Improving Health Systems Through a Maternal Health Framework

October 17, 2011
Outline

- Why Maternal Health?
- Linkages with Population Health
- The Maternal Health Framework(s)
- The WHO Health Systems Framework
- Diagonal Approach
- Added Utility of MH approach to improving HS
- Food for Thought
Why Maternal Health?

• Maternal health indicators in Kenya are still poor
• Provides opportunities for improving the health system
• A health system that adequately addresses MH will have a significant impact on:
  • Newborn and child health (directly and indirectly)
  • Adolescent sexual and reproductive health
# Maternal Health Indicators in Kenya

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contraceptive prevalence (%), 2005-2009*</td>
<td>46</td>
</tr>
<tr>
<td>Antenatal care coverage (%), At least once, 2005-2009*</td>
<td>92</td>
</tr>
<tr>
<td>Antenatal care coverage (%), At least four times, 2005-2009*</td>
<td>47</td>
</tr>
<tr>
<td>Delivery care coverage (%), Skilled attendant at birth, 2005-2009*</td>
<td>44</td>
</tr>
<tr>
<td>Delivery care coverage (%), Institutional delivery, 2005-2009*</td>
<td>43</td>
</tr>
<tr>
<td>Delivery care coverage (%), C-section, 2005-2009*</td>
<td>6</td>
</tr>
<tr>
<td>Maternal mortality ratio†, 2005-2009*, reported</td>
<td>490</td>
</tr>
</tbody>
</table>

**Source:** UNICEF, 2011
MH Linkages with Population health

• Continuum of reproductive, maternal, newborn, child and adolescent health
• Developmental origins of disease: Cardiovascular disease risk in adulthood may be determined in pre-natal and early childhood period – dependent on health and behavior of the mother
• Links between MH and household economic productivity
Maternal Health Frameworks

- Determinants of maternal health
- Pathways to improved maternal health outcomes
- UNICEF framework for maternal and neonatal mortality and morbidity (or Health)
- UK Framework for Results (for improving MNH)
## Pathways to Improved MH Outcomes

<table>
<thead>
<tr>
<th>MH Outcomes</th>
<th>Households / Communities</th>
<th>Health system &amp; other sectors</th>
<th>Government policies &amp; actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maternal health outcomes</td>
<td>Household behaviors &amp; risk factors</td>
<td>Health service supply</td>
<td>Health reforms</td>
</tr>
<tr>
<td>Household resources</td>
<td>Other parts of health system</td>
<td></td>
<td>Actions in other sectors</td>
</tr>
<tr>
<td>Community Factors</td>
<td>Supply related sectors</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Source: PRSP Sourcebook, Claeson, et al.*

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Maternal Health Frameworks

• Pathways to improved maternal health outcomes
  – Government policies and actions influence health service supply and other aspects of the health sector
  – Government policies and actions also influence (health) supply-related sectors
  – Factors at household and community are influenced by the health system but they also influence interaction with the health system
Maternal Health Frameworks

Maternal Health

- Congenital factors
- Education, information, life skills
- Sufficient access to maternity services
- Adequate MH practices and care seeking
- Sufficient access to adequate nutrition
- Water Sanitation Hygiene
- Quality and quantity of actual resources for MH

Potential Resources

Outcomes

Direct factors

Underlying factors at district/community and HH level

Basic factors at societal level

Political, economic, cultural, religious and social systems

Source: SOWC, 2009

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• UNICEF Framework for maternal and neonatal health
  – Illustrates that health outcomes are determined by interrelated factors
  – Encompasses nutrition, water, sanitation and hygiene, health-care services and healthy behaviours, and disease control, among others
  – Factors are proximate (individual), underlying (household, community and district) and basic (societal)
  – Useful for assessing and analyzing the causes of maternal and newborn mortality, and in planning effective preventive actions
UK Framework for Results

Source: DFID, 2010
Maternal Health Frameworks

• UK Framework for Results for improving MNH
  – Empower women and girls to make healthy reproductive choices and act on them
  – Remove barriers that prevent access to quality services
  – Expand the delivery of quality services through stronger health systems with public and private providers
  – Enhance accountability for results at all levels with increased transparency
Maternal Health Frameworks

• Commonalities

Both UNICEF and UK frameworks highlight:

– The enabling environment - the wider multi-sectoral connections of the health system e.g. governance, security, environment, water, infrastructure, including women's status.

– Removing barriers that limit access to MH services

– Increasing demand for MH services
The Health Systems Framework

1. The health system does not exist without purpose
2. That purpose is to address health issues/problems/challenges
3. The system should not, be divorced from its functions and the context
Coverage, access, Utilization, Quality of care, etc.

- Morbidity
- Mortality
- Physiological changes
- Quality of life
- Subjective wellbeing
- Self-rated health
- etc…

Health Knowledge

Health Behavior

Responsive
Equitable access
Effective coverage

Coverage, access, Utilization, Quality of care, etc.

Inputs
Processes
Outputs and outcomes

Health Systems Financing
Service Delivery
Health Workforce
Health Information System

Products, vaccines and technologies
Leadership and Governance

System level
Population level

Health Systems Financing
Service Delivery
Health Workforce
Health Information System

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The Classical Systems Approach

• Classical systems thinking acknowledges that “problems” are part of the system and

• .....”the component parts of a system can best be understood in the context of relationships with each other and with other systems, rather than in isolation
Other factors/systems: Food, Water, Sanitation, Education, Roads, Energy ….

“Health System”

Health Workforce

Health Information System

Products, vaccines and technologies

Leadership and Governance

System level

Coverage, access
Utilization
Quality of care, etc.

Responsiveness
Equitable access
Effective coverage

Population level

Health Knowledge
Health Behavior

Health (or lack thereof):
• Physiological changes
• Quality of life
• Subjective wellbeing
• Self-rated health
• Morbidity
• Mortality

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Classical Systems Approach for MH


- Performance – based financing
- CHWs Midwives Obs/Gyn
- Emergency obstetric supplies, FP & other commodities
- Leadership and Governance
- Service Delivery
- Health Information System
- Coverage, access Utilization Quality of care, etc.
- Responsiveness Equitable access Effective coverage
- Health Knowledge Health Behavior
- Maternal Health

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Classical Systems Approach for MH

- Roads – emergencies; supply chains; access to non-emergency services
- Education – delayed first sex and pregnancy; knowledge and health literacy; health behavior
- Food and Agriculture – Adequate nutrition; optimal growth; immunity
- Water, Sanitation and Hygiene – reduced morbidity; infection control
- Energy – supply chains; blood transfusion; emergencies
Diagonal Approach for Health Systems

- Traditional vertical and horizontal approaches to health systems strengthening are limited in scope
- “Diagonal approach” defines and utilizes priorities to improve health system
- Provides opportunities for a more integrated strategy
Diagonal Approach for Health Systems

• Emphasizes interrelations between health system components
• Health systems must be viewed from a population perceptive
• Requires that equity is central in assessing a health system
• In addition to provision of services, the health system must provide stewardship and adequate resource generation
Added utility of a MH System

• A health system *(in isolation)* that adequately ensures maternal health may not be adequate for other population health problems

• However a holistic system *(health plus other sectors)* that adequately ensures MH will have far reaching impact on other population health issues
## Added utility of a holistic system

<table>
<thead>
<tr>
<th>Sector/system</th>
<th>Influence</th>
<th>Other health issues addressed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food/Agriculture</td>
<td>Adequate quality and quantity of food and micronutrients</td>
<td>Child health;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Adolescent health;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Long term: NCD</td>
</tr>
<tr>
<td>Water, sanitation and hygiene</td>
<td>Adequate supply of safe water, proper waste disposal</td>
<td>Childhood illnesses;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Common adult morbidities;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>General wellbeing</td>
</tr>
<tr>
<td>Education</td>
<td>Health (numeracy and literacy); health knowledge and behavior; economic productivity</td>
<td>Better care seeking in general Preventive behavior;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Long term: HWF supply and quality</td>
</tr>
<tr>
<td>Roads</td>
<td>Improved access to health facilities; better supply of essential commodities; emergency services</td>
<td>Medical emergencies in general Road Traffic crashes and other injuries;</td>
</tr>
<tr>
<td>Energy</td>
<td>Supportive infrastructure for 2\textsuperscript{nd} and tertiary care; cold chain</td>
<td>Emergencies requiring surgery and system support; vaccine-preventable childhood illnesses; blood transfusion services</td>
</tr>
</tbody>
</table>
Food for thought

• How can the diagonal approach be used to strengthen the health system in Kenya?
• Which maternal health interventions can best set priorities for improving the health system in Kenya?
• How can maternal health indicators be used to create entry points and development plans for improving the health system?
• What will it take to have a holistic health system that takes a life course perspective on maternal health?
Thank you