Summary and Conclusion

VitaminA is known to fulfil a number of biological functions in tissue during fetal life. It is required for growth for cellular differentiation and for normal development of fetuses, the human derives its vitamin A content from the mother through the placental circulation, which limits and controls the passage of the vitamin.

Many maternal and neonatal factors have been reported to affect the delivery of nutrients and vitamin A to the fetus.

This study was conducted on 50 newborn-mothers pairs classified into 15 full term healthy newborns and 35 preterm newborns.

Vitamin A level was estimated in both cord and maternal bood samples.

The cut off level of plasma vitamin A concentration is 20 ug/dl. below which a deficiency state is considered,

In the premature group both cord and maternal blood vitamin A were significantly lower than the corresponding value of control group I reflecting deprivation of transplacental transport of vitamin A from the mother to the fetues which occurs mainly in the third trimester.

There was a positive correlation between the cord vitamin A and birth weight.

Also a significant correlations were found between cord serum vitamin A, gestational age and maternal vitamin A.

On the present work , we studied the affection of maternal age and parity, on vitamin A status of the newborn, we found that maternal age

had a significant affection only on cord serum vit. A of full term newborns and parity had one significant affection on cord serum vit. A of fullterm and preterm newborns.

The relationship between maternal and neonatal anthopometric measurements, and vitamin A status of newborn infants at birth has been evaluated in the present study, we found no significant influence of maternal anthropometric parameters on the respective cord serum vit.A of preterm newborns, also, there was no significant influence of maternal anthropometeric parameters except for age on the respective cord serum vit. A of full term newborns.

The different neonatal anthropometric variables were significantly correlated with each other, as well as with cord serum vit. A (except for gestational age of fullterm newborns). Our study showed a highly significant correlation between vit.A status of our neonatal groups and their gowth status at birth.

Low and deficient vit. A status at birth could be a potential indicator of low birth weight.

So in conclusion the vit. A status of the newborn is influnced by factors such as gestational age, growth status and maternal. vit.A status as well as overal nutrional status, the studies also suggest the low vit., A status of the mother to be one of the features associated with prematurity , these findings stress the importance of safe vit. A supplies to pregnant and nursing mothers to prevent vit. A deficiency and growth retardation in the progeny.