Vitamin A Supplementation Remains Vital in Sub-Saharan Africa

Declaration made in Dakar, April 6, 2016

Delegates from 23 countries as well as technical partners concerned with the public health impact of vitamin A deficiency, gathered in Dakar, Senegal from April 4–6, 2016 to discuss current levels of vitamin A deficiency, associated under-5 mortality and status of vitamin A supplementation (VAS) programs, inclusive of strategies, institutionalization, and current threats and opportunities. The following Consensus Statement was endorsed by participants.

Consensus Statement

Vitamin A deficiency remains a pervasive problem in much of Sub-Saharan Africa, with levels 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.[1] Despite progress, unacceptably high rates of child mortality persist.[2] 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 aged 6–59 months who received two age-appropriate doses of VAS in 2014 was 69%,[3] 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.[4]

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,[5, 6] but there is much more to do. Further reductions are possible in countries where VAD is a public health problem among children by: (1) implementing specific strategies to reach those currently not reached, ensuring all children are reached with VAS two times per year; (2) increasing efforts to reach children immediately at six months of age;[7] and (3) strengthening integration with immunization programs.

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.[2, 7] In the absence of VAS programs, these deaths would be even greater.

Causes of under-5 deaths have also changed, with fewer deaths resulting from measles, but with infections continuing to play a substantial role in child deaths.[2] 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 that, 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.[8] This is in line with the GAVA decision-making framework for scaling back VAS.[9]

While 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 regarding 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 who 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.[10]

Finally, we recognize that the changing global and regional landscape, inclusive of changes in financing and delivery platforms, will significantly impact VAS programs, and that now more than ever there is a need for better coordinated efforts between governments and partners.

Delivery strategies have evolved substantially over the last 15 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 toward the future, we are in agreement that VAS programs are highly cost-effective[11] and also 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 healthcare systems to consistently reach children under 5 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: providing the opportunity to reach all children 6–59 months of age, particularly the most vulnerable; maximizing all contacts within the health system, including routine contacts; meeting the needs of caregivers, incentivizing their attendance; and having 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 (e.g. 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 on the part 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 attention to ensure 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 target 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 their 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.

Countries that attended the GAVA workshop in Dakar included: Benin, Burkina Faso, Burundi, Cameroon, Central African Republic, Cote d'Ivoire, Chad, Democratic Republic of the Congo, Ethiopia, Ghana, Guinea, Kenya, Madagascar, Malawi, Mali, Mozambique, Niger, Nigeria, Senegal, Sierra Leone, South Sudan, Togo, and the United Republic of Tanzania.

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