

Effectiveness of supportive supervision and performance review on the quality of community-based neonatal sepsis case

RESEARCH QUESTION

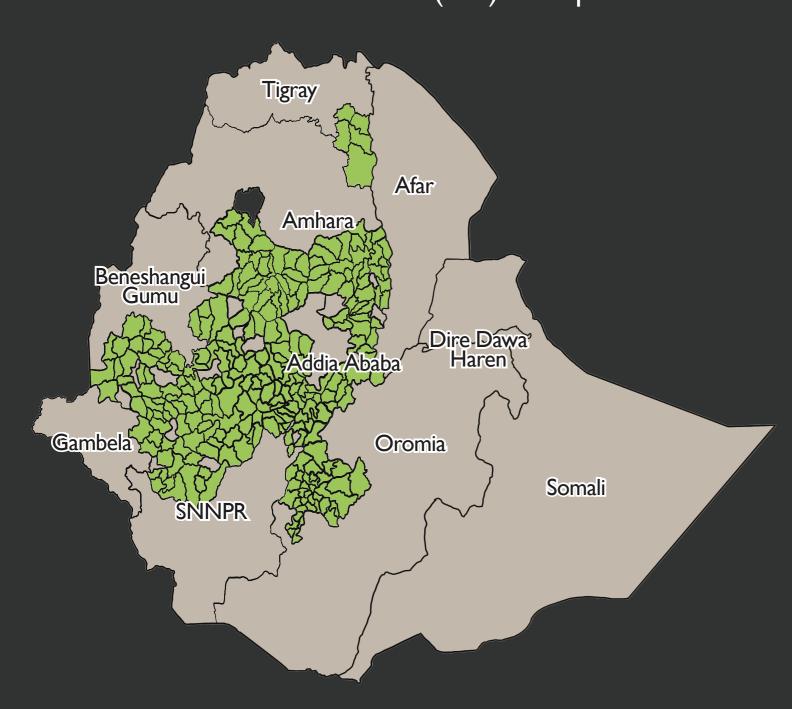
How effective is supportive supervision in strengthening the consistency of community based management of neonatal sepsis?

PROCESS

- We applied the following strategies to maintain the quality of community-based management of neonatal sepsis:
- Competency-based training
- Prompt post-training follow up
- Continued coaching through regular supportive supervision (SS)
- Woreda level Performance Review and Clinical Mentoring Meetings (PRCMM)
- 8,006 supportive supervision visits in 6,416 health posts over 30-month observation.
- All health posts received at least one supportive supervision visit, 20% (1,289) received two, and 5% (301) received more than two visits.

METHODS

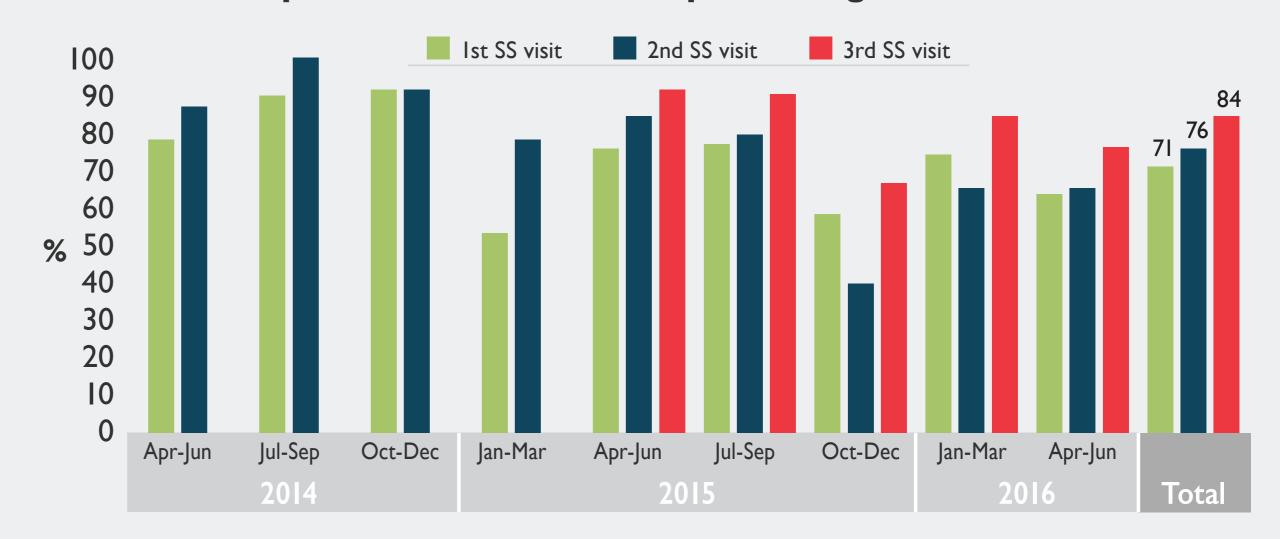
• Study implemented by JSI/L10K and Save the Children International (SCI) Ethiopia.



- Analysed health posts in 6,416 health posts across 269 districts.
- During supervision, supervisors reviewed case registers for completeness and consistency between recorded signs/symptoms, classification, and treatment against the CBNC management protocol.
- Study used longitudinal program monitoring data captured between January 2014 and June 2016
- The health post level repeated measures were analysed using random effects multiple logistic regression models.

RESULTS





Effects of the supportive supervision on the consistency of neonatal sepsis management skills of the HEWs

The consistency of sepsis management skills of HEWs was statistically significant when compared between those visited once and those visited more than twice (OR 2.49; p-value <0.05).

After only the first supportive supervision visit, they was not a statistically significantly different between health posts that were visited once and those visited twice.

The odds of consistency of neonatal sepsis management skills of HEWs increased by 95% in the second round Performance Review and clinical Mentoring Meeting (PRCMM) as compared to health posts without woreda level review meeting.

 This effect has not matured enough to reach statistically significant level.

Table 1: Random effect logistic regression estimates of the predictors of consistency of neonatal sepsis management

	OR	95%CI	P-value
Observation period			
Apr-Jun 2014	1.00		
Jul-Sep 2014	2.02	0.55-7.51	0.292
Oct-Dec 2014	2.25	0.78-6.52	0.135
Jan-Mar 2015	0.40	0.12-1.36	0.143
Apr-Jun 2015	0.67	0.27-1.65	0.378
Jul-Sep 2015	0.71	0.30-1.63	0.410
Oct-Dec 2015	0.30	0.12-0.73	0.008
Jan-Mar 2016	0.50	0.19-1.30	0.156
Apr-Jun 2016	0.43	0.17-1.12	0.083
Region			
Amhara	1.00		
Oromia	2.70	1.59-4.60	<0.001
SNNP	1.68	1.01-2.81	0.046
Tigray	2.33	0.43-12.64	0.328
Implementing partner			
SCI	1.00		
LIOK	1.01	0.61-1.68	0.975
Number of supervision visits			
1	1.00		
2	1.32	0.86-2.02	0.208
3	2.49	1.16-5.38	0.020
Number of PRCMM			
0	1.00		
I	1.25	0.80-1.95	0.324
2	1.95	0.71-5.36 0.	198
_cons	2.44	1.04-5.73	0.040

CONCLUSIONS

- Supportive supervision visits are an effective intervention in improving the consistency of skills of neonatal sepsis management at community level.
- At least three rounds of supervision are needed to maintain optimum consistency in the management of neonatal sepsis at the community level.
- However, the implementation strength of PRCMM needs to be reviewed to improve its impact on the consistency of sepsis case management skills of HEWs.
- Policymakers and program planners should make investments to improve the implementation intensity of PRCMM and to sustain the effect of supportive supervision.