Experiences in strengthening transport and referral systems to support referral of newborns –two pilot studies in eastern Uganda

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Outline of the presentation

• To conceptualise newborn referral
• To show experiences of community newborn referral through home visits
• To show experiences of a community newborn transport system
• Lessons learned, conclusions and recommendations
CONCEPTUAL FRAMEWORK

Delay 1 Recognition of illness and decision to seek care

Delay 2 Reaching health facility

Delay 3 Receiving quality care at health facility

Household/community level
- Socio-cultural factors (I) and CHWs’ competence to identify and refer sick newborns (Study II)

Household level
- Caretakers’ compliance with referral advice by CHWs (Study III)

Health facility level
- Capacity of Health Facility to offer care to sick newborns (Study IV)

Survival of newborn

Thaddeus and Maine’s Three Delays model 1994
UGANDA NEWBORN STUDY (UNEST)

- Iganga-Mayuge HDSS
- 2007-2010
- WHO and UNICEF home visits package
UNEST (2)

- 61 CHWS trained
- Home visits: 2 (pregnancy) 3 (after delivery)
- Mother/Newborn assessment and Referral for treatment and postnatal care
- Supervision (DHT, UNEST, Health workers)
- 20 Health facilities strengthened
Variety of transport types

- Motorised transport – personal, taxis (hired), ambulances – broken down, require fuel, few functional
- Motorcycles – common in most rural areas at negotiated prices
- Motorcycle ambulances – in a few scattered places
- Bicycles rather uncomfortable
Organization of the transport component

- Transport vouchers to transport women for ANC, delivery, PNC, referral
- Arrangements were negotiated with transporters with involvement of local leaders
- Payment rates negotiated and contracts signed
- Payment by cash, often delayed but contact maintained
UNEST: KEY FINDINGS

• Reason for referral
  – 53% immunization / postnatal care
  – 47% because of a danger sign

• Caretaker compliance
  – Overall 63% complied
  – Caretakers of sick newborns (74%) vs (53%) referred for postnatal (p-0.001)

• Determinants of compliance
  – Age of mother (25-34 years), AOR 0.4 [0.2 - 0.8] compared to mothers <20 years
  – CHW reminder visit, AOR 1.8 [1.2 –2.7]
  – Sick newborns, AOR 2.3 [1.6– 3.5]
Health facilities where caretakers sought care

<table>
<thead>
<tr>
<th>Health facility level</th>
<th>Sick</th>
<th>Postnatal and Immunization</th>
</tr>
</thead>
<tbody>
<tr>
<td>HC II</td>
<td>37%</td>
<td>53%</td>
</tr>
<tr>
<td>HC III</td>
<td>27%</td>
<td>39%</td>
</tr>
<tr>
<td>HC IV</td>
<td>8%</td>
<td>0.5%</td>
</tr>
<tr>
<td>Hospital</td>
<td>27%</td>
<td>7%</td>
</tr>
<tr>
<td>Others</td>
<td>0.5%</td>
<td>1%</td>
</tr>
</tbody>
</table>
Key findings - Safe Deliveries

![Graph showing safe deliveries from June 2008 to May 2011. The graph compares intervention versus control groups, with a notable increase in interventions post-intervention start.]

June 2008 - May 2011
Reasons for grading the change in availability of transport services

Percentage of respondents

Reason for grading ease of accessing transport

- ANC
- Delivery
- PNC
Take home

- CHWs could enhance caretaker compliance to referrals – but only useful if to appropriate health facility with quality

- Transport systems improve access to care for sick kids and women in labour

- Issues of quality of referral and care at referral health facility, and sustainability remain important
Areas that need improvement – Quality of transportation
Research agenda

- Role for CHWs in referral
- Improving illness recognition and decision to seek care
- Standards and quality of care in referral in different contexts (Community, PHC, etc)
- Quality of care in referral
- Safety of referral systems
- Evaluating referral: effectiveness, efficacy, cost, impact
ACKNOWLEDGEMENTS

• Ministry of Health
• Iganga and Mayuge District authorities
• Iganga-Mayuge HDSS
• Co-authors and investigators: Christine Nalwadda, Stefan Peterson
THANK YOU FOR LISTENING