The Global Alliance for Vitamin A (GAVA), through its technical partners – the Centers for Disease Control and Prevention (CDC), Helen Keller International (HKI), Micronutrient Initiative (MI), and the United Nations Children’s Fund (UNICEF) – and in conjunction with Global Affairs Canada, hosted a three-day regional workshop in Dakar, Senegal from April 4–6, 2016.

The workshop was attended by approximately 120 participants from 23 countries in Sub-Saharan Africa (SSA) representing both nutrition and immunization sectors, policy makers and managers from Ministries of Health (MoH), country, regional, and global-level technical partners from the GAVA, and Global Affairs Canada (GAC).

The goal of the workshop was to re-examine vitamin A supplementation (VAS) programs in Sub-Saharan Africa in light of epidemiologic and programmatic changes, and to develop broad, country-specific road-maps for VAS for the next five years. Specifically, the workshop aimed to:

- Review and re-establish the relevance of VAS as a child survival intervention in the region;
- Examine delivery models, especially in light of the phasing-out of polio campaigns;
- Share experiences and best practices on VAS delivery, emphasizing Child Health Days and other community outreach strategies;
- Identify ways to better integrate VAS into existing healthcare delivery systems, including, but not limited to, EPI;
- Develop strategies to increase support and institutionalization of VAS as an important component of a package of services so as to improve child survival rates in Africa.

Symposium Process

- **Day One**
  - Understanding the reality - exploring delivery options
- **Day Two**
  - Exploring the journey - transition & monitoring
- **Day Three**
  - Sustainability - Institutionalization
The key points from opening remarks and initial presentations were that VAS is still VERY relevant to most SSA countries because:

- There is strong scientific evidence that VAS improves child survival;
- Vitamin A influences the major cause of child deaths in SSA (i.e. infectious diseases);
- Mortality among children under five has decreased but still remains unacceptably high;
- High levels of VAD persist in most SSA countries.

As a result, WHO VAS recommendation for bi-annual distribution to all children 6-59 months remains relevant.

Challenges to address were then highlighted:

- High VAS coverage levels reflect the joint success of polio eradication and VAS. However, as polio disappears, so too does the VAS distribution platform;

**Conclusion:** “Business as usual is not an option, if we are to sustain child survival gains attributable to VAS over the next 5-10 years in Sub-Saharan Africa”

Questions:

- **What is the reality of VAS in your given context?**
- **What are the strengths, weaknesses, opportunities and threats associated with VAS in your context?**
DELIVERY MODELS FOR VAS

Objectives:
• Explore different models of delivery and their required context
• Explore strengths, weakness and limitations of each type of model and identify most suitable model for each country

Three experiences from Senegal, Democratic Republic of Congo and Mozambique were presented to the participants on various delivery models for VAS being implemented in sub-Saharan Africa:

Routine facility and community VAS in Senegal
The Ministry of Health in Senegal is scaling up the delivery of VAS through a routine delivery model that combines facility level provision of VAS and community-based platforms. VAS campaigns continue in districts that are not enrolled, but the objective of the government is to ultimately generalize routine VAS.

Multiple delivery models for VAS in DRC
Several delivery models are being implemented in DRC to answer the wide diversity of contexts in the country: various forms of CHD, polio and immunization campaigns and routine delivery of VAS in health facilities. Comparative studies are underway to inform the future delivery strategy.

6 months contact point in Mozambique
The Ministry of Health of Mozambique is testing the integration of VAS at 6 month with facility based distribution of micronutrient powders and community based behavior change promotion. National scale up of the 6 months contact point will be initiated in 2016.

Several delivery models exist that aim at answering country specific needs and contexts. Each of these models needs to be carefully designed to address the features of the health system they are integrated within and the humanitarian needs they are answering.

Questions:
• What are the main indicators and features to consider to decide which model fits which context?
• What is the model most suitable to your context?

• For many countries, transition from a National Immunization Days (NiDs) model to CHDs is required. For others already in a CHD model, changes of delivery mechanism may be needed from door-to-door distribution to a facility or community outreach model. Both types of transition create the risks of a significant drop of coverage exists during the transition process;
• Transition from a CHD to delivering VAS through routine health system contacts is happening in some countries. In order for coverage not to drop, routine health services need to be strengthened;
• Combination of maternal and child health and nutrition services together increases impact and cost effectiveness of each service.
• Countries where mortality and morbidity are still unacceptably high and where the health system is weak may have to consider continuing relying on mass campaigns for the coming years.
Coordination among VAS stakeholders varies widely between countries. Reflecting about the role each actor is playing in their country, participants noticed that in some countries, each actor has a different view of where VAS should head, where it presently stands, and how to take it forward. Ministry of Health is often the actor leading and guiding the process, but in some instances UN agencies and INGO’s are the ones promoting the integration of VAS in maternal and child health services. In all cases, strong coordination between GAVA actors and the government is a required basis for VAS to be delivered efficiently.

Mother and child health and nutrition (MCHN) week in Madagascar

Delivery of MCHN services in Madagascar evolved from stand-alone immunization campaigns to events delivering comprehensive packages. The transition process was successful, and high coverage of VAS was maintained.

Integration of VAS program in the health system, Ethiopia

In Ethiopia, transition took place from immunization campaigns to the Enhanced Outreach Strategy (EOS) and then to a routine only system. After an initial drop, high coverage is beginning to be reached, as challenges are being addressed.

Transition from one model to a more sustainable one requires careful preparation: minimum standards of performance of the health system should be assessed, a balanced package of services defined, and a progressive process that does not lead to massive drop of coverage implemented.

Objectives:

• Raising awareness and knowledge of the transition process and its challenges and requirements
• Identify main immediate steps to initiate the transition process

Two examples from Madagascar and Ethiopia were presented to the participants highlighting the journey each country experienced while transiting towards sustainable delivery models for VAS:

Out of the 6 building blocks, the 4 main challenges identified by most countries for the VAS transition process were:

• The lack of awareness of decision makers (governance block);
• Weak supply chain leads to stock outs of essential drugs;
• Weak information system does not allow for an informed design and monitoring of health services;
• Lack of trained frontline line health facility and community workers.

Some of the solutions proposed consisted of:

• Develop and roll-out comprehensive advocacy strategies tailored to each country’s features and needs;
• Adopt a Health System Strengthening (HSS) approach to address VAS as a component of a comprehensive package of services.

Fishbone Analysis for Burkina Faso

Questions

• What are the main challenges that you can foresee for the success of the transition process in your country?
• What are the first steps that should be undertaken to start the transition?
MONITORING VAS

Objectives:
• To present an overview of best practices for monitoring of VAS
• To introduce some of the main tools and approaches used to monitor VAS and immunization programmes

An initial presentation was submitted to the participants highlighting the main rationale and principle for monitoring VAS.

Monitoring VAS services is necessary to identify whether the children targeted actually receive the services, to measure the performance of the services and to identify the bottlenecks to quality services and high coverage.

Results-based management and equity should be placed at the core of the monitoring strategy.

The monitoring strategy should also consider the whole programmatic framework, monitoring inputs, outputs, outcomes and impacts to inform decision making for the improvement of the project performance.

Greater investments and attention are needed to strengthen collection and use of data to monitor the performance of VAS programs and inform program adjustments.

Three tools of demonstrated relevance were then presented: District health Information System 2 (DHIS2), Lot Quality Assurance Sampling (LQAS) and Post-event Coverage Surveys (PECS).

Post Campaign coverage survey using LQAS in Benin:

LQAS can be used to support the planning, implementation and quality of VAS and EPI events. It assesses coverage of VAS and immunization during mass campaigns, and can be used to identify barriers to access and utilization of VAS. The small sample size required makes it quick and affordable to conduct and thus a very effective tool for routine monitoring for VAS service.

Post-Event Coverage Surveys (PECS) in Mali:

PECS are based on cross-sectional survey methodology. Objectives are similar to the LQAS ones, but where LQAS focuses on verifying pre-determined assumptions, PECS can be used to assess in a more comprehensive way the determinants of low coverage of VAS and EPI campaigns. PECS are significantly more costly and lengthy to implement than LQAS.

Data Driven Decision-making Tools – DHIS2:

DHIS 2 is a tool used by many national information systems for collection, validation, analysis, and presentation of aggregate health statistics. It can be used for microplanning, stock management, improving programme reporting, and the tracking of bottlenecks. Using DHIS2 for VAS can improve data quality and decentralized data use.
Objectives:
• To define institutionalization and health systems integration;
• To learn about public financing tools;
• To identify practical challenges and solutions for institutionalization.

Two presentations were proposed to the participants. The first one highlighted the basics of health system strengthening and the second one provided some elements of how to promote public financing for VAS.

Integrating VAS into Primary Health Care system:

Opportunities for achieving and sustaining high VAS coverage exist within the country specific health system. Integrating VAS into the health system provide opportunity for the nutrition programs to add value and synergy to health system strengthening efforts.

Steps proposed for the integration of VAS in the health system consist of
1. Conducting a Situation analysis;
2. Assessing the readiness of the Health delivery system,
3. Drawing a landscape analysis of VAS and other child survival services,
4. Identifying opportunities for support (technical & financial)

Institutionalization is a long and complex process that needs to be prioritized for VAS to be fully sustained through health system services and financing by national budgets. Advocacy and a health system wide approach are required.

Three presentations highlighted successes and challenges of promoting institutionalization of VAS in Burkina Faso, Nigeria and Tanzania.

Institutionalization in Burkina Faso:
Prior to 2011, VAS was co-delivered with Polio NIDs. Since then, the government delivers VAS twice a year during Vitamin A Plus Days (JVA+). However, these campaigns remain donor-supported, and so are vulnerable to financial gaps if donor commitment changes.

Institutionalization in Nigeria:
VAS is well institutionalized in the national health policies. However, coverage is low in many states and inequities persist. Many states do not release sufficient funds and often release them late for the campaigns and the majority of health facilities do not implement it.

Institutionalization in Tanzania:
VAS is managed by districts government for planning and resource allocation. Funding for VAS is a mix of government and external sources. Factors impacting sustainability include enabling environment, a motivated workforce, supply management, and social mobilization.
**WAY FORWARD**

**Objectives:**
- To agree on a common outcome statement;
- To identify some key advocacy steps to undertake at country level.

**Some key advocacy steps that were common to most groups consist in:**

- Provide a comprehensive feedback to partners and actors who did not participate in the symposium, in particular the decision makers from governments;
- Develop a country advocacy strategy tailored to each context;
- Advocate for a dedicated budget line for nutrition specific interventions including vitamin A;
- Target high profile political leaders such as members of parliaments to sensitize them on the benefits and importance of VAS for child survival and can become advocates for VAS;
- Use every opportunity existing in countries, such as the organization of budgeting or strategic nutrition and health workshops, the existence of Scaling Up Nutrition (SUN) coordination bodies, or any other relevant structure or events to promote VAS.

Mozambique participants: from left to right - Osvaldo Neto (HKI), Matthieu Joyeux (UNICEF), Luisa Maringue (MoH).
The following consensus statement was endorsed by participants

Vitamin A deficiency remains a pervasive problem in much of Sub-Saharan Africa, having changed little over the past two decades. The most recent estimates suggest that 48%, of children in this region suffer from deficiency, placing them at a greater risk of dying. Despite progress, unacceptably high rates of child mortality persist. Furthermore, reductions are not equitable with national averages masking areas of high mortality.

We recognize that great progress has been made over the last 15 years in scaling up the provision of high dose VAS. Estimates show that the proportion of children, 6-59 months who received two age-appropriate doses of VAS in 2014 was 69%, in line with previous estimates. Because many countries have continuously achieved higher coverage (>80%), these efforts have contributed to recent population level reductions in under-5 mortality since VAS reduces child deaths by 12-24% when provided every four to six months to children 6-59 months of age, where vitamin A deficiency is a public health problem.

Efforts to reach all children 6-59 months of age twice a year with VAS have made a substantial contribution to mortality reduction in countries with consistently high coverage, but there is much more to do. Further reductions are possible in countries where VAD is a public health problem among children, by implementing specific strategies to reach those currently not reached ensuring all children are reached with VAS two times per year, by increasing efforts to reach children immediately at six months of age, and by strengthening integration with immunization programmes.

Globally, there have been shifts in the patterns and epidemiology of under 5 child deaths with neonatal mortality representing a greater proportion of under 5 deaths than it did two decades ago. However, the number of deaths in children over six months of age remains far too high, reaching almost one million in Sub-Saharan Africa in 2015. In the absence of VAS programs, these deaths would be even greater.

Causes of under-five deaths have also changed, with fewer deaths resulting from measles, but with infections continuing to play a substantial role in child deaths. Such deaths are those in which children would be expected to benefit from an immune system replete with vitamin A, or a high-dose supplement where this is not the case. Thus, we agree until there is a sustained rise in population serum retinol with a reduction of vitamin A deficiency to below 5%, the continued provision of VAS in deficient populations, such as in sub-Saharan Africa, is a priority for child survival. This is in line with the GAVA decision-making framework for scaling back VAS.

Whilst continuing VAS programs, we agree that there is a critical need to address the direct and underlying causes of vitamin A deficiency: the inadequacy of vitamin A, or its precursor, in the diet, as well as, poor hygiene and repeated infections. Improvement is a long term goal, but efforts to improve breastfeeding practices, access to fortified foods, availability of high quality complementary foods and improved hygiene and infection control must be initiated and more explicitly integrated into child survival strategies. This will benefit all population groups that are vitamin A deficient. Assessment of progress toward this goal will rely on recent population data on vitamin A deficiency, which is currently limited.

We acknowledge that programmatic data to identify those currently not reached also needs to be strengthened. Strengthening the collection of coverage data, along with its use for corrective action and links to national health information systems, is critical to ensure that all children that need VAS can be identified and reached in a timely manner. Furthermore, intermediate outcomes should also be monitored and program performance improved by identifying and addressing bottlenecks. We therefore recognize that greater investments are needed to strengthen data collection and use.

Finally, we recognize that the changing global and regional landscape, inclusive of changes in financing and delivery platforms, will significantly impact VAS programs, and now more than ever there is a need for better coordinated efforts between governments and partners.
Delivery strategies have evolved substantially over the last fifteen years with Child Health Days and Weeks serving as a platform in an increasing number of countries and immunization campaigns and polio eradication efforts continuing to provide a platform for reaching many more children. Both approaches have helped to drive up VAS coverage in numerous countries.

We are aware that substantial international financing has supported these delivery platforms for many years and that it is time for this lifesaving intervention and platform to be institutionalized in national health systems, including national budgets, management and coordination, with continued external support where national resources are limited. As we look towards the future, we are in agreement that VAS programs are highly cost-effective and that there are ways in which this cost-effectiveness can be improved. Thus, there is an urgent need to find innovative ways to embed VAS in delivery strategies linked to public health care systems to consistently reach children under five with VAS and other lifesaving interventions, particularly in countries where a transition in strategy and financing will take place.

Key criteria for selecting such a delivery strategy should include: the opportunity to reach all children 6-59 months of age, particularly the most vulnerable; maximizes all contacts within the health system, including routine contacts; meets needs of caregivers incentivizing their attendance, and has a mechanism to ensure accountability. We believe that engagement in the polio legacy planning process and expanding novel immunization approaches, such as "Reaching Every Community" and other platforms, such as community based screening for acute malnutrition, are critical to reach all children under 5 with VAS.

We acknowledge that institutionalization is a process, which will require substantial time and effort of many stakeholders. It must be prioritized, while maintaining an urgent focus on continually reaching all children 6-59 months of age with life-saving VAS, every six months. Achieving this vision will require continued advocacy to decision-makers to make them aware of the evidence for VAS programs and the need for continued prioritization and support.

As such, we hereby declare the following:

- We, the participants of this symposium, pledge our support to improve the delivery of twice-yearly VAS to reach all children 6-59 months, which will require a focus on the most vulnerable and ensuring equity, and we urge decision makers in national governments and donor agencies to maintain their support.

- We will work to ensure that VAS is integrated within health systems—including the 6-month contact point, and will facilitate the co-delivery of VAS with other high-impact interventions. We strongly and urgently advocate for building on and/or expanding novel approaches such as Reaching Every Community (REC) and community-based platforms and, in relevant countries, engaging in the polio legacy planning process to capitalize on earlier investments.

- We specifically note that routinization within health systems often includes outreach to reach the most vulnerable, but that the planning and monitoring of such outreach activities should be fully embedded within the health system.

- We pledge to leverage national investment to support VAS programs because of its high impact and documented cost-effectiveness.

- We support the strengthening of interventions to address the unacceptably high prevalence of VAD in sub-Saharan Africa.

- We will increase efforts to generate high-quality population-based data on VA status, intervention coverage and quality, and dietary intake in order to use it to guide program and policy decisions.
The GAVA wishes to thank participants from all the following countries, agencies and organizations:

**Country representatives from:**

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