HKI Senegal Successful M-Health strategy: The routine delivery of Vitamin A Supplementation at six months using SMS appointment reminders

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[1]Helen Keller International, Senegal, [3] Consultant- Enquête rapide de couverture des Journées Locales de Supplémentation en vitamine A au Sénégal, 2005.
[4] Stagiaire du Laboratoire de Nutrition, Comité Sénégalais pour la Fortification des Aliments en Micronutriments (COSFAM), Micronutriment Initiative (MI), 2010. Evaluation du statut en vitamine A, fer et zinc chez les enfants sénégalais âgés de 12 - 59 mois et chez les femmes en âge de procréer (15 - 49 ans) dans le cadre du programme de fortification des aliments en micronutriments au Sénégal. 2012, 155p

Introduction

Vitamin A supplementation (VAS) in Senegal is carried out primarily through bi-annual Child Health Days where VAS and deworming are distributed to all children aged 6-59 months.

Supplementation with vitamin A in the routine setting is relatively weak in Senegal, with 8% of children receiving a dose at a sick visit, 12% receiving a dose during a routine weigh-in and 15% receiving a dose during scheduled vaccination visits (HKI, USAID, 2005).

Strengthening of the routine supplementation is of high importance and for this purpose a pilot project to test the effectiveness of an integrated package of interventions on VAS coverage at 6 month contact point (***6mcp***) that includes **sms** appointment reminders.

Objectives

1) To improve Vitamin A supplementation coverage in the routine setting, particularly for children at six months.

2) Raise awareness of the VAS six-month visit and increase both demand and supply

3) Test the effectiveness of an integrated intervention package including ***6mcp*** on the child health card, ***sms reminders***, and ***sms stock*** capsule monitoring.

Fig 1. Child receiving Vitamin A red capsule

Methods

1) Baseline and Final Evaluation with randomized sampling in 6 districts; 3 interventions districts :Thionck Essyl, Dakar West, and Mbacke; 3 control districts: Thiés, Bambey and Diouloulou.

Methods Cont'd

2) Census of Intervention Districts for a database of beneficiaries & their phone numbers.

3) With the use of **Telerivet*** m-health software, **SMS** reminder messages are sent to improve demand

4) Weekly SMS stock reports to improve supply and reduce outage occurrences.

5) Social mobilization & sensitization activities such as radio spots, posters, follow-up visits etc.

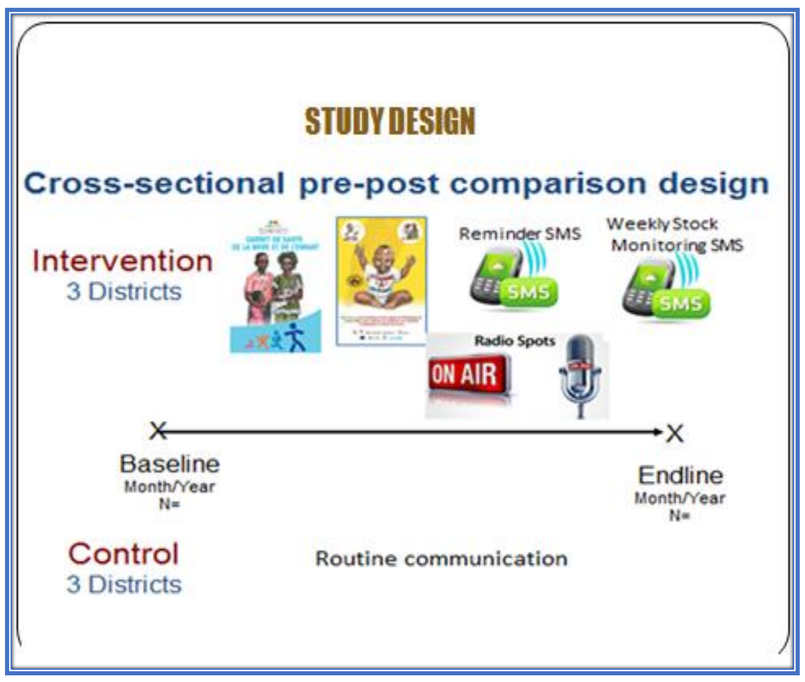

Fig 2. Illustration of Study design with integrated activities pre-post.

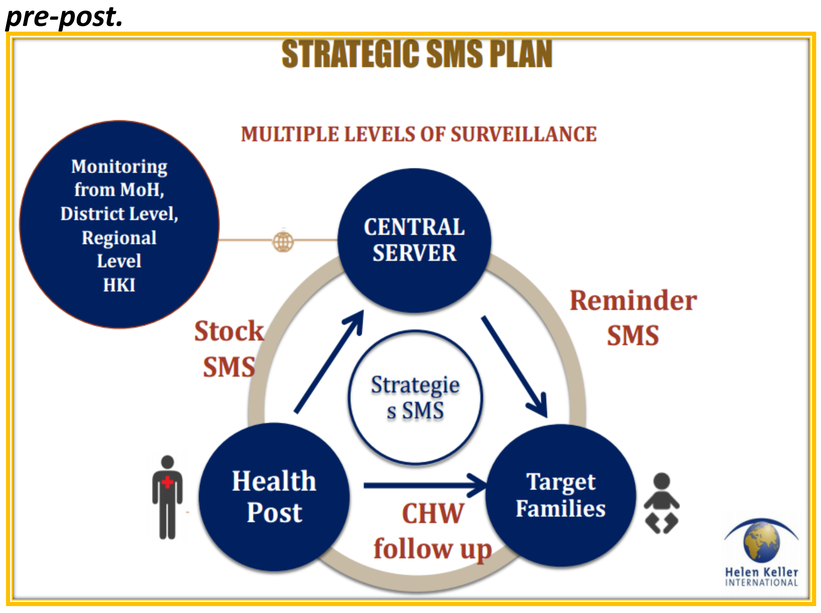

Fig 3. Illustration of flow of activities& information using mhealth strategeic plan

Results

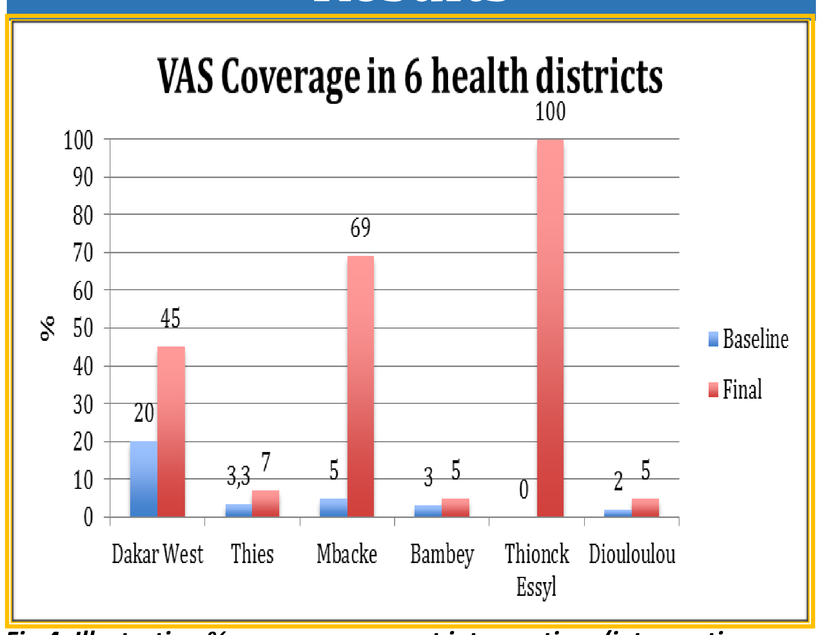

Fig 4. Illustrating % coverage pre-post intervention: (intervention- Dakar-ouest, Mbacké, Thionk Essyl, control- Thiès, Bambey, Dioloulou

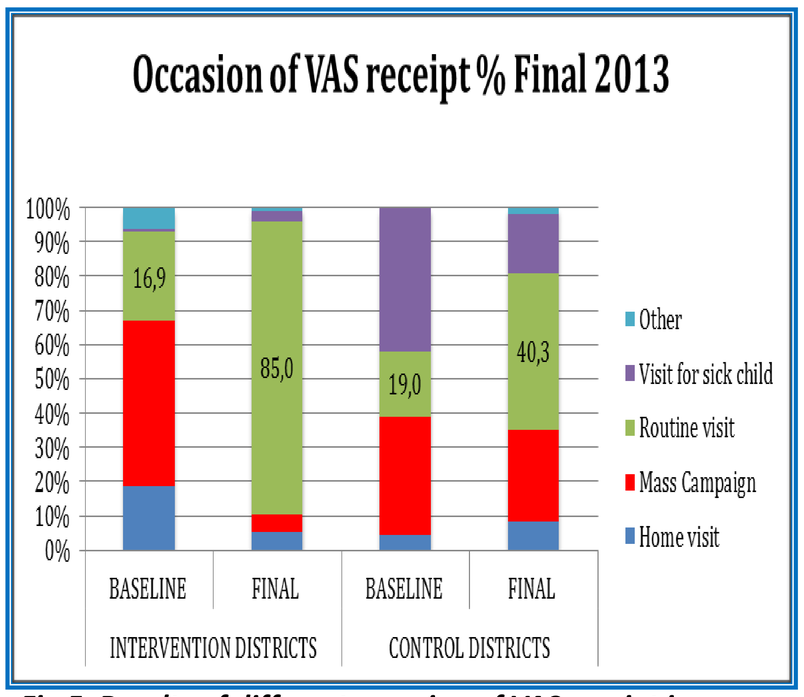

Fig 5. Results of different occasion of VAS receipt in intervention and control zones pre/post integrated sms reminder package

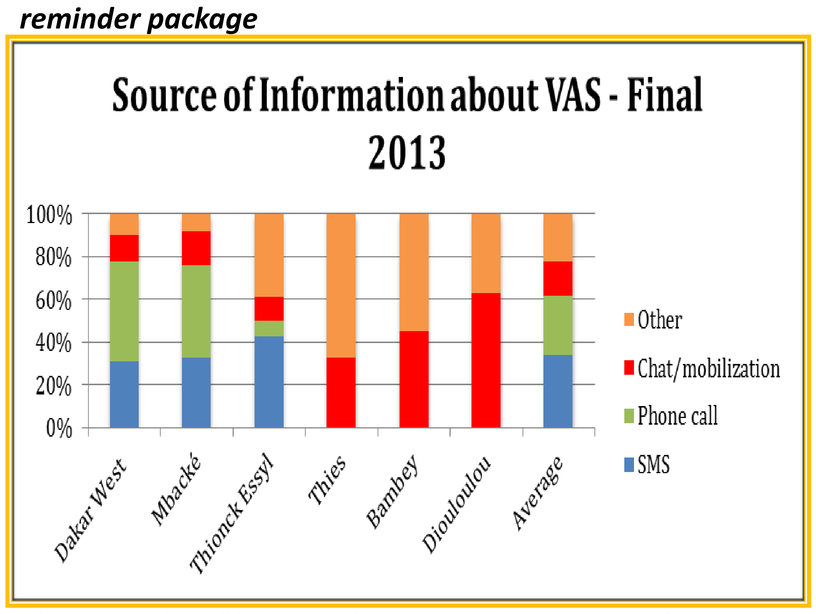

Fig 6. Results of information source for VAS appointments in intervention and control zones

Conclusions

1) Coverage of Vitamin A supplementation at six-months in the routine setting significantly improved in all districts that implemented the six-month contact point.

2) Use of low end mobile technology for sms appointment reminders could be useful in enhancing demand & supply for VAS.

3) Further strategies may be needed to achieve high coverage in urban and semi-urban areas.

Fig 7. Phones use by community health workers (CHWs) for stock sms and sms reminders