

## **EDITORIAL**

### **BIRTH WEIGHT : A COMMUNITY PERSPECTIVE**

India has a dubious distinction of belonging to the top bracket of countries with a very high under-5 Mortality Rate (U5MR) of above 96/1000 live births. The U5MR considered the single most significant basic indicator of health status of a community, is proportional to the Infant Mortality Rate (IMR) which in turn is contributed to directly and indirectly by the incidence of low Birth Weight (LBW). About 25 million LBW are born each year consisting 17% of all live births, nearly 95% of them in developing countries. About 26% of newborns are LBW in India, and indeed over 16% in those countries with very high U5MR. Both preterm and small-for-dates almost equally make up this category of vulnerable infants predisposed to asphyxia, feeding problems, anemia and growth failure.

Considering the close relationship of birth weight with perinatal and infant morbidity as well as mortality, it is crucial to identify the high risk groups of low birth weight babies as early as possible. Unfortunately, in a community where 80% of newborns never get to have their weight measured, this itself is a tall order. In our society, the cry of the newborn is greeted with anxious queries about the sex of the baby and not his well-being and potential for healthy survival. The basic concept of the importance of birth weight is missing even among educated families. Indeed, it is as if the weighing machine has no place in the requirements at childbirth. In the absence of this basic facility, field workers and TBAs must report to other means to identify babies at risk. Mid-arm circumference, thigh circumference, foot length, and skin-fold thickness etc. are measurements that have been correlated satisfactorily with the baby's weight. Simple tools like coloured strips have been developed and these show promise of applicability in field situation for identification of LBW by TBAs for early referral.

Prevention is always better than cure. How does one ensure that a baby is born with adequate weight. In the case of an individual pregnancy, the obstetrician can make efforts to improve the outcome as far as possible by using clinical and ultrasonographic methods to assess fetal weight for decision-making regarding intervention. However, a pregnant woman approaching an obstetrician or other birth attendant has, to a large extent, already been trapped in an interplay of factors that can effect the weight of the baby. It has been shown that maternal age below 20 years or above 40 years, primiparity or high parity, short

height and sex of the baby are all associated with lower birth weight.

Intervention before pregnancy actually occurs could help to an extent in that the optimum time of conception can be planned. Increasing the age of marriage such that the first baby is conceived beyond 20 years of maternal age, and interpregnancy interval of more than 24 months facilitates better maternal nutrition including anemia adversely affect growth of the fetus. Also evidence is abundant that poor maternal nutrition including anemia adversely affect fetal growth. Maternal weight, mid-arm circumference, hemoglobin level and serum proteins levels have been shown to closely correlate with baby's weight. Although dietary supplementation and correction of anemia from early pregnancy certainly promotes fetal well being. The optimum time of building a good nutritional state before pregnancy, indeed during adolescence and even childhood. A healthy and well nourished girl child is more likely to grow up better equipped for pregnancy and motherhood.

In a broader perspective, it is not just the individual mother health but the complex interplay of social, cultural, political, environmental and economic factors that influences birth weight patterns in a community. Maternal literacy, type of family i.e. nuclear or joint, and place of residence i.e. rural or urban have all been noted to indirectly have a role. Socio-economic factors are the most important in this regard. Indeed, the average birth weight is a reliable index of socio-economic development. Nonetheless, it will take a gigantic and concerted effort from all agencies to create a social revolution which alone can bring about a significant impact in improving the situation.

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