What’s New in Nutrition?

ISSUE: Antenatal iron-folic acid supplementation reduces neonatal and childhood mortality
ISSUE: Iron deficiency and anaemia (IDA) during pregnancy can cause low birth weight, preterm birth and increase the risk of deaths of unborn and newborn babies. However, the long term impact of iron supplementation during pregnancy on childhood survival is not known. Neonatal mortality is a major contributor to infant deaths in low- and middle-income countries, and identifying effective interventions is crucial to achieve the Millennium Development Goals. Reducing child mortality is also a high priority issue for World Vision within the 7-11 Health and Nutrition Strategy and the Global Child Health Now campaign over the next 5 years (2010-2015).

REPORT from 2nd International Meeting of the Micronutrient Forum – Micronutrients, Health and Development: Evidence-based Programmes (Beijing, China in May 2009)

i) Antenatal Iron/Folic Acid (IFA) Supplementation Reduced Childhood Mortality in Rural Nepal

- In 1999-2001, 4926 pregnant women were randomly assigned to receive daily supplements of vitamin A (VA) alone (as control), VA + Folic Acid (FA), VA + IFA, VA + IFA + Zinc or a multiple micronutrient supplement that included VA and IFA plus 10 others, to examine the impact on birth outcomes
- Surviving children of these women were followed up in 2007 (children were 6-7 years old) to determine the long term effects of supplementation during pregnancy on child survival and other health outcomes
- Supplementation during and after pregnancy with VA + IFA, compared to VA alone, reduced the risk of childhood (3 months to 6 years) mortality by 31% (impact on mortality is probably due to IFA alone since control group also received VA)

CONCLUSION: IFA supplementation during pregnancy reduced risk of child deaths by 31% in a population with a high prevalence of IDA. This finding shows the importance of including IFA as part of routine antenatal care in undernourished and underserved populations in rural South Asia.

ii) Antenatal IFA Supplements Protected Against Early Neonatal Mortality in Indonesia

- Pooled data from Indonesia Demographic and Health Surveys of 1994, 1997, 2002 were analysed using infant survival data collected from mothers’ who gave birth within five years before the survey
- Relationships between the use of antenatal care and its components (any IFA supplements and tetanus toxoid (TT) vaccination) and death of newborns (0-7 days postnatal) were reviewed
- Receiving any antenatal care (ANC), consuming any IFA supplements during pregnancy and receiving two or more TT vaccinations reduced risk of newborn death. The main protective effect was from IFA supplements.
- Infants whose mothers received only IFA supplements without receiving ANC or with less than two TT vaccinations remained significantly protected from neonatal death

CONCLUSION: Increased use of IFA supplements among pregnant women will reduce newborn deaths in Indonesia, and in other low and middle income countries. Antenatal iron-folic acid supplementation should be seen as a key part of any package of services to prevent newborn deaths.

WORLD VISION RECOMMENDATIONS:

- Promote and include IFA supplements in antenatal care programs to help improve infant and child survival
- Facilitate Health Care System capacity to provide Iron Folic Acid supplementation to all pregnant women
