyi</td>
<td>46</td>
<td>20</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Ondo</td>
<td>59</td>
<td>11</td>
<td>22</td>
<td>22</td>
</tr>
<tr>
<td>Kogi</td>
<td>44</td>
<td>8</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>Sokoto</td>
<td>61</td>
<td>11</td>
<td>37</td>
<td>37</td>
</tr>
<tr>
<td>Bauchi</td>
<td>55</td>
<td>14</td>
<td>28</td>
<td>28</td>
</tr>
<tr>
<td>Katsina</td>
<td>55</td>
<td>21</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>Total</td>
<td>379</td>
<td>96</td>
<td>136</td>
<td>136</td>
</tr>
</tbody>
</table>
Knowledge of hypertensive disorders in pregnancy by level health care

Chronic hypertension
Severe PE
Eclampsia

- Chronic hypertension:
  - Tertiary: 56.30%
  - Secondary: 59.70%
  - Primary: 37.10%

- Severe PE:
  - Tertiary: 76.30%
  - Secondary: 83.90%
  - Primary: 64.60%

- Eclampsia:
  - Tertiary: 83.80%
  - Secondary: 86.30%
  - Primary: 64.60%
Knowledge of Aspirin and antihypertensives by type of provider

- Medical Practitioner: 65.70% knowledge of Aspirin, 22.90% knowledge of antihypertensives
- Nurses/Midwives: 48.50% knowledge of antihypertensives
- CHEWs/CHO: 31.90% knowledge of antihypertensives
Knowledge of aspirin/anti-hypertensives across level of health care

- Tertiary: 51.30% Knowledge of aspirin/anti-hypertensives
  - Knowledge of aspirin: 8.80%
  - Knowledge of antihypertensives: 42.50%
- Secondary: 47.60% Knowledge of aspirin/anti-hypertensives
  - Knowledge of aspirin: 6.10%
  - Knowledge of antihypertensives: 41.50%
- Primary: 37.70% Knowledge of aspirin/anti-hypertensives
  - Knowledge of aspirin: 4.60%
  - Knowledge of antihypertensives: 33.10%
Knowledge of loading/maintenance dose of MgSO4 (Prichard regimen) by type of provider

- **Medical officers**
  - Loading dose: 25.70%
  - Maintenance dose: 8.60%

- **Nurses/Midwives**
  - Loading dose: 14.50%
  - Maintenance dose: 16%

- **CHOs/CHEWs**
  - Loading dose: 4.20%
  - Maintenance dose: 2.80%
Knowledge across levels of practice

<table>
<thead>
<tr>
<th>Level</th>
<th>Loading dose</th>
<th>Maintenance dose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tertiary</td>
<td>12.50%</td>
<td>25.00%</td>
</tr>
<tr>
<td>Secondary</td>
<td>9.70%</td>
<td>21.00%</td>
</tr>
<tr>
<td>Primary</td>
<td>4.60%</td>
<td>4.00%</td>
</tr>
</tbody>
</table>

- **Loading dose**
- **Maintenance dose**
Knowledge of monitoring of toxic effects and antidote to MgSO4 toxicity by provider

- Medical officers: 31.40%
- Nurses/Midwives: 10.00%
- CHEWs/CHOs: 7.60%

Monitoring of MgSO4 toxicity
Antidote to MgSO4 toxicity
Knowledge of monitoring toxic effects and of MgSO4 toxicity by level

- Tertiary: Monitoring of MgSO4 toxicity 18.80%, Antidote to MgSO4 toxicity 36.30%
- Secondary: Monitoring of MgSO4 toxicity 9.70%, Antidote to MgSO4 toxicity 46.00%
- Primary: Monitoring of MgSO4 toxicity 8.60%, Antidote to MgSO4 toxicity 13.10%
Discussion

• There is no guarantee that pregnant women would receive true care just by interacting with care providers

• Knowledge of providers in relation to best practices for PE/E is grossly inadequate

• Knowledge and practice around prevention, detection and management of PE/E is random; not consistent with providers’ certification and hierarchy of care
Conclusion

The assumption that skilled providers are those with some designated certificates is erroneous.

While the importance of pregnancy care by well-trained providers cannot be overstated, focus should be around ensuring that providers stationed at service delivery points know what to do as opposed to deploying them based on their certificates alone.