

Improving National Vitamin A Supplementation Programme Monitoring

CONCLUSIONS OF AN INFORMAL CONSULTATION OF THE GLOBAL ALLIANCE FOR VITAMIN A (New York 19-20 July 2006)

On behalf of the Global Alliance for Vitamin A (GAVA):

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Background

Country-level monitoring of vitamin A supplementation (VAS) coverage is essential to ensure the universal protection of children, improve delivery, and estimate its impact on child survival. At the global level, VAS coverage is an internationally agreed-upon indicator of progress towards Millennium Development Goal #4 (MDG4). Given its importance, limitations to VAS coverage monitoring need to be addressed.

Aims

A meeting of the Global Alliance for Vitamin A was held in New York on 19-20 July 2006 to provide guidance on improved VAS coverage monitoring, specifically addressing:

- the feasibility of directly measuring coverage with two annual doses, as per international recommendations for VAS every four to six months;
- methods for improving coverage data quality; and
- non-coverage indicators for use by countries in self assessing programme performance and sustainability.

Challenges to improving vitamin A supplementation coverage data

VAS Recommendations: International guidelines recommend that children 6-59 months living in areas with high under-five mortality (≥ 70 deaths per 1000 live births) or evidence of a vitamin A deficiency public health problem receive high-dose VA supplements on a four to six month schedule.

Current Indicator: The proportion of children 6-59 months that received at least one dose of VA in the past six months.

The present indicator of coverage with at least one dose in the past six months would be informative if coverage levels remained relatively constant from one distribution to the next. Past experience suggests that this is in fact quite rare: the diversity of delivery mechanisms for vitamin A yields significant variations in coverage with each distribution attempt (see table below).

SEMI-ANNUAL COVERAGE ESTIMATES FROM 10 AFRICAN COUNTRIES (2000-2004)

Country	2000		2001		2002		2003		2004	
	Dose 1	Dose 2	Dose 1	Dose 2	Dose 1	Dose 2	Dose 1	Dose 2	Dose 1	Dose 2
Eritrea	74	--	61	42	51	35	52	--	50	--
Gambia	87	--	91	--	93	--	91	52	27	--
Kenya	90	41	90	--	91	--	33	--	63	46
Malawi	54	--	63	--	86	--	92	14	57	--
Nigeria	79	--	77	60	79	31	27	--	65	76
Rwanda	59	--	94	--	36	--	86	8	95	93
Somalia	100	45	62	50	60	56	--	6	--	6
Sudan	99	15	92	88	93	94	34	--	70	--
Togo	100	--	77	7	95	18	84	72	95	94
Zimbabwe	--	--	--	--	78	--	46	--	20	20

NOTE: "--" denotes that no coverage was reported for the given round

Based on the present indicator, we would assume that coverage in the Africa region was relatively high and sustained over the period from 2000 to 2004. In fact, mean coverage reported in The State of the World's Children for that period averaged approximately 70%. Far fewer children were "fully protected" with two annual VA supplements.

We therefore reviewed the current indicator and have made recommendations to strengthen it.

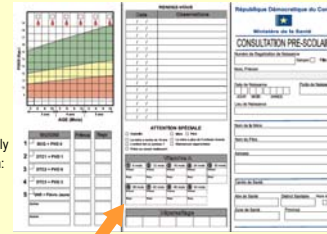
Outcomes

Recommended Revision to VAS Coverage Indicator

6-11 months		12-59 months	
1 st Semester		2 nd Semester	
$\frac{\text{Numerator}}{\text{Denominator}} = \% \text{ coverage}$	$\frac{\text{Numerator}}{\text{Denominator}} = \% \text{ coverage}$	$\frac{\text{Numerator}}{\text{Denominator}} = \% \text{ coverage}$	$\frac{\text{Numerator}}{\text{Denominator}} = \% \text{ coverage}$

Direct measurement of "full protection" will not be feasible until health cards or registries are adequately designed to capture VA dosing and routinely marked each time children receive a VA supplement. In the interim:

- For infants:** Numerator = sum all doses reported from health unit registries (including outreach) PLUS any doses delivered to this age group during events
Denominator = target population for measles
- For children:** Numerator = sum all doses delivered during events conducting 1 Jan to 30 June OR sum all routine doses delivered per HMIS from 1 Jan to 30 June (use the larger of the two figures)
Denominator = estimated population 12-59 months
- 1st semester Numerator = sum all doses delivered during events conducted 1 July to 31 Dec OR sum all routine doses delivered per HMIS from 1 July to 31 Dec (use the larger of the two figures)
Denominator = estimated population 12-59 months
- 2nd semester Numerator = sum all doses delivered during events conducted 1 July to 31 Dec OR sum all routine doses delivered per HMIS from 1 July to 31 Dec (use the larger of the two figures)
Denominator = estimated population 12-59 months



Children's health cards should be marked each time they receive a vitamin A supplement, whenever the delivery strategy allows.

Recommended Data Quality Improvements

Campaign tally sheets: Campaign distributors record VA doses delivered on a tally sheet. These are aggregated at the central level and divided by the estimated target population. Data quality may be affected by numerators (ineligible children may receive capsules) and denominators (inaccurate census data, migration).

- Include a column on tally sheets to capture doses delivered to children outside targeted age group, or the number of capsules delivered, in order to correct inflated numerators.
- Where interventions are delivered together, monitoring should also be integrated and should use the same denominator of targeted children.

Routine health data: VA delivered through routine services is registered for entry into health management information systems (HMIS), centrally aggregated and divided by the estimated target population. Data quality may be affected by a poor HMIS, inadequate integration of VAS and inaccurate denominators.

- Ensure adequate integration of VA into routine monitoring tools & HMIS.
- Ensure systematic recording of doses given at fixed site or via outreach on tally sheet and/or registry for health management information system reporting.

Population-based surveys: Nationally representative household surveys (Multiple Indicator Cluster Surveys or Demographic & Health Surveys) can eliminate denominator problems and are useful for disparity analysis; however, they generally underestimate coverage due to poor maternal recall and survey timing.

- Ensure systematic recording on child's health card each time s/he receives VA.
- Undertake methodological research to improve reliability of household survey data (e.g., improving recall, modifying questions to capture two-dose coverage, health card verification).

Post-event coverage assessments: Assessments designed specifically for VAS and carried out immediately following distribution eliminate concerns regarding denominators, maternal recall and timing; however, they require additional funding and are not sustainable.

- Assessments are useful to validate administrative coverage and improve monitoring efforts, but should not be considered a long-term solution for VAS monitoring.
- Assessment methodologies will be detailed in upcoming GAVA monitoring guidelines.

Monitoring Programme Performance

A programme performance framework will be developed for use by countries and their partners in assessing the sustainability of VAS. This framework could be used for national planning and coordination, with a subset of key indicators to inform global monitoring efforts. A subset of indicators would also be useful for standardized donor reports, making these more meaningful to both countries and donors on strategic issues.

PROGRAMME PERFORMANCE FRAMEWORK

Enabling Environment

Policy/Political Commitment: existence of a national policy for semi-annual VAS, with defined roles & responsibilities for procurement & distribution

Health System Infrastructure: training, availability of distributors, availability and compliance of health service providers with preventive services

Procurement/Logistics Supply: adequacy of supplement supplies both for semi-annual and routine supplementation activities

Management: district-level focal points assigned for VAS activities & supplies

Monitoring: integration of VA into standard monitoring tools, HMIS and essential drug monitoring; monitoring/supervisory mechanism defined for distributions

Communication: awareness activities designed/delivered for semi-annual events

Donor Coordination: calculation of anticipated donor support; task force available to address funding needs

Provision of Service

Capsules procured / estimated target pop; HQ-district; stock-outs

Utilization

Awareness of importance of VA and knowledge re: distribution

Coverage

One- and/or two-dose coverage for children 6-59 months, post partum women and in curative care; comparison of coverage & procurement

Impact

To be determined based on upcoming VA indicators consultation

Sustainability

Score based on 15 indicators from above components

Next Steps

Improving the VAS coverage indicator

- Adopt revised three-part VAS coverage indicator & provide guidance to countries on its use.
- Modify global reporting forms to capture revised VAS indicator; work towards integrated reporting for child survival interventions.
- Advocate for long-term move towards direct measurement of two-dose coverage by: 1) ensuring child health cards or registries are adequately designed to capture these data; 2) assessing the feasibility of registering dosing during campaign-style events; and 3) encouraging health workers to systematically record VA dosing.

Improving coverage data quality

- Undertake methodological work & propose modifications to improve the reliability of VAS coverage from household surveys.
- Finalize guidance on post-event coverage assessments to improve VA delivery & strengthen administrative data quality.

Monitoring programme performance

- Finalize framework for use in assessing VAS sustainability.

Technical guidance

- Provide guidance to countries re: capsule quality control, infant & post partum VA dosing, appropriate indicators for assessing deficiency & how to monitor programme impact.

Joint work planning between partners

- Finalize and jointly release revised VAS monitoring guidelines; create central clearinghouse for monitoring tools.

VAS Coverage Goal

Universal coverage should be considered the goal for all coverage categories:

- infants 6-11 months, 2) children 12-59 months reached in the 1st semester and 3) children 12-59 months reached in the 2nd semester. Attaining universal coverage will require data-driven management. To identify underperforming districts, countries will be encouraged to track the proportion of districts falling into various coverage brackets (<50%, 50-79%, $\geq 80\%$).

For the MDG4 monitoring, countries will be considered "on track" with $\geq 80\%$ coverage in all three categories, "to watch" with coverage 50-79% in any of the three categories and "high alert" with coverage <50% in any category.

Implications

Interim guidelines from this meeting will drive improvements in the collection, analysis and utilization of coverage data by countries, ensuring the more sustainable and equitable delivery of vitamin A. Revisions to the indicator and enhanced data quality will better inform MDG4 monitoring efforts at the global level.

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