Utilization of Skilled Maternity Personnel in “Wa” Ethnic Group in Hopang Township, Northern Shan State, Myanmar

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Presenter Disclosures

Thinzar Wai

There is no financial or commercial conflict of interest for this project.
Where is Myanmar (Burma) located?
Background

- Daily about 800 preventable maternal deaths
  - Almost 99% occur in developing countries
  - One third from South Asia

Millennium Development Goal 5: Reduction of maternal mortality ratio by three quarters between 1990 and 2015

- Myanmar (Burma)
  - >50% of women give birth alone, with a family member, or with a traditional birth attendant
  - Focus on Wa ethnic group in Hopang Township of Northern Shan State—hard to reach
Determinants of Maternal Mortality

- Socioeconomic status
- Culture

- Intermediate determinants
  - Healthcare status
  - Reproductive status
  - Access to healthcare services
  - Healthcare behavior/use of health services
  - Unknown or unpredicted factors

- Distant determinants

- Outcomes
  - Pregnancy related complications
  - Death/Disability

Maternal Deaths in Myanmar

Data Source: WHO 2012
Hypothesis

What are the sociodemographic characteristics and key variables that predict “Wa” ethnic group women’s choice of skilled vs. unskilled maternal healthcare providers?
Methods

Study design
• Secondary analysis of a cross-sectional survey collected during 2008-2010
• Face-to-face interviews with women (>18 years) who gave birth during previous two years (2006-2008) or close relatives of deceased mothers

Inclusion criteria:
• Mothers of ‘Wa’ ethnic who lived in the study area over two years
• Close family members of deceased mothers who met the pervious criterion

Exclusion criteria:
• Mothers who delivered outside the study area
• Mothers who transferred out of the study area during the study period
Methods

Variables

• Dependent variables
  • Utilization of skilled birth attendants during pregnancy and delivery

• Independent variables
  • Socio-demographic factors
  • Determinants

Statistical analysis

• Descriptive statistics
• Bivariate statistics (Chi-square)
• Logistic regression and Generalized Linear Models
Results
Frequency Table for Scio-demographic results

<table>
<thead>
<tr>
<th>Variables</th>
<th>Number (%) N= 358</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Residential setting</strong></td>
<td></td>
</tr>
<tr>
<td>Urban</td>
<td>161 (45%)</td>
</tr>
<tr>
<td>Rural</td>
<td>197 (55%)</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
</tr>
<tr>
<td>18-25</td>
<td>177 (49.4%)</td>
</tr>
<tr>
<td>26-35</td>
<td>143 (39.9%)</td>
</tr>
<tr>
<td>36-49</td>
<td>38 (10.6%)</td>
</tr>
<tr>
<td><strong>Education</strong></td>
<td></td>
</tr>
<tr>
<td>Illiterate</td>
<td>155 (43.3%)</td>
</tr>
<tr>
<td>Literate</td>
<td>203 (56.7%)</td>
</tr>
<tr>
<td><strong>Religion</strong></td>
<td></td>
</tr>
<tr>
<td>Buddhist</td>
<td>185 (51.7%)</td>
</tr>
<tr>
<td>Other</td>
<td>173 (48.3%)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Variables</th>
<th>Number (%) N= 358</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Occupation</strong></td>
<td></td>
</tr>
<tr>
<td>Dependent (Housewife)</td>
<td>116 (32.4%)</td>
</tr>
<tr>
<td>Employed</td>
<td>242 (67.6%)</td>
</tr>
<tr>
<td><strong>Household Size</strong></td>
<td></td>
</tr>
<tr>
<td>1-3</td>
<td>44 (12.3%)</td>
</tr>
<tr>
<td>4-5</td>
<td>150 (41.9%)</td>
</tr>
<tr>
<td>&gt;5</td>
<td>164 (45.8%)</td>
</tr>
<tr>
<td><strong>Distance to nearest skilled personnel</strong></td>
<td></td>
</tr>
<tr>
<td>&lt; 1 mile</td>
<td>135 (37.7%)</td>
</tr>
<tr>
<td>&gt;1 miles</td>
<td>223 (62.3%)</td>
</tr>
</tbody>
</table>
Use of Skilled vs. Unskilled Attendants for Antenatal Care and Birth

- No Antenatal Care: 26.0%
- Antenatal Care: 74.0%
- Skilled attendant: 73.3%
- Unskilled attendant: 23.7%
Reasons for Not Choosing SBA

- Cannot Afford: 35%
- Easy to deliver: 32%
- Low access to services: 13%
Frequency of Indicators

- Frequency of ANC visits: 34.3% <4 visits, 65.7% ≥4 visits
- TT immunization: 68.2% ≥2 times, 31.2% <2 times
- Can Read Maternal Record: 0.8% No, 99.2% Yes
- Health problems during pregnancy: 84.2% none, 15.9% Some
- Place of Birth: 23.5% Other, 76.5% Home
Predictors of Use of Skilled Birth Attendant

- Distance to reach nearest healthcare personnel
- Utilization of Skilled Birth Attendant at Antenatal Care
- Education
- Place of birth
- Religion
- Occupation
- Health Problems during delivery
Discussion

• Key factors for utilization of SBA
• Geographical barriers, clinical staffing, transportation and financial concerns can also prevent in assessing healthcare in rural areas of Myanmar (Kyaw Oo et al, 2012).
• Accessibility also depends on traditional beliefs, mutual coordination between healthcare workers and the community (Tarenkegn et al, 2014).
Discussion

Three Delays Model

Delay in Decision to Seeking Care

Delay in Reaching Care

Delay in Receiving Adequate Healthcare

Study Limitations

• Use of interpreters may have affected responses
• Recall bias of actions over the previous two years
Conclusion

• Myanmar Ministry of Health needs to cooperate with NGOs and UNICEF to hit the MMR target

• Strategic planning is essential to increase resources targeting hardest to reach areas

• These findings in Hopang Township provide promising evidence to focus maternal services in other regions of Myanmar
Acknowledgement

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