Community-based Management of Neonatal Infections: MINI Program, Nepal

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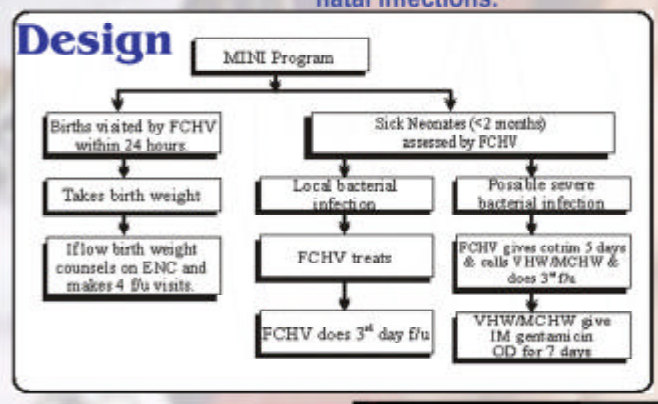
Background: Neonatal deaths account for 40% of the under-five mortality in Nepal. Due to multiple factors including poor access to public health services and cultural restrictions on travel for newborns and their mothers, few sick young infants are brought for care to government health facilities. WHO estimates that, overall, approximately 32% of neonatal deaths are due to infection. The MINI (Morang Innovative Neonatal Intervention) Program, implemented in one district by the Ministry of Health and Population, with technical support from JSI R&T and funding from The Bill and Melinda Gates Foundation through SAVE/SNL, is bringing identification and management of neonatal infections to the household and community level as an 'incubator' approach utilizing its 10 years of learning from the community-based (CB) pneumonia program. The MINI Program was initiated in 2004 following the endorsement of the Ministry of Health's National Neonatal Health Strategy (Jan 2004) in which the Ministry supported the initiation of pro-

Objectives: The main program objective is to determine whether existing community-based mostly illiterate Female Community Health Volunteers (FCHVs) and the most peripheral government health workers (eg. Village Health Workers (VHWs) and Maternal and child health workers(MCHWs)) with 8th grade education can perform a set of activities that result in improvement in the early identification and correct management of neonatal infections.

A semi-literate FCHV visiting a new born, counselling on essential new born care, weighing the baby, issuing a birth record & screening for danger signs in the baby.

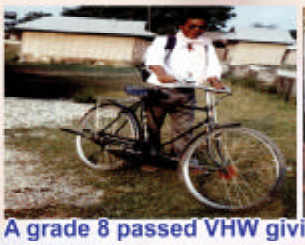
Design



Policy Implications:

Experience from MINI will be used by the MOH to guide Nepal's neonatal health policy, much in the same way that the early 'incubator' approach for pneumonia has established treatment policy for under-5 pneumonia management. The MOH plans to incorporate this approach, if deemed successful, into the existing Community-Based IMCI program for rapid expansion in the country. The policy implications could also be influential beyond Nepal, in the same way that Nepal's approach influenced the evolution of the recent WHO endorsement of community-based pneumonia treatment.

An FCHV assessing a sick neonate for signs of possible severe bacterial infection and issuing a call-form to call the VHW to give gentamicin injection when any 1 out of 10 signs are present.



A grade 8 passed VHW giving gentamicin injection after receiving call-form from the FCHV.

Discussions and Conclusions:

Based on observations, supervisory visits and data review, it appears that FCHVs are capable of assessing neonates, and managing initial care and referral and that the referral is effective and the baby receives early treatment. The program appears to be increasing the proportion of sick neonates receiving appropriate treatment through the existing government channels, making it likely that the program will have an impact on mortality. While there are still some delays, the referral mechanisms are proving effective with the guardians of the sick newborns actively seeking out VHW/MCHWs and AHWs who are capable of giving the injections to ensure that the baby receives early treatment.

Results:

In the first five months (May 15 to October 15, 2005) after the basic training:

- 51% of predicted births recorded
- 50% of newborns visited within 72 hours of birth
- 16% low birth weight by scale
- 24% of newborns had an episode of LBI
- 15% of newborns had an episode of PSBI
- 82% of the PSBI cases were first assessed by the FCHVs and 12% by the VHWs/MCHWs
- 86% of detected PSBI received treatment
- 6% of caretakers did not consent to treatment for PSBI, 3% referred to higher center and 5% lost contact
- 94% of treated PSBI cases completed 5 days of Cotrimoxazole
- 89% of treated PSBI cases completed 7 days of Gentamicin injections
- 93% of PSBI cases treated with gentamicin improved
- Median time duration from the onset of PSBI to first contact by FCHV is 2 days
- Median time duration from the onset of PSBI to first dose of Gentamicin by VHW/MCHW is 3 days
- Knowledge about all 10 signs for PSBI was above 80% in all levels of health workers 4 months after training.

Community and Family served by MINI program.

Reaching the community through monthly mother's group meeting conducted by FCHVs in each ward of the village.