 Hidden Patterns in Maternal Deaths

October 20, 2012. FIAPAC Conference 2012
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Background

• Given the high mortality ratio (51.5 deaths per 100,000 livebirths in 2010) and the Millennium Development Goals commitment, maternal deaths in particular are notified and analyzed carefully every year by the Ministry of Health both at the federal and state level.

• In Mexico, public health sector information systems have significantly improved their record keeping. For that purpose, the Ministry of Health (MoH) has developed tools aiming to better understand the causes and to provide recommendations for the health systems.
Maternal Mortality, 2009

Millennium Development Goal:
22.3 x 100,000
Maternal Mortality, 1990-2009

- MMR Registered
- MMR Adjusted
Maternal Mortality Causes, 1990-2009

- Obstetric Hemorrhage
- Hypertensive disorders
- Indirect causes
- Other maternal causes
- Abortion
- Puerperal sepsis

Source: INEGI/SSA, SINAIS; Cubos de Mortalidad de la Población Mexicana, 1990-2008
Mortalidad por aborto: Causas específicas, 1990-2009

- No especificado: 59%
- Causas patológicas: 36%
- Aborto espontáneo: 4%
- Aborto médico: 1%

n = 1860
Aim and Methods

• To analyze the national maternal deaths files

• We used the latest International Classification of Diseases (ICD-10) that includes all pregnancies with abortive outcome under ICD codes O00-006.
Total maternal deaths: 992

Abortion Related: 92

First site of health care: 92 women

Second site of health care: 48 women

Three or more sites: 44 died

   38 died

   10 died
Age distribution: abortion and others
Quality of the Data

• Every state has different tools for documenting maternal deaths as also has different health care conditions
# Use of oficial tools

<table>
<thead>
<tr>
<th>Official Tool</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aclaración oficial</td>
<td>0.1%</td>
</tr>
<tr>
<td>Acta de defunción</td>
<td>4.6%</td>
</tr>
<tr>
<td>Informe necropsia</td>
<td>6.5%</td>
</tr>
<tr>
<td>Cuestionario confidencial</td>
<td>33.4%</td>
</tr>
<tr>
<td>Notas médicas</td>
<td>34.4%</td>
</tr>
<tr>
<td>Formato de notificación</td>
<td>45.2%</td>
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<tr>
<td>Otro</td>
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<tr>
<td>Eslabones críticos</td>
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<tr>
<td>Autopsia verbal</td>
<td>57.3%</td>
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<tr>
<td>Dictamen de muerte materna</td>
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<tr>
<td>Resumen clínico</td>
<td>69%</td>
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<tr>
<td>Certificado de defunción</td>
<td>94.3%</td>
</tr>
</tbody>
</table>
Conclusions

• Despite the growing interest in MM, first trimester deaths are not being adequately addressed in the current framework of review; the information in the files systematically leaves many questions unanswered.

• Abortion related deaths enquiries demand a renovated effort from the health information systems, to provide more adequate data on all types of abortion and help guide recommendations to eradicate this preventable cause of MM death.
GRACIAS