Mama SASHA Project Western Kenya
Progress Update

7-10\textsuperscript{th} October 2013

4\textsuperscript{th} SPHI Meeting, Kumasi, Ghana

Dr. Frederick Grant
Background: Introduction

**Target group**
- Pregnant women

**Key actors**
- CHW’s/CHEW’s
- Vine multipliers/AEO’s
- ANC nurses/DNO’s
- Provincial administration
Goal: To assess the cost effectiveness of integrating OFSP into an existing health service delivery program* to improve the health status of pregnant women and the nutritional status of children up to two years in selected districts/counties of Western Kenya

* APHIA plus

Objective 1: Strengthen the utilization of IEC materials at both the health facility and community levels to support OFSP production and consumption

Objective 2: Improve the evidence base of the health impacts on infants and their mothers and the use of health services by pregnant women

Objective 3: Assess the costs and benefits of linking an integrated OFSP agricultural-nutritional intervention to a health service delivery system serving pregnant women
Background: Partners

- CIP
- PATH
- ARDAP
- CREADIS
- KARI
- Ministry of Health
- Ministry of Agriculture

With scientific inputs from
- Emory University
- University of Toronto
- University of Washington
Implementation strategy

**Intervention**
- Community sensitization
- Identification and training of project actors
- Home visits/PMC meetings
- Voucher redemption
- Formation of PMC’s, ANC clinic attendance/voucher issuing

**Control**
- Trainings by APHIAplus to HCW’s and CHW’s
Achievements: Women reached

Since March 2011 – August 2013

• Reached over 5900 women through

  • Voucher issues

  • 215 PMC/LMC formed
    • >1400 members
    • 25,141 attendances
Achievements: Voucher issue vs redemption

March 2011-August 2013

- Pairs vouchers issued: 8,775
- Number women reached with vouchers: 5,944
- Project target: 900
- Pairs vouchers redeemed: 4,389
• IEC materials designed and produced
  • 300 badges for program actors
  • 2000 healthy eating leaflets
  • 200 healthy eating posters
Program Implementation Achievements
Training and Coordination

- Integrated Ag-Health refresher training for implementing agents
  - Ongoing refresher trainings
  - 191 staff participated
  - Male opinion leader training
- Quarterly partners’ meetings
- Monthly feedback meetings
- Quarterly review meetings with men opinion leaders
Farmer field days

- Facilitated Integration of agriculture and health during field days
- 7 field days conducted (2011 and 2012)
- Reached over 2400 people
Demo plot establishment

- Established 14 demo plots (size 320m$^2$)
  - Impart agronomic lessons on OFSP to beneficiaries
- Compare yields among varieties
- Act as trial plots to assess performance of Kabode and Vita compared to local variety (Bungoma)
- Findings presented at 9$^{th}$ APA meeting
  - Wamalwa and Grant, 2013.
Irrigation equipment
Partnership health check up

- Done to allow reflection on internal partnership processes, identify areas working well, and areas of concern
- Round 4 conducted and results discussed by partners
  - Reviewed the communication strategy developed in year 2 and updated in year 3
Integrated gender into project activities
Monitoring system established

• Data capture for Ag and health activities
  – Routinely (actors on the ground)
  – During monthly supervision visits (supervisors)
• Forms collection and centralization
  – During monthly supervision visits
  – During monthly feedback meetings
  – Sent monthly to the data manager / M&E Specialist
• Data entry: modules developed under CSPro
• Archiving: files for hard copies
Improving the evidence base – evaluating impact, acceptability, feasibility and affordability
Operations research (Round 2)

- Conducted to assess the feasibility, acceptability and sustainability of project

**Dissemination of findings:**

- Machira et al. IUNS/ICN2013: Granada, Spain.
  - Summary findings
    - Marked improvements in project strategy in the 2nd wave compared to the pilot
    - Male involvement is increased,
    - Training curricula have been strengthened and services are largely standardized
    - Evidence of integration of lessons learnt from the pilot into the 2nd wave of the project’s implementation.
The prevalence of vitamin A deficiency (VAD), among the children 6-23 months was 18.3% & did not significantly differ by study site (Intervention: 18.4% vs. Control: 18.2%).

Knowledge about OFSP at the baseline is low hence to track by the end of the intervention.

Dissemination of findings
• Perumal et al. BMC Pregnancy and Childbirth 2013, 13:146 http://www.biomedcentral.com/1471-2393/13/146
• Grant et al. IUNS/ICN2013: Granada, Spain.
Cohort Vitamin A study (COVA)

- Prospective study: Impact of Mama SASHA on diet, food security and nutritional status of mothers and their infants
  - Supplementary funding obtained May 2012
  - Early pregnancy, late pregnancy, 4 and 9 months postpartum
  - Infection adjusted vitamin A, iron, anemia
    - Breastmilk & plasma samples from pregnant & lactating women (not funded in original Mama SASHA component)
    - Plasma samples from infants
Economic Evaluation

• Conduct cost analysis to estimate the economic and financial costs of resources used to implement and scale up Mama SASHA intervention.

• Two methods to estimate resource use and costs:
  – Project expense reports
  – Microcosting techniques to capture shared resources by health workers, community health workers and vine multipliers (i.e. labor, agricultural supplies)

• Estimate total incremental costs, cost per beneficiary reached and cost shares for key inputs and activities.
Conduct cost-effectiveness analysis using multiple outcomes:

• Reduction in Vitamin A deficiency and sequelae associated with Vitamin A disability.

• Model the contribution of Vitamin A to overall morbidity and mortality to estimate Disability life-year adjusted (DALY) averted.

• Conduct additional CE analysis using other key program outcomes that have reliable measures of effectiveness, including anemia and antenatal care utilization.
Upcoming surveys

Endline cross-sectional survey
• Nov- Dec 2013: HH enumeration and selection
• March – May 2014: Data collection
  – Computer-based interviewer administered surveys & anthropometric measurements
    • ~300 pregnant women and 2400 mother-child dyads (blood sampling in children 6-23mo).

Food consumption survey for COVA
• Dietary intakes of mothers & their infants at 9 mo postpartum
• Nov 2013 – April 2014.
  – ~250 mother-child (8-9mo) dyads
Lessons learned

- Refresher trainings important for strengthening coordination, implementation and retention of IEC messages by all actors.
- Difficult to motivate individualized counseling
  - Group nutritional counseling more common as compared to individual counseling in spite of training & revision of counseling cards.
- Continuous monitoring of control sites to avoid contamination.
- Increased number of pregnant women who are accessing our facilities but are ineligible for voucher issuance since they originate from villages that do not fall within our clientele.
Lessons learned

• There is the need to motivate CHWs, through refresher trainings, increased remuneration or provision of T-shirts, since they are an essential component for the success of any project of such magnitude.

• Male involvement in Mama SASHA is important in increasing the uptake of the intervention by the project’s target participants (pregnant and lactating women).
  – This is because access to land for planting the OFSP vines and decision to visit the ANC/PNC clinics are mostly possible with the concurrence of the male partner.
Challenges

- Low voucher redemption early part the years due to prolonged dry spell.
- Increased labor costs for vine multipliers (maintenance of plots during dry spell)
- Increased work load for the project actors (ANC and Vine multipliers)
Thank you!!