



Gynäkologie/Geburtshilfe

Maternal Supplementation With Multiple Micronutrients Does Not Reduce Infant Mortality

Dezember 23, 2014

CHICAGO -- December 23, 2014 -- In Bangladesh, daily maternal supplementation of multiple micronutrients, compared with iron-folic acid before and after childbirth, did not reduce all-cause infant mortality to age 6 months, but did result in significant reductions in preterm birth and low birth weight, according to a study published in the December 24/31 issue of JAMA.

Multiple micronutrient deficiencies are common among pregnant women in resource-poor regions of the world, especially in southern Asia. Co-existing with poor maternal nutrition across the region are excessive burdens of low birth weight (LBW), preterm birth, small size for gestational age, stillbirth, infant mortality, and maternal mortality. Gestational micronutrient deficiencies may contribute to avertable adverse birth outcomes.

Data for effects of antenatal multiple micronutrients supplementation on longer-term infant mortality are sparse for guiding policies in southern Asia, according to Keith P. West, MD, Johns Hopkins Bloomberg School of Public Health, Baltimore, Maryland, and colleagues conducted a study in which pregnant women in Bangladesh (n = 44,567) were randomised to receive supplements containing 15 micronutrients or iron-folic acid alone, taken daily from early pregnancy to 12 weeks postpartum.

Among the 22,405 pregnancies in the multiple micronutrient group and the 22,162 pregnancies in the iron-folic acid group, there were 14,374 and 14,142 live-born infants, respectively, included in the analysis.

At 6 months, multiple micronutrients did not significantly reduce infant mortality; there were 764 deaths (54.0 per 1,000 live births) in the iron-folic acid group and 741 deaths (51.6 per 1,000 live births) in the multiple micronutrient group.

Multiple micronutrient supplementation resulted in a non-statistically significant reduction in stillbirths (43.1 vs 48.2 per 1,000 births) and significant reductions in preterm births (18.6 vs 21.8 per 100 live births) and low birth weight (40.2 vs 45.7 per 100 live births).

“Our study’s null finding is in agreement with a small number of trials that have provided an antenatal multiple micronutrient vs iron supplement, with or without folic acid, and found no effect on neonatal mortality,” the authors wrote. “Reasons for a null effect on postnatal survival after improvement in some birth outcomes with antenatal multiple micronutrient

supplement use remains unknown, but may reflect a complex interplay between maternal and newborn sizes and differential responses to supplementation by causes of death.”

SOURCE: JAMA