



Coupling de-worming and vitamin A supplementation: National-level success in Senegal

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Abstract

Background: The 2005 Senegal Demographic and Health Survey estimates that 84% of children < 5 are anemic. A major cause is intestinal parasites. Starting in 2004 the Ministry of Health piloted coupling of de-worming with other child survival interventions in 2 regions with support from UNICEF. The population-based assessment of Local Vitamin A Supplementation (VAS) Days, carried out in August 2005 showed that 96% of mothers favored de-worming for their children (full results of this assessment are presented in an accompanying poster). The pilot phase and the results of the assessment led to the decision to take de-worming nationwide in the second VAS distribution in 2005. **Aims:** Describe steps and identify lessons learned of this first nationwide experience of coupling de-worming and VAS. **Framework:** National Immunization Days (NIDs) were organized in Senegal in December 2005 and were used as the delivery platform for both VAS and de-worming. Steps for national scale-up of de-worming included: development and dissemination of a technical brief, identification and ordering of medication (mebendazole), incorporating de-worming into management information system tools and training, development of communication strategy and tools covering VAS, de-worming and oral polio vaccine (OPV). Because of NIDs door-to-door distribution was used. Mapping of the intervention areas of health stations and supervision at all levels were important factors of success. **Outcomes:** Tally sheets show 100% coverage for de-worming and VAS. Mebendazole was well accepted and tolerated by children. Anecdotal evidence indicates de-worming decreased number of cases of refusal of OPV. Management of mebendazole stocks was an added burden. Coupling of 3 interventions (de-worming, VAS, OPV), slowed down the work of the teams but did not decrease overall coverage. **Conclusions:** The first nation-wide experience of coupling de-worming with VAS was successful and has been adopted for future rounds, including in Local VAS Days organized in May/June 2006. In the event of future NIDs, de-worming will be added to the first round of OPV and VAS to the second, in order to reduce logistic burden. An assessment of the impact on anaemia is planned in 2007.

Introduction

In December 2004, The West African Health Organization (WAHO) held a workshop to assess the progress made in anaemia/iron deficiency control in the sub-region. In 2005, the Senegal DHS has shown that 84% of children < 5 are anaemic. The population-based assessment of local VAS Days, carried out in August 2005 showed that 96% of mothers favoured de-worming for their children. Starting in 2004 the Ministry of Health piloted coupling of de-worming with other child survival interventions in 2 regions with support from UNICEF. The pilot phase and the results of the assessment led to the decision to take de-worming nationwide in the second VAS distribution in 2005.

Objectives

Describe steps and identify lessons learned of this first nation-wide experience of coupling de-worming and VAS in Senegal.

Framework

National Immunization Days (NIDs) were organized in Senegal in December 2005 and were used as the delivery platform for both VAS and de-worming.

Target groups:

- **Vitamin A supplementation:** children aged 6-59 months.
- **De-worming:** children aged 12 – 59 months.

De-worming tablet : 500 mg mebendazole.

Steps for national scale-up of de-worming included:

- Advocacy to obtain commitment of the Ministry of Health to add de-worming to VAS distribution,
- Development and dissemination of a technical brief,
- Identification and ordering of medication (mebendazole),
- Incorporating de-worming into management information system tools,
- Development of a guide to manage de-worming during vitamin A supplementation,
- Organization of orientation and training sessions at all levels,
- Development of communication tool
- Implementation through application of some key strategies (*mapping of the intervention areas of health stations, application of door-to-door distribution, marking children who have already received services with indelible ink in order to facilitate rapid evaluations, and supervision at all levels*).

Outcomes

Tally sheets show **100% coverage for de-worming and VAS**. Mebendazole was well accepted and tolerated by children.

Lessons learned:

- High-level political advocacy has been an essential step in order to get commitments from all actors.
- De-worming results in an immediate, visible effect (excretion of worms) which is highly valued by parents. It appeared to reduce refusal of OPV. Management of mebendazole stocks adds an additional burden.
- The diversity of services (OPV+vitamin A+mebendazole) slows down the progression of the teams but does not affect the overall coverage.
- Reference to health structures is to be systematised as a service during mass campaigns because the door-to-door strategy provides a contact which makes it possible to identify each child's health problems (even with those over 5 years of age).
- It is important to carry out de-worming in conjunction with hygiene-related messages to avoid cases of re-infestation by helminths.

Discussion

- Adding de-worming to VAS was first nationwide response to high anemic rates in young children documented by DHS.
- The first nation-wide experience of coupling de-worming with VAS was successful and has been adopted for all vitamin A supplementation rounds.
- Delivering de-worming tablets and vitamin A supplements at the same time makes logistical sense, particularly for remote community that are difficult to reach.
- The drugs used for de-worming are regarded as so safe that non-medical staff, such as communities volunteers can be trained to deliver them.
- In order to avoid the increase in the number of community volunteers required and reduce logistic burden during NIDs, mebendazole could be coupled with OPV during the first round of NIDs and VAS coupled with OPV during the second round.
- Since December 2005, Senegal has already conducted three distribution rounds integrating de-worming for children aged 12 – 59 months. The challenge, during 2007, is to undertake an impact evaluation on anaemia reduction using DHS as baseline.



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