**Antenatal Iron-folic Acid (IFA) Supplementation Reduces Mortality in Children Less than 5 years of Age in Nepal**

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**Article Information**

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**ABSTRACT**

**Objectives:** To examine the effect of antenatal iron-folic acid (IFA) supplements on the risk of childhood mortality in Nepal using pooled data from 3 Nepal Demographic and Health Survey (DHS) 2001, 2006 and 2011.

**Methods:** Survival information was used from 13,009 singleton most recent live-born infants. Primary outcomes were mortality indicators in children <5 years and the main exposure variable was any use of IFA supplements. Data was analysed by using STATA 13 and adjusted for the cluster sampling design. Analyses used multivariate Cox proportional hazards regression adjusted for 24 potential confounders based on Mosley and Chen framework for childhood survival in developing countries.

**Results:** Any use of IFA supplements significantly reduced risk of early neonatal deaths by 45% (aHR: 0.55, 95% CI: 0.38, 0.79), and total neonatal deaths by 42% (aHR: 0.58, 95% CI: 0.39, 0.85). Similarly, the risk of infant and under-5 mortality was significantly reduced by 32% and 48%, respectively. For mothers who started ≤4 months of pregnancy and used ≥150 supplements under-5 mortality was significantly reduced by 57% (aHR: 0.43, 95% CI: 0.23, 0.78). Population attributable risk estimates found 15% of under-5 deaths were attributed to non-use of IFA, and 29,000 under-5 deaths could be prevented in the next 5 years with universal IFA coverage.

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Conclusions: Antenatal IFA supplementation significantly reduces the risk of neonatal and under-5 deaths in Nepal. The greatest impact on child survival was found in women who started early in pregnancy and took ≥150 supplements. Universal IFA coverage could improve childhood survival.

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