Promoting Antenatal Care Services in Urban Health Centres of Mandalay, Myanmar to improve early detection of pre-eclampsia

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Training Course in Reproductive Health Research
WHO 2008
WHO Scholarship
1. Introduction

**Pre-eclampsia**: a major cause of maternal and fetal death
leading cause of premature delivery worldwide

**Worldwide**: 12% of all maternal deaths
- PE & E >50,000 maternal deaths each year
- 5 fold increase in perinatal mortality

**United Kingdom**: 15% of direct maternal deaths

**In the developing world**: 42% of maternal deaths, Colombia

**In Myanmar**: pre-eclampsia remains one of the most common reasons for women to die during pregnancy (MOH, 2003; Khin-Thein, 2006)

**Central Women Hospital, Mandalay (CWH)**:
- 1st July 2004 to 30th June 2005 - 33% of maternal deaths, severe PE and E
- CWH, 2006 - 10% caesarean section, 6% total deliveries, PE & E (Saw-Lwin 2006)
2. Problem statement

**Urban Health Centres**: providing health care to the urban and suburban population. Township Medical Doctor, Assistant Doctors, Health Assistant, Lady Health visitor, midwives, Public Health Supervisors I and II.
3. Research questions

- Can training on PE using the updated training modules based on PCPNC & Pre-eclampsia Community Guideline (PRECOG) improve the diagnostic practice of midwives on PE?

- Can training on PE improve the referral of PE cases by MW?

- Can training on PE enhance the 
  supervisory capability 
  of their supervisors - the LHVs?
4. General objectives

To determine the training on PE using the updated training modules based on PCPNC and PRECOG to improve the detection and referral of pre-eclampsia by midwives at the UHC hospital, reducing the complications and consequences of PE.

Specific objectives

1. To improve the practice of MWs in the detection of pre-eclampsia at UHCs of Mandalay city using updated training modules based on PCPNC & PRECOG.

2. To improve the referral of women with pre-eclampsia to the Central Women’s Hospital, Mandalay by MWs.

3. To enhance the supervision of MWs by the LHV in the detection and referral of pre-eclampsia cases.
5. Methodology

5.1. Study location - five Urban Health Centers (UHCs) of Mandalay city

5.2. Study population - MWs and LHV in Urban Health Centers irrespective of their duration of services
   Each UHC - 10-12 MWs and 2-3 LHV, a total of 50-60 MWs and 10-15 LHV.

5.3. Sample size
   The proportion of pre-eclampsia in Mandalay = 6% of total delivery
   The proportion of PE estimated after trial = 8%
   Total pregnant women to be scanned = 5306 pregnant women
   where alpha is equal to 0.05 and power of the test to 80%

5.4. Study design
   Quasi-experimental design, Pre and post test
5.5. Description of activities

Phase I. Preparatory phase

1. Formation of project management team

2. Advocacy meeting

3. Reviewing of training manual for the midwives

4. Collection of background data ---
   no. of ANC attendance, no. of PE cases detected and referred within previous 6 months
Data collection tools

1. Pts registers and monthly reports at Urban Health Centers
2. Pts registers and monthly reports at Central Women Hospital
3. Summary of Data from five UHCs
4. Semistructured questionnaire for knowledge on MWs on PE
5. Checklist in observation of skill in screening, measuring blood pressure and urine protein by midwives
6. Supervision checklist for LHV
7. Guide for LHV
8. Informed consent forms: Preintervention, Postintervention, Observation
9. Evaluation forms for the training workshop
10. Visitor record book of MWs
Phase II. Intervention phase
1. Conducting training workshop on screening of pregnant women --- 2 days workshop
2. Supervision of ANC
3. Post intervention collection of data for 6 months

Phase III. Evaluation and Dissemination

5.6. Operational definition
Hypertension
Pre-eclampsia
Severe pre-eclampsia
Eclampsia

6. Data processing and analysis
Data will be entered in Epi-Info record files
Data analysis will be done by- Stata statistical software
7. REFERENCES


## 8. Time line

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<thead>
<tr>
<th>PHASE I – Preparatory Phase</th>
<th>M2</th>
<th>M4</th>
<th>M6</th>
<th>M8</th>
<th>M10</th>
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<td><strong>PHASE III – Evaluation &amp; Dissemination</strong></td>
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## 9. Budget

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<th>Second 6 months US $</th>
<th>Year 2 US $</th>
<th>Total US $</th>
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<td><strong>GRAND TOTAL</strong></td>
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ACKNOWLEDGEMENT

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Thank you