

**Abstract of a major presentation at the
International Conference**

Forging Effective Strategies to Combat Iron Deficiency

**Atlanta, GA USA
7-9 May 2001**

**Organized and sponsored by:
ILSI Center for Health Promotion
Centers for Disease Control and Prevention
Emory University
Micronutrient Initiative**

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Anemia Prevention in Four Republics in Central Asia and Kazakhstan

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Recent country level reviews have covered the background, achievements, constraints and lessons learned from approximately three years of activities aimed toward Anemia Prevention and Control (APC) in Kazakhstan, the Kyrgyz Republic, Uzbekistan, Turkmenistan and Tajikistan. The information gained is feeding into national recommendations for APC in each country.

The high levels of anemia in women and young children (over 40%) documented through national surveys and health records in these countries are linked to the current economic and social transitions taking place in each country. These governments and some international partners made APC a priority in 1997 and began developing and implementing projects based on a single, phased, multi-intervention APC strategy. Since August 1998, one oblast in each country was to develop interventions based on oral supplementation, nutrition IEC and ongoing monitoring. Concurrent work was to progress toward universal fortification of wheat flour. The major components of the oblast level work were:

- Oral supplementation of major risk groups (children less than two years of age, women of reproductive age and pregnant women),
- Universal fortification of wheat flour,
- Information, education and communication (IEC) to foster dietary change aimed toward improving iron nutrition, increasing supplementation compliance and building demand for fortified foods,
- Helminthes control where appropriate;
- Linkage to other public health programs (reproductive health, Integrated Management of Childhood Illness, etc).
- Ongoing programme monitoring, sharing and use of lessons learned.

During February through April 2001, with UNICEF support, each country reviewed their oblast level activities as a step toward developing national APC strategies. These APC oblast level reviews¹ included interviews with health officials, group discussions with APC management groups, health professionals at central, hospital and periphery level facilities and groups of beneficiaries. Health facility records and APC management team documentation also were reviewed as well and in some oblasts where baseline anemia prevalence data had been collected, hemoglobin tests were done. Preliminary results of these reviews show, overall in these oblasts² the acceptability, viability and potential effectiveness of supplying

¹ Assessment guidelines were developed by the Iron Deficiency Project Advisory Service (IDPAS) of the International Nutrition Foundation (INF), a project supported by a Grant from the Micronutrient Initiative of Canada. The Headquarters Nutrition Section of UNICEF funded INF technical assistance for the reviews. UNICEF supported country level work.

² The findings from Turkmenistan and some of these from Uzbekistan were not yet available as this abstract was written. They will be considered in the overall report of APC reviews across the area.

oral supplements to large population groups in this part of the world. Minimum requirements appeared to be adequate, overall medical supply distribution systems, reasonably dedicated health staffs familiar with their communities, minimal, ongoing IEC efforts and client populations that, in general, try to follow the advice of health professional and paraprofessionals.

More specific finding included the following:

- The effectiveness of initial and follow-up APC training was strong often consisting of two or three day workshops at oblast level resulting in knowledgeable, motivated project leaders. However, training generally weakened substantially, when carried to periphery level facilities, where the APC was often covered in a single one or two hour meeting that focused mainly on pill distribution and the compliance.
- Reactions among health professionals to the added work of APC activities ranged from mainly positive to some negative. Overall, however, despite their willingness, many health workers spent too much time distributing pills and following up for compliance. In many regions, peripheral health workers made weekly household visits to distribute supplements and assure compliance, especially among pregnant women and those with young children.
- Compliance with the weekly protocol was high for children less than two years of age, reasonably high for pregnant women, and lower (generally under 50%) for non-pregnant women.
- IEC played its most significant role in raising awareness and communicating messages aimed at promoting behaviors such as waiting to drink tea until 30 minutes after meals.
- Side effects in women were seldom reported in medical records, but frequently mentioned in group discussions. Few were severe, but health professionals' responses varied considerably and affected continued compliance. Little ongoing training was devoted to counseling on side effects. Few side effects were reported among children receiving syrup or pills,
- There is a need to improve the supplement for young children. Syrup was difficult to maintain, measure and store for long periods. UNICEF noted prohibitive shipment costs, particularly if APC target groups expand to national level in these countries.
- None of the oblasts had planned efforts to share useful lessons learned across rayons. Sharing such information across the counties was initially promoted by UNICEF is no longer sustained.
- Expansion of supplementation and IEC activities to national levels likely will require supplement availability through private pharmaceutical outlets and/or health facility pharmacies on a payment basis. Group discussions on costs, even in the poorest setting in Tajikistan indicated an overall willingness of families to purchase oral supplements.³

³ This willingness was predicated on recommended for use of supplements by doctors and availability at prices similar to those currently paid by UNICEF. In general, a multi-micronutrient supplement containing additional vitamins was preferred.

- Family level groups, health workers and officials at all levels in all countries viewed the prospect of wheat flour fortification with iron and other micronutrients positively⁴.

National APC recommendations will develop this year and likely call for continuation of work to develop the effectiveness of these APC interventions in the current oblasts while expanding activities to additional oblasts as soon as possible and substantially increasing IEC activities and work toward wheat flour fortification.

Human and supply resources will need major new consideration, and national and oblast level APC leadership and continuity will require strategic planning and improvements. Better, ongoing and more strategically organized training is needed at all levels, with emphasis at the periphery and in pre-service medical training. Institutions. This will require improved training and educational materials and greater participation by national research institutes dedicated to nutrition and public health. Monitoring will need to encompass all project components rather than its current focus mainly on pill distribution and compliance. Better linkage of APC with other public programs and helminthes control where needed (southern Tajikistan) will be needed as well. A system of within-country and cross-country APC dialogue, information sharing and use of lessons being learned will be essential if APC is to effectively develop and expand. Renewed donor commitments to support new supplies of supplements and IEC materials are also required as is stronger donor commitment to national capacity building in nutrition generally and technical assistance specifically to APC.

Such support will have to complement new resources and strategies expected as part of a new Asian Development Bank grant that included resources to initiate and expand wheat flour fortification and IEC for improved micronutrient nutrition. Technical recommendations based on the reviews and up to date international guidelines and research will likely include a change in the supplement protocol for pregnant and lactating women from weekly to daily doses, identification of a better (non-liquid) type of multi-micronutrient supplement for young children, mechanisms such as screening to narrow the target group for weekly supplementation among women of child bearing age and development of mechanisms to allow families to purchase multi-micronutrient supplements

A national commitment to substantially reduce anemia, including iron deficiency, has been created in these countries and boosted substantially by the recent APC reviews. Follow-up in the coming months is critical to maintain this momentum, improve APC effectiveness, and expand APC supplementation and IEC activities beyond a single oblast in each country.

⁴ No complaints of any kind were heard regarding use of fortified wheat flour provided as humanitarian assistance through the World Food Programme the past four years in Tajikistan.