Abstract: Introduction: Periodical evaluation of anthropometric indicators is one of the best methods for monitoring of children’s nutritional status and also suitable information resource as a reference for the health system of the country and a criterion for justice. The purpose of this study was the survey of underweighting, stunting and wasting predictors among 2-6 years old children in Zahedan, southeastern Iran.

Methods: In this cross sectional study, 1012 Children aging 2-6 years old were surveyed in 2008, in Zahedan. The sample was selected from health centers of 5 districts in Zahedan. The data were collected using records and interview with mothers. In this study weight to height (as a wasting), height to age (as a stunting) and weight to age (as a underweighting) of children based on Z score, -2.5, was evaluated. The data were analyzed in SPSS.15 and Anthro 2000 softwares using Independent T test,ANOVA,chi square and linear logistic regression.

Results: In this study the prevalence of wasting, stunting and underweighting were 4.2%, 7.6% and 3.4%, respectively. In univariate analysis, the wasting related to low birth weight and low birth interval, stunting related to low birth weight, low mothers’ educational level, infection history, low birth weight, infection history, low birth interval and low mothers’ age during pregnancy and underweighting related to low birth weight, infection history, low birth interval and low mothers’ age during pregnancy (P<0.05). The prevalence of stunting among children with jobless father and absence exclusively breast feeding and prevalence of underweighting among females and children with absence exclusively breast feeding was significantly more than others(P<0.05). In multiple analysis, low birth interval related to wasting, low birth weight and low mothers’ age during pregnancy related to stunting and low birth weight, low birth interval and low mothers’ age during pregnancy related to underweighting (P<0.05).

Discussion and Conclusion: Based on the results of this study the best method to preventing from malnutrition among children is arising educational level of mothers and health education about importance of appropriate age for pregnancy and birth interval. In addition, mothers’ nutritional statues especially during pregnancy (that is related to birth weight) and exclusively breast feeding are too important factors. It seems that health promotion and prenatal period is as important as post neonatal period.