

Double Fortified Salt-An Effective Measure to Prevent Micronutrient Deficiencies in Indian Pregnant Women

Authors : Kejal Joshi Reddy, Sirimavo Nair

Abstract : Micronutrient malnutrition affects pregnant women and children extremely with reference to growth manifestations in gestation as well as after birth. Early fetal development affected by iodine and iron deficiency leads to poor life quality. Various researchers have found interesting interrelations between iron and iodine. A few studies on impact assessment of DFS supplementation during pregnancy have been reported in India. Aim To provide meaningful contribution by assessing the efficacy of DFS supplementation on iodine and iron status of pregnant women. Design An interventional study. Setting A semi government hospital of urban Vadodara. Subjects Pregnant women (n=150) enrolled during first trimester (< 12 weeks) and followed up till the end of gestation, n=75 were divided in experimental (DFS supplemented) and control (Non supplemented) group. Results Impact on iron and iodine status was assessed by Hb concentration and UIE respectively. Mean Hb improved significantly ($p < 0.001$) (+0.42 g/dl) in experimental group and reduced non significantly (-0.20 g/dl) in control group at the end, since DFS provided additional 93 mg of iron within 6 months. Median UIE improved non significantly (278.6 to 299.01 μ g/L) in experimental group and decreased significantly ($p < 0.05$) (376.59 to 288.66 μ g/L) in control group. Conclusion DFS could improve iron and iodine status of experimental group compared to control group. It is an effective measure to control two essential micronutrient deficiencies together.

Keywords : DFS supplementation, anemia, pregnancy, iodine deficiency, iron

Conference Title : ICFSNPH 2015 : International Conference on Food Safety, Nutrition and Public Health

Conference Location : Zurich, Switzerland

Conference Dates : July 29-30, 2015