Newborn Vitamin A Supplementation

A2Z Program Update

Every year approximately seven million infants die before reaching one year of age. The majority of these deaths occur during the first six months of life, a time where risk of vitamin A deficiency is high. Recent USAID-supported research in South Asia has demonstrated that dosing newborns with 50,000 IU of vitamin A reduces substantially mortality at six months of age.

USAID, along with global partners, has taken the lead through advocacy and partnership building in identifying and evaluating feasible delivery mechanisms for newborn vitamin A supplementation (NVAS) in an effort to support the World Health Organization (WHO) policy development process on NVAS. A technical consultation convened by WHO in December 2008 recommended the need for identifying feasible approaches to reach newborns within the first two days after birth to deliver interventions such as NVAS. Currently WHO is supporting the gathering of additional evidence on the efficacy of NVAS on early infant mortality in Africa and confirmation of the findings in South Asia.

NVAS – Moving from Research to Implementation

Since 2007, A2Z has led a USAID initiative to identify and evaluate feasible delivery mechanisms for NVAS, in partnership with Saving Newborn Lives (SNL)/Save the Children, ACCESS, UNICEF, Canadian International Development Agency (CIDA), Johns Hopkins University (JHU), and the Micronutrient Initiative (MI). With USAID global funding, A2Z aims to operationalize the agency's historic investments in NVAS, using evidence-based research to develop strong and effective programs.

Research findings presented during a session at the Micronutrient Forum in 2007 showing the efficacy and safety of NVAS in Indonesia, India, and Bangladesh engaged stakeholders working in maternal, newborn, and child health and nutrition, and generated interest in the possibility of including NVAS interventions in various health packages or bundles of services aimed at improving newborn health and survival.

A2Z and its partner organizations subsequently drafted an Action Plan, and built consensus around next steps, timelines, and roles and responsibilities for translating NVAS research findings into program implementation in select countries of South and Southeast Asia. This document serves as a basis for continued discussions on how stakeholders can best coordinate their efforts in support of NVAS introduction. It is updated as progress, discussions, and decisions are made.

Consensus and agreement on the Action Plan was achieved through:

- Sharing research evidence on NVAS with partners and interested parties.
- Determining future needs for applying the results of efficacy studies to the design and evaluation of potential implementation models, and future scale up.
- Discussing partner expectations, participation, and responsibilities.
- Advocating with US-based partners at regional and country levels by using opportunities to sensitize and involve potential participating countries.
- Discussing and identifying possible delivery options and platforms for NVAS at global and country levels.
- Identifying possible early adopter countries.

Current Status of NVAS at the Country Level

To generate interest and formalize country support for the design and evaluation of NVAS implementation models, A2Z—in collaboration with its global and country partners—has planned and carried out sensiti-

zation and technical meetings at the country level in Bangladesh and Nepal. In addition, A2Z has assisted country level partners in generating stakeholder and policymaker support for the drafting and approval of policies to test potential implementation models for NVAS.

Informal meetings with Ministry of Health (MOH) representatives from Bangladesh and Nepal were facilitated by USAID at the Family Planning/Maternal, Newborn and Child Health Best Practices Asia Near East Meeting in Bangkok in September 2007. As a result of these initial discussions, A2Z conducted follow-up visits to Bangladesh and Nepal in December 2007, with support from JHU.

Bangladesh

Advocacy for Policy Approval

A series of technical update meetings for key stakeholders and other interested partners took place in Dhaka, Bangladesh in December 2007. These meetings were planned by an informal group of stakeholders including the JHU/JiVitA Project, MI, SNL/Save the Children (country and regional representatives), ACCESS, and Helen Keller International (HKI). With the financial support of A2Z, the JHU/JiVitA team provided in-country logistic and operational support to these meetings.

Several informal discussions were held with relevant units of the Government of Bangladesh, including the National Nutrition Program and the Institute of Public Health Nutrition, academic leaders, key professional bodies working in obstetrics and gynecology, local and international NGOs including BRAC, HKI, MI, and multilateral organizations, including UNICEF and the World Bank.

The above meetings culminated in a formal briefing for The Honorable Advisor for the Ministry of Health and Family Welfare (MoHFW) on December 4, 2007, to discuss the findings of the research on efficacy and safety of NVAS.

This process raised awareness of NVAS and engaged stakeholders in the policy process. The evidence supporting efficacy was generally accepted, and participants were able to discuss and address concerns about safety during the formal briefing and discussion.

In February 2008, JHU, with the financial support of A2Z, carried out additional meetings at the country level to present NVAS research findings at the Bangladesh Neonatal Forum to a group of pediatricians, neonatologists, and program implementers, and to share a summary of the research evidence and possible policy implications with the National Newborn Strategy Working Group. A2Z also assisted in the creation of the NVAS Core Group, a group organized in partnership with SNL/Save the Children, ACCESS, JHU/JiVitA, MI, A2Z, and USAID/Bangladesh to discuss next steps for testing the feasibility of NVAS in Bangladesh.

During 2008 and 2009, A2Z and partners JHU, JiVitA, MI/Bangladesh and MI/Asia Regional Office, advocated for the MoHFW to endorse and provide policy approval for testing implementation models for NVAS in Bangladesh. In December 2009, the MoHFW approved the piloting of NVAS in three districts. Draft operational research objectives for Bangladesh have highlighted the intention to identify, develop, and evaluate feasible models for delivering NVAS within existing antenatal and postnatal health interventions.

Technical Support for Intervention Design

In the first half of FY2010, A2Z sponsored a site visit to Nepal for five key Bangladeshi stakeholders from government, international, and local non-governmental organizations. These stakeholders observed the implementation of NVAS pilot activities, with the objective of informing the planning of future pilot activities within Bangladesh.

A2Z, MI Bangladesh, MI Asia Regional Office, and JHU/JiVitA are currently in the program design phase of NVAS pilot activities. NVAS programs in Bangladesh will focus on the use of three community-based maternal, newborn, and child health delivery platforms that currently offer an opportunity for the integration of newborn health services. These platforms fall under the jurisdiction of the MoHFW and include:

- Community clinics under the Directorate General of Health Service in Sadar and Nesarabad (Swarupkathi) upazilas, and Pirojpur districts.
- The Directorate General of Family Planning in Modhupur and Shakhipur upazilas, and Tangail district.
- The National Nutrition Program in Jaldhaka and Dimla upazilas, and Nilphamari district.

Two delivery methods, mother dosing and health worker dosing, will be tested in each of these delivery systems.

Nepal

Advocacy for Policy Approval and Technical Support for Intervention Design

In December 2007 a technical meeting was organized by A2Z, USAID's Nepal Family Health Project (NFHP), UNICEF/Nepal and USAID, and led by the Nepal Ministry of Health (MOH), Department of Health Services, Child Health Division. Local stakeholders were invited and encouraged to participate in discussions on issues and evidence relating to NVAS. A2Z also invited three key stakeholders from Bangladesh and two from Pakistan to participate in the Nepal process. The response was very positive, with consensus that the efficacy and safety findings were compelling enough to initiate the development of an MOH file to request policy approval for the testing of implementation models on NVAS in selected districts. A2Z prepared a draft proposal, "Development of a Model for Newborn Vitamin A Supplementation (NVAS) in Nepal: A proposal for implementation in 4 districts," which was shared with the NFHP, UNICEF, USAID, and the MOH. The proposal was used as the basis for requesting policy approval from the MOH which was received in February 2008. An implementation plan was prepared and approved in March 2009 as a collaborative effort among the MOH, UNICEF, NFHP, and MI, with the Nepal Technical Assistance Group (NTAG) supporting the implementation and coordination of program activities.

UNICEF, with funding from CIDA, is partially supporting the testing of NVAS operational models in Nepal. In addition, this activity has the field operational and implementation support of the NFHP. MI provides the 50,000 IU vitamin A capsules, and A2Z provides technical support to the design, implementation, monitoring, and documentation of this activity. A2Z also advocates for additional funds from other interested partners, and coordinates communications.

The Nepal Newborn Vitamin A Dosing Pilot

The overall objective of the Nepal NVAS pilot is to identify the most effective and safe delivery mechanisms for NVAS, and to ensure maximum outreach of the intervention for national scale up. The pilot tests the effectiveness of two approaches for delivering a single, timely, oral dose of 50,000 IU of vitamin A to newborns within 48 hours of birth.

The first approach is the Female Community Health Volunteer (FCHV) dosing model, in which the FCHV visits the household immediately after birth and directly administers vitamin A to the newborn. The second approach is the mother/care-giver dosing model, in which the vitamin A capsule is provided to pregnant women during an ante natal care (ANC) visit with health center staff or FCHV, and the mother or family member doses the newborn immediately after birth. Vitamin A is widely available at all health facilities in all NVAS pilot districts. In addition, all mothers and caregivers receive NVAS counseling from their ANC contacts, regardless of the dosing model being tested in each district.

The pilot is being implemented in four districts. The mother/caregiver model is being implemented in Sindhuli and Tanahun districts, and dosing began in July and September 2009, respectively. The FCHV model began in October 2009, and is being implemented in Banke and Nawalparasi districts.

The pilot projects will assess the coverage and effectiveness of each dosing model, and collect data and information regarding:

- Cases of adverse events following dosing (bulging fontanel and choking).
- Integration of NVAS into existing and planned maternal and neonatal health and nutrition activities.
- Optimal sequence for introduction of these interventions.
- Social preparation and communication needs for introducing NVAS into the community.
- Best packaging and logistical supply mechanism for the neonatal 50,000 IU vitamin A capsules.
- Channels to ensure best coverage for correct timing of dosing.

It is expected that the pilot activities will have a duration of 18 months in each implementation district.

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