HEALTH INFORMATION SYSTEMS FOR MATERNAL HEALTH IN ZIMBABWE

By

Eden G-Sellasse and Tewuh Fomunyam

Supervised by

Freeman T. Changamire, M.D., Sc.D
“The lack of maternal health care violates women’s rights to life, health, equality, and nondiscrimination. MDG 5 can be achieved… but we urgently need to address the shortage of health workers and step up funding for reproductive health programs” Thoraya Ahmed Obaid (Former UNFPA executive director)
Much attention to maternal health - MDG 5

570 of the estimated 1000 women dying every year from pregnancy related causes in 2008 were in sub-Saharan Africa.

The life-time risk of a woman dying from pregnancy related causes is 36 times higher for developing than for developed countries. (WHO 2010)
ANC has been shown to improve maternal health when started early and is adequate and appropriate by reducing maternal mortality (Campbell and Graham, 2006).

WHO recommends at least 4 ANC visits for each pregnancy with the first occurring within 16 weeks of pregnancy.

Only 1 in 3 rural women in developing countries receive the recommended care during pregnancy. (UN 2010)
ZIMBABWE BACKGROUND

- Population 12,523,000
- Life-expectancy at birth 47/50 male & female respectively
- GDP spending on health 9%
- Literacy rate 92%
Health delivery is decentralized

- Public sector
- Private sector
- Faith based institutions
  - Most of the services are provided by private and faith based hospitals due to the health system collapse following the economic crisis

Administration is centralized

- to guide policy, administration and provide coordination for decision making
Health Financing

- National Health Strategy plan 2009-2013 was developed in response to the financial crisis
HEALTH INFORMATION SYSTEM

- Anecdotally, most clinics and hospitals in Zimbabwe are still using paper medical records.
- RTI is working with the government of Zimbabwe to strengthen the health information system including instituting the use of electronic medical records.
MATERNAL HEALTH IN ZIMBABWE

- High Maternal mortality ratio of 730/100,000 compared to 624/100,000 in 2008 and 231/100,000 in 1990. (UNFPA)
  - 1 in 42 lifetime risk of a woman dying from a pregnancy related complication
- ANC coverage at least 1 visit 90%
- ANC coverage 4 visits 57%
- Institutional delivery 65%
- Skilled birth attendant coverage 66%
Maternal and Perinatal Mortality carried out in 2007 revealed that the 3 delays accounted for 72% of maternal deaths.

- Delay in identifying problems and deciding to seek medical care
- Delay in reaching health facility after deciding to seek care
- Delay in receiving needed care the facility

42.8% of the main avoidable factors in the deaths were institutional.
Most women book for ANC

Strong desire to deliver at the facility

Some TBAs refuse high risk women

Increasing mobile network coverage

Health worker aware of the challenges
BARRES TO ANC ATTENDANCE

- Failure to recognize danger signs
- Denominational doctrines (Apostolic)
- Lack of communication facilities
- Lack of transport
- High user fees at district hospitals
- Lack of drugs and supplies
- Staff shortage
Cultural beliefs

Rituals

Taboos

Women’s ability to decide
<table>
<thead>
<tr>
<th>Kenya</th>
<th>Uganda</th>
<th>Nigeria</th>
<th>Zambia</th>
</tr>
</thead>
<tbody>
<tr>
<td>The use of a PDA/GPS system built on pendragon forms for data collection during home visits in Western Kenya were reported by end users as faster (4.4±0.9), easier (4.5±0.8) and produced high quality data (4.7±0.7) on a 5 point scale.</td>
<td>Mobile phones are being used to send messages to pregnant women in the Jinja district to increase adherence to appointments and the involvement of men. (Connect4Change, ND)</td>
<td>Collaboration between the National Primary Health Care Development Agency (NPHCDA) and Duke University aims to implement a robust electronic health record system based on the Open MRS to complement the efforts of the MDG supported Midwifery Services Scheme.</td>
<td>The installation of an electronic perinatal patient-referral system designed to support health personnel in making referrals laid the groundwork for a larger EMR system. (Darcy et al, 2010)</td>
</tr>
</tbody>
</table>
Recommendations

- Expand use of cell phones to include sending reminders to women especially as it has been reported that most women book for ANC.
- Expand and encourage the use of electronic data collection tools.
- Infrastructure development such as roads through collaboration with key ministries.
- Collaboration between NGOs and the government in the implementation of information technology to improve health care.
Before implementation of technology to improve ANC attendance, measures need to be taken to ensure that the health system has the necessary capacity in terms of staff and supplies to handle the increase demand for services. Without the elimination of barriers, no amount of technology will be able to improve access to services.