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Topic: Malnutrition treatment and prevention

Title: Malnutrition, Low folate rich diet and risk of Neural tube defects in Pakistani Hospital Population

Presentation Type: Oral

Background: Maternal nutritional status is a major environmental factor that influences development of embryo, pregnancy outcome and maternal health. In maternal nutrition folic acid has been focus of much attention and low folate status increases risk of pregnancy with neural tube defect.

Methodology: For this study women with pregnancy with Neural tube defect on antenatal anomaly scan or delivered a baby with Neural tube defect with no prior ante natal record were identified(190). Control mothers were those who had delivered a healthy baby(100).

Results: Case mothers were asked about nutritional intakes in periconceptional period. They were divided into two groups, one who were taking fruits and vegetables adequately in their meals per week and the other group included those control and case mothers whose diet was deficient in fruits and vegetables per week. In present investigation diet inadequate in fruits and vegetables was reported by 60.53 % (n=115) mothers with NTD affected babies significantly high than in control mothers ($P=<0.0029$). Majority of case mothers had not been to school and belonged to low socioeconomic group.

Future directions: Malnutrition is a common social problem in Pakistani pregnant women as observed in other developing countries. Findings of this study suggests the strong need to implement dietary counseling programs for women of childbearing age and apprise them of the significance of proper diet rich in fruits and vegetables before conception. Food fortification of staple food like flour and cereals need to be implemented to reduce risk of NTDs in Pakistan.