

## *Clinical Study*

# **Folic Acid and Birth Defects: A Case Study (Iran)**

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The aim of this study was to evaluate the impact of folic acid use in pregnancy for the reduction of neural tube defects (NTDs) in the northwest region of Iran. We studied 243 women with pregnancies complicated by some forms of birth defect(s). These patients were identified by medical diagnostic tests as having a fetus with some types of congenital anomalies. The prevalence of NTDs among pregnant women who were referred for therapeutic termination of pregnancy was 24.7 percent. Consumption of folic acid prevented NTDs by 79 percent (Odds Ratio = 0.21, CI 95%: 0.12–0.40) and 94 percent (Odds Ratio = 0.06, CI 95%: 0.03–0.15) compared to pregnancies complicated by other anomalies and normal pregnancies, respectively. Hydrops fetalis, hydrocephaly, Down syndrome, and limb anomalies did not have any significant association with the folic acid use. Along with the advice for the consumption of folic acid for pregnant women, they should be offered prenatal screening or diagnostic tests to identify fetal abnormalities for possible termination of pregnancy.