

# **SESSION II-B: Maternal Anemia Control and Prevention**

**Jose O. Mora**

13-June-2011

A2Z-Cornestone Meeting: Investing in  
Micronutrients – From Past Experiences to  
Current Challenges.

Washington, DC.

# Presentations



1. Integrating maternal anemia reduction into malaria-control in Uganda. **Dr. E. Madraa.**
2. Community-based service delivery for reducing maternal anemia in Nepal. **Dr. Raj Kumar, Nepal, presented by Dr. P. Harvey**
3. Integrated program for maternal anemia reduction in India. **Dr. P. Kotecha**
4. Strengthening pharmaceutical supplies to improve maternal health in Uganda, Cambodia and India. **Dr. G. Adeya, MSH**

# 1. Integration of maternal anemia reduction into malaria control in Uganda

- Integration of currently independent maternal anemia and malaria control programs (malaria contributes to high rates of anemia in women: 49-64%)
- Integration would be under Reproductive Care/ANC
- A comprehensive policy and guidelines for integration to be developed for implementation by the Directorates of Community Health and Disease Control
- Integration would require: training, strengthening health systems, promoting service demand, developing community-based services, improving supply systems, enhancing women's education and counseling, and providing continue monitoring
- Proposal contemplates screening for both anemia and malaria through ANC, followed by delivery of both IFA and malaria prevention supplies

## 2. Community-based service delivery for reducing maternal anemia in Nepal

- Community-based intervention targeted to pregnant women
- IFA intensification approach after failed implementation (23% coverage)
- Building on VAS experience with FCHVs since 1993 (50,000 FCHVs)
- Operation research testing capacity to provide anemia services to pregnant/post-partum women (IFA, deworming, counseling)
- Intensive training to encourage early ANC registration, deliver services, create demand and provide community/family support
- Securing regular supply of blister-IFA and deworming medications
- Regular monitoring of supplies, FCHVs service delivery and compliance

### Program performance and impact (2001-2009):

- Increased ANC attendance (49 to 87%) and IFA coverage (23% to 81%)
- Reduced anemia from 68% in 1998 to 36% in 2006 (47% drop)

# 3. Integrated program for maternal anemia reduction in India



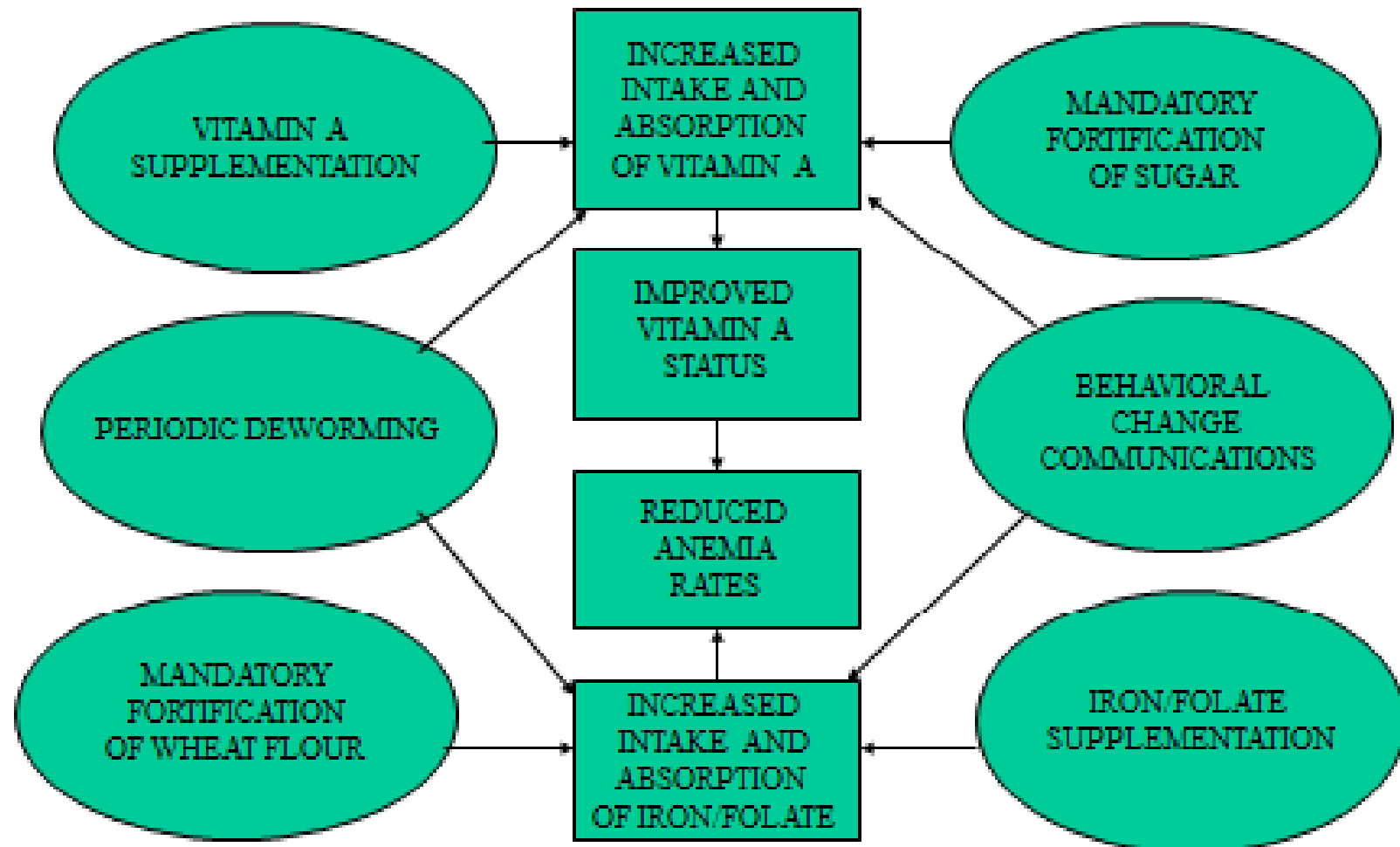
## Program components (2 States):

- Situation analysis identified shortfalls: high anemia rates, low ANC registration, demand and use of services, weak supply systems, low IFA compliance
- Integrated program designed to address implementation short-falls
- Training auxiliary nurse midwives and CHWs to build capacity for service delivery (IFA, deworming, follow-up, counseling)
- Strengthened supply systems (planning distribution, records, use of data)
- Community activities: village H&N days, print/broadcast media, events
- Supportive supervision, monitoring performance tools, monthly clinic/household visits, annual mini-surveys
- Program performance: Improved midwife skills, ANC registration (36-86%), IFA coverage (24-78%)
- Significant impact (2008-2010) on anemia: 72-50% in UP

## 4. Strengthening pharmaceutical supplies in improve maternal health in Uganda, Cambodia, and India

- MSH and A2Z collaboration in a process for development and field testing of a toolkit for improved management logistic systems to reduce constraints in pharmaceutical supply for anemia control programs
- Key components of the process included
- Initial assessment of logistic and supply constraints in India, Cambodia and Uganda
- Implementing recommended interventions to address the gaps identified
- Evaluating the impact of improved pharmaceutical logistical supply systems on program performance and impact
- Identifying remaining challenges and potential solutions
- Developing recommendations to address pharmaceutical supply issues in micronutrient and maternal anemia programs

# Integrated Approach to Vitamin A Deficiency and Anemia Control in Nicaragua



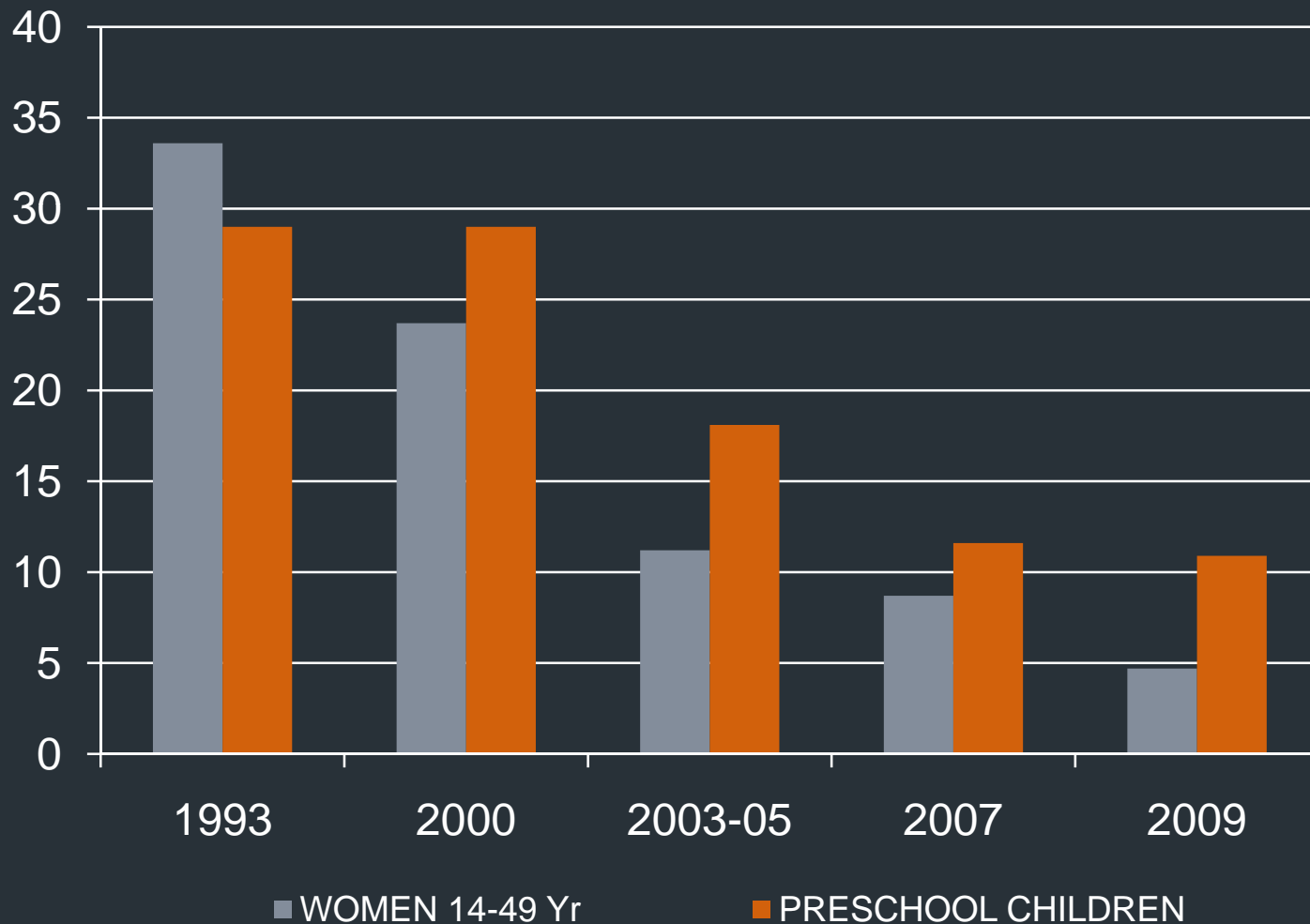
# Sequential implementation of the integrated approach in Nicaragua

- 1993: National Micronutrient Survey
- 1994: Country-wide sensitization, technical documents; National Micronutrient Committee, 5-year MN plan; expansion of National Health Rallies to include VAS, IFA, deworming, educational messages
- 1997: Wheat flour fortification initiated
- 1999: BCC plan developed, field testing and training
- 2000: Sugar fortification launched
- 2001: Operations research on CHVs and IFA delivery followed by CHVs intensive training
- 2003: Establishment of M&E system (SIVIN)
- 2005: Development of Enhanced Management Logistics System for IFA/deworming supply

# Performance indicators of the Integrated Anemia Control Program Nicaragua 1993-2009

- Active participation of trained CHVs (12,000) in IFA and iron supplementation and follow-up to pregnant women and children
- Strengthened management logistics system securing continue supply of iron and anthelmintic medications
- Sustained high IFA coverage in pregnant women (83-88%), iron in preschool children (62-71%) and deworming in preschool children (81-96%)
- Consistently high coverage of VAS in preschool children through 1-2 National Health Rallies per year (74-96%)
- Adequate levels of vitamin A in sugar samples from plants (82-100%), retail outlets (74-84%) and households (53-80%), and of iron in wheat flour samples from plants (>60 mg/kg): 100%
- Excellent non-competitive cooperation of international agencies (USAID, UNICEF, MI, CDC, INCAP/OPS).

# Anemia in Non-Pregnant Women 15-49 years and preschool children Nicaragua, 1993-2009



# Critical elements of successful anemia control and prevention programs - 1



- Strong political, technical and, eventually, industry commitment
- Multi-pronged integrated strategies addressing the main causes of anemia and removing constraints to implementation, in the context of expanded coverage of maternal and child health care services, with clear policies and guidelines
- Proper training of health care personnel and CHVs for enhanced capacity in service delivery and follow-up

## Critical elements of successful anemia control and prevention programs - 2



- Effective management logistic systems securing permanent supply of IFA and anthelmintic medications
- Special efforts to improve awareness, KAP of the target population, demand for services and compliance
- Operations research aimed at improving program implementation
- A functional M&E system providing timely information for program decision-making