Coverage of preventive and promotive services before and after ICCM

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Outline

- Back ground information
- Rationale
- Objective of the study
- Methodology
- Result & Discussion
- Limitation of the study
- Conclusion and Recommendation

Back ground Information

- At the Inception of iCCM program there were concerns that introduction of curative services could negatively affect preventive and promotive service
- There was no study before on impact of iCCM on preventive and promotive services

Study area

- IFHP -USAID-funded program implemented by Pathfinder International and John Snow
- Geographic coverage:
  - Region= 04
  - Woreda= 302
  - HFs = **1338**HCs, **5909**HPs,& **5.1 million** HHs
- Total target program beneficiaries=**30.2 million**

General objective

- To determine the impact of ICCM scale up on key preventive and promotive coverage of maternal and child health services in IFHP focus four big regions namely; Oromia, Ahmara, Tigray and SNNPR

Specific objective

- To assess change in coverage of EPI (Penta V3, Measles and FIC) before and after iCCM introduction
- To assess change in coverage of optimal nutrition practices including ; IIBF, EBF <6mon, and CF before and after iCCM introduction
- To assess change in FANC coverage ,Ins delivery & FP before and after iCCM introduction
- To assess change in coverage of ITNs utilization before and after iCCM introduction

Methods

- Study Methods And Designs
  - Cross-sectional study
- Study Area
  - Four IFHP focus regions (Oromia, Ahmara, Tigray,& SNNPR)
- Source population
  - All HHs in four regions
- Study Population
  - Randomly selected HHs from sampling frame in four respective regions
- Data Collection Period: February to March ,2011 and 2013

…..Methods

- Data collection techniques
  - Face to face interview
- Tools
  - The structured questionnaires

Sample size and sampling

- Formula for assessing a difference in proportions between two independent samples was used

$$n = \frac{D\,[(Z\alpha + Z\beta)^2 * (P1\,(1 - P1) + P2\,(1 - P2)]^2}{(P2 - P1)^2}$$

with the following assumptions;

- P1 to be 50% and considering a change of 12 percentage points between P2 and P1, a design effect of 1.5, and a non-response rate of 10%; a total of 347 samples (HHs) was calculated as a minimum sample size. The minimum sample of HHs was applied for each study region as the level of analysis of the results will be at regional level.

…. Sample size and Sampling

- The minimum sample size (347 HHs) was increased to 480 HHs in order to have enough contingency (about 40%) for cross tabulation of the results by the age of the child in study HHs in each study region.
- Once the minimum sample size was determined, the number of HH to be sampled in each region was determined by:
  - Dividing the minimum sample of 480 HHs into the minimum number of CLO in a region (this is 160 HH per CLO)
  - The sample size for each CLO was multiplied by the total number of CLOs in each region to arrive at the total sample size for each study region as indicated in table below.

Indeed, the total sample size for the four study region was 2,560 (of which 640 for Amhara, 960 for Oromia and 480 for Tigray and SNNP). The selection procedure was described as follows

…..Sample size and Sampling

2011

Regions	WorHO	HCs	HPs	HHs
Oromia	32	64	128	640
AHMARA	48	96	192	960
Tigray	24	48	96	480
SNNPR	24	48	96	480
Total	**128**	**256**	**512**	**2560**

2013

WorHO	HCs	HPs	HHs
32	64	128	640
48	96	192	960
24	48	96	480
128	256	512	2560

Sampling procedure

- Study WorHOs, HCs and Health posts/Communities were selected by the regional M&E Program Officer in consultation with country office M&E team using random sampling.
- List of WorHOs, HCs and Health posts were first prepared by CLOs to be used as a sampling frame for sample selection.
- The number of Communities/Kebeles selected was equal to the number of Health posts (i.e. if a HP is randomly selected then the community/Keble in which the HP is found was automatically selected for interview).
- Study Households (HHs) were selected using a random walk technique. Visitors were responsible for selecting five eligible households (one for each age category) for follow-up visits under each selected HP. The following steps were used to select eligible HHs for the study.
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Sampling procedure

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  - ✓ First a list of Gott/Geri/ Kushet (locality) for the selected Keble/HP was prepared in consultation with the HEWs
  - ✓ A Gott/ Geri/ Kushet was selected from the list using simple random sampling.
  - ✓ Random-walk method used to select eligible households within the selected Gott/ Geri/ Kushet.
  - ✓ If an eligible household for an age category was not found within the selected Gott, then one of the Gotts adjacent to the first selected Gott was randomly selected using simple random sampling (lottery method), and choosing the missing eligible household using the same steps was continued.

Data collection

- Interview guideline was developed to guide IFHP Officers who conduct the visit to selected HHs for interview
- Each questioner contains selected questions for each area of focus for recording purposes
- A visitor could go beyond the focus questions during his/her visit, whether key behaviours were in place in selected HHs.

Data quality control

- Intensive training was provided to CLO and RPO staffs by the CO M&E team and the Systems advisor. Following the training, the CO M&E and the RPO M&E Program Officers were made field visits and spot checks during data collection.

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…Data quality control

- Well versed visitors with the follow-up checklists, the use of field implementation guidelines, intense consideration and internalization of the coding criteria for yes/no responses by visitors and using local languages during the interview process added to the quality of the data
- A random sample of checklists (10% of the checklists at each level) was double-entered with to verify the quality of data entry, and the matching report showed excellent agreement (97.1%).

- **Data Processing and analysis**

→ All completed checklists from the structured interviews were submitted to the IFHP Country office for data entry and processing. A team of data entry clerks well versed with the basics of the checklists performed the data entry. Their roles included office editing, coding of open-ended questions, data entry, and random verification of entered data. Data encoding, entry and processing were managed by the CO M&E team.

→ The data were entered and analyzed using SPSS16.0 version. Basic analysis tools such as univariate tables, percentage analysis and graphs were produced

Ethical Considerations

→ Consent was obtained from each respondent

Results and Discussion

Characteristics of the respondents

Indicators	2011	2013
# of mother with children 0-5 months	437	476
# of mother with children 0-59 months	1983	1987
# of mother with Children 6-23 months	987	1001
# of mother with children 6-59 months	1536	1511
Children 12-23 months with children 12-23 months	484	502
Mothers with children 0-11 mon.	961	975
Households in malarious areas	1239	1391
Women aged 15-49 years	1999	2144
Households with or without child visited	2560	2503

Comparism of key child health and Nutrition services coverage before and after iCCM introduction

Indicators	2011	2013	diff	P-value
Fully immunized children	77.0%	86.4%	†	0.000
Children 6-59 months who received Vit A capsule in the last six months	86.5%	89.8%	†	0.005
Immediate intiation of BF	70.4%	78.6%	†	0.004
EBF for < 6 months	57.7%	79.2%	†	0.000
Complementary feeding at 6 m	60.8%	75.4%	†	0.000

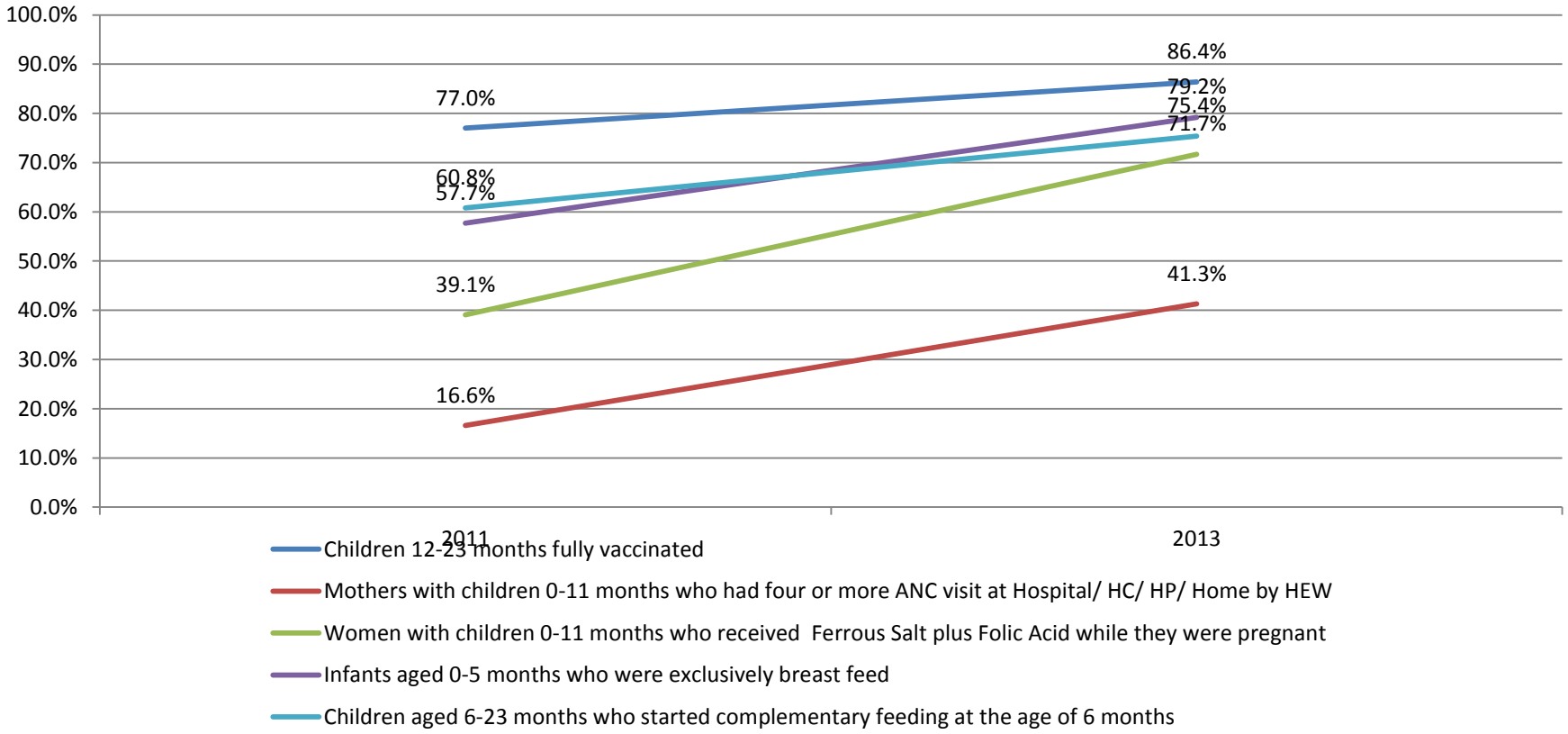
Comparism of key maternal health services coverage before and after iCCM introduction

Indicators	2011	2013	diff	P-value
FANC 4 visit	16.6%	41.3%	†	0.000
Mothers of children 0-11 months who received two or more TT does during pregnancy	77.4%	69.7%	↓	0.000
Women age 15-49 years who are currently using any family planning	44.0%	53.9%	†	0.000

Comparism of ITN coverage and utilization coverage before and after iCCM introduction

Indictors	2011	2013	diff	P-value
Children 0-59 months who slept under bed-net last night (Among children in households found in malarious areas and who have bed nets)	72.9%	71.4%	↓	NS
Household with any type of latrine	71.6	70	↓	NS

key preventive and promotive MNCH services coverage before and after iCCM introduction



Discussion

- During the PRCMMin ICCM an additional one day was taken to discuss on counseling focusing on optimal breastfeeding and demonstration on complementary feeding.
- HEWs were trained to do more home visits to find sick young infants, which could have increased ANC, but it may also be due to expansion of health extension program

Discussion

- Increase in latrine coverage was due to the ICCM program because of initial efforts of HEWs in mobilizing the community, but there was no strong follow-up.
- The ICCM program did not replace ITNs and there were no repeated campaigns because of which the coverage did not increase.

Discussion

- Improved child nutrition, clean water, sanitation and clean HH fuels resulted in child deaths 14% in Latin America,24% in South east Asia and 31% in Sub-Saharan Africa (in 42 countries)
- MCH (100%) services and Immunization (98%),66.7% and 39% decrease in infant and child mortality in India.

Limitations

- The data were collected and analyzed by IFHP staffs.
- Decrease in child mortality and morbidity not analyzed.
- It is difficult to precisely attribute the contribution of Health Extension Program to these increases in services, so we think attribution from the ICCM program is likely.
- Other factors might have also contributed to the increase in coverage, like health workers service in hospitals and health centers on ANC, nutrition, immunization, delivery and family planning but not all people in rural areas could get this service.

Recommendations

- Scale up of ICCM improved some preventative and promotive services, significantly including, immunization, vitamin A supplementation and Ferrous suphate supplementation, excusive breast feeding and ANC.
- HEWs should strengthen their initial preventive, promotive activities, like sanitation while adding other activities.

Recommendations

- Replacement of ITNs needs serious attention to increase coverage by replacing the old ones and teaching proper utilization of the existing ones.
- PHCU strengthening is important to increase health facility delivery, family planning and other child survival interventions

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Thank you